



SUBMISSION TO NAAC

Nagarbhavi,

Bangalore -560072,

Karnataka,

India

1st cycle of Accreditation

SELF STUDY REPORT(SSR) 2015



Brahmananda Keshab Chandra College

111/2 B.T.Road, BonHooghly,
Kolkata - 700 108

Phone No. : +91 033 2577 5878

www.bkccollege.org

bkccollegebonhooghly@gmail.com



Phone : 2577-5878

BRAHMANANDA KESHAB CHANDRA COLLEGE

(GOVT .SPONSORED DEGREE COLLEGE)

111/2, BARRACKPORE TRUNK ROAD, BON-HOOGHLY
KOLKATA - 700108

REF. 428/SSR/NAAEP/2015

DATE 15.12.15

From,
The Principal
Brahmananda Keshab Chandra College,
Kolkata

To,
The Director
National Assessment and Accreditation Council
P.O. Box No.1075, Nagarbhavi
Bangalore 560072
Karnataka, India

Sub: Uploading of Self-Study Report (SSR) 2015 of Brahmananda Keshab Chandra College, Kolkata for 1st Cycle of Accreditation in our official website: www.bkccollege.org

Sir,

In compliance with our LOI requirements for 1st cycle of Accreditation, we are uploading the **Self Study Report (SSR) 2015** of our College in our official website www.bkccollege.org for your kind perusal.

I shall be looking forward for your reply regarding the acceptance of LOI and thereafter the decision regarding peer team visit to our institution.

Thanking you.

Yours faithfully

Papia Chakrabarti
15/12/15

Dr. Papia Chakrabarti

Principal

B.K.C. College

111/2, B.T. Road,
Kolkata 700108

Principal
Brahmananda Keshab Chandra College
111/2, B.T. Road, Kolkata-700 108



Phone : 2577-5878

BRAHMANANDA KESHAB CHANDRA COLLEGE

(GOVT. SPONSORED DEGREE COLLEGE)

111/2, BARRACKPORE TRUNK ROAD, BON-HOOGHLY
KOLKATA - 700108

REF.428/SSR/NAAC/2/2015

DATE15.12.15

Certificate of Compliance

This is to certify that Brahmananda Keshab Chandra College fulfils all norms

1. Stipulated by West Bengal State University
2. The affiliation and recognition is valid as on date.

In case the affiliation /recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.

It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or recognition by the Regulatory Council , as the case may be.

In case the undertaking submitted by the institution is found to be false then the Accreditation given by NAAC is liable to be withdrawn . It is also agreeable that the undertaking given to NAAC will be displayed on the college website.

Date:

Place: *Kolkata*

Papia Chakraborti
15/12/15

Dr. Papia Chakraborti

Principal

Principal
Brahmananda Keshab Chandra College
111/2, B.T. Road, Kolkata-700 108



Home About Us Organization Commission Universities Colleges Publications

Universities & Colleges

- Colleges Under Section 2(f) & 12(B)
- Autonomous Colleges
- Colleges With Potential for Excellence
- Academic Staff Colleges
- Universities (UPE)
- Centres (OPEPA)
- Basic Scientific Research
- Visiting Committee Reports
- Central Universities
- State Universities List
- Deemed Universities
- Private Universities
- Fake Universities

Colleges under section 2 (f)& 12(B) of the UGC Act 1956

Jyoti Chakrabarti
15/12/15
Principal
Brahmananda Keshab Chandra College
Kolkata-700 102

Consolidated List of Colleges under section 2(f)&12(B) as on 31.08.2015

The University Grants Commission (UGC) provides financial assistance to eligible colleges which are included under Section 2(f)* and declared fit to receive central assistance (UGC grant) under Section 12 (B)** of UGC Act, 1956 as per approved pattern of assistance under various schemes.

* The UGC had notified Regulations for recognition of colleges under Section 2(f) of the UGC Act, 1956. The colleges are brought under the purview of UGC in terms of these Regulations as and when the proposals are received from the colleges for inclusion under Section 2(f) and they are found fit for inclusion as per the provisions contained in the Regulations.

** Apart from inclusion of colleges under Section 2(f), the UGC includes the Colleges under Section 12(B) of its Act in terms of Rules framed under the Act. This makes the colleges eligible for central assistance from the Government of India or any organization receiving funds from the Central Government.

Colleges Search by State - Grants Released to colleges

Colleges Search by State

S.No.	College	University	Status
51	Berhampore College P.O. Berhampur, Dist., Murshidabad, West Bengal 742 101 West Bengal 742 101		Under Section : 2(f)&12(B)
52	Berhampore Girls' College Berhampore, Dist., Murshidabad, West Bengal 742 101 West Bengal 742 101		Under Section : 2(f)&12(B)
53	Bethadabani College P.O. Bethadabani, Dist., Nadia, West Bengal 741 116 West Bengal 741 116		Under Section : 2(f)&12(B)
54	Bethune College 181Bikhan Sarani Calcutta -6, Dist., Calcutta, West Bengal West Bengal		Under Section : 2(f)&12(B)
55	Bhairab Ganguli College Belgharia Calcutta -56, Dist., North Twenty Four Parg, West Bengal West Bengal		Under Section : 2(f)&12(B)
56	Bhanger Mahavidyalaya P.O. Bhanger, Dist., South 24 Parganas, West Bengal West Bengal		Under Section : 2(f)&12(B)
57	Bhatter College Dankon, Dist., Midnapore, West Bengal 721 426 West Bengal 721 426		Under Section : 2(f)&12(B)
58	Bhowanipur Education Society College 5- Lal Lajpat Roy Road, Calcutta - 20, Dist., Calcutta West Bengal West Bengal		Under Section : 2(f)&12(B)
59	Bishan Chandra College Rathia, Dist., Hooghly, West Bengal 712 248 West Bengal 712 248		Under Section : 2(f)&12(B)



63	Birpara College Jalpaiguri, Distt., Jalpaiguri, West Bengal 738 204 West Bengal 735 204		Under Section : 2(f)&12(B)
64	Birbhum Institute of Engineering & Technology P.O. Suri, Distt., Birbhum, West Bengal 731 101 West Bengal 731 101	West Bengal University of Technology	Under Section : 2(f) File No. 8-273(2013)(CPP-IC)
65	Birbhum Mahavidyalaya P.O. Suri - Birbhum - 1, Distt., Birbhum, West Bengal West Bengal		Under Section : 2(f)&12(B)
66	Bolpur College Bolpur, Distt., Birbhum, West Bengal West Bengal		Under Section : 2(f)&12(B)
67	Bon Hooghly College of Commerce Bon Hooghly Calcutta -35, Distt., North Twenty Four Par West Bengal West Bengal		Under Section : 2(f)&12(B)
68	Brahmananda Keshabchandra College Bon Hooghly Calcutta -35, Distt., North Twenty Four Par West Bengal West Bengal		Under Section : 2(f)&12(B)
69	Budge Budge College Piyali P.O. Budge, Distt., South Twenty Four Par, West Bengal West Bengal		Under Section : 2(f)&12(B)
70	Bunladpur Mahavidyalaya P.O. Bunladpur, Distt., Dakshin Dinajpur, West Bengal 733 121 West Bengal 733 121	University of Gour Banga	Under Section : 2(f) File No. 9-45(2013)(CPP-IC)
71	Burdwan Medical College & Hospital Burdwan, Distt., Burdwan, West Bengal West Bengal		Under Section : 2(f)&12(B)
72	Burdwan Raj College Burdwan - 4, Distt., Burdwan, West Bengal West Bengal		Under Section : 2(f)&12(B)
73	Calcutta Girls B.T. College 8/1 Swinhoe Street, Calcutta 19, Distt., Calcutta West Bengal West Bengal		Under Section : 2(f)&12(B)
74	Calcutta Girls College 3 Goalpi Lane Kolkata, West Bengal 700 013 West Bengal 700 013		Under Section : 2(f)&12(B)
75	Calcutta National Medical College 32- Gorchanda Road Calcutta 14, Distt., Calcutta West Bengal West Bengal		Under Section : 2(f)&12(B)
76	Chakdaha College Chakdaha, Distt., Nadia, West Bengal West Bengal		Under Section : 2(f)&12(B)
77	Chanchal College Chanchal, Distt., Maida, West Bengal 732 123 West Bengal 732 123		Under Section : 2(f)&12(B)
78	Chandernagore Govt. College Chandernagore, Distt., Hooghly, West		Under Section : 2(f)&12(B)

Papir Chakrabarti
15/12/15
Principal
Brahmananda Keshab Chandra College
11/12, B.T. Road, Kolkata-700 103



PREFACE

Brahmananda Keshab Chandra College, named after the nineteenth century social reformer, Keshab Chandra Sen, has been providing education to students who usually come from the underprivileged section of society for nearly sixty years. In 1954, Professor J. C. Ghosh, the then Vice-Chancellor of Calcutta University, surveyed the available higher educational facilities in North 24 Parganas which revealed that facilities were inadequate for the huge influx of refugees in the area. Professor Ghosh stressed the necessity of setting up at least six colleges for male and female students in the suburbs of Kolkata in order to cope with the growing demand for college education in both humanities and sciences. He further suggested that these six colleges should be established and financed by the Central Relief and Rehabilitation Ministry, Government of India. Soon after, Dr. B. C. Roy, the then Chief Minister of West Bengal, took up the proposal with the Government of India, which was accepted by the Central Relief and Rehabilitation Ministry. The Ministry then agreed to set up six Government Sponsored degree colleges in and around Kolkata and bear the financial commitments as well. The College, thus established in 1956 as one of the colleges under this scheme with the aim of providing higher education, was initially housed at Sagar Dutta Free High School, Kamarhati which later moved to its own present premises in 1957. Popularly known as B.K.C College, the institution was set up with the aim of filling a vacuum in higher education in areas with influx of population from the East Pakistan and has always striven to excel in creating capable citizens of India. The College is situated on seven acres of land at premises No. 111/2, Barrackpur Trunk Road, Bon-Hooghly, Kolkata – 700 108, near the Indian Statistical Institute and at North-West corner of a lake. The large water body opposite the main entrance of the college is a soothing sight and adds to the natural beauty of the college surroundings. It is one of the few colleges that have a huge playground for the use of the students. A wide variety of trees also create a green belt around the college.



The College, a UGC registered college (under 2f & 12B), had been affiliated to University of Calcutta since inception but since 2008 has been affiliated under West Bengal State University. It believes in the idea that education does not consist in mere learning, but involves fostering a sense of social responsibility among its students, the future pioneers of social change. Special emphasis is being given on expansion of higher education to the women belonging to all sections of the society who are being deprived of formal education due to economic constraints. It is with these aims that the college has been moving ahead, contributing to the cause of education and hopes to do so in the years to come. It is noteworthy to say that this College has a huge list of alumni well placed in various esteemed institutions throughout India as academicians, theatre personalities and also top level administrators. It has also a record set of excellent teachers who are well known for their scholarly activities and researches of international stature.

As our objective is advancement of learning accompanied by modern teaching aids, the campus is now Wi Fi enabled with digital classrooms. Also the library resources are enormous with huge collection of books and journals. We are now ready to provide the well furnished hostel facility for the girl students residing at far-off places.

Apart from academics, the students are always encouraged to nurture their hidden talents through various extra-curricular activities. For the holistic development of the youth of today, apart from building of their body and the mind amongst the eco-friendly sprawling green campus of the college over-viewing the Bon-Hooghly lake, we also create awareness for conservation of biodiversity through its sustainable development to save our Mother Nature.

Much as we value the words of appreciation from ourselves we felt the need that recognition should come in a more concrete manner – in the shape of well considered appraisal and judgement by a duly constituted academic body whose opinion would carry the weight of authority. We duly recognize the



desirability and importance of such quality assurance. Self assessment is undoubtedly an yardstick for an institution to measure its effectiveness and efficiency. The assessment and accreditation process will surely help us to analyse the Strengths, Weaknesses, Opportunities and Challenges (SWOC) of our institution and help us in holistic development of the students of all our programs. Since the establishment of IQAC in May, 2013, we are striving towards continuous improvement and application of quality benchmarks in various activities of the institution to ensure accountability to all our stakeholders.

It is a matter of satisfaction that the NAAC Steering Committee was formed under the supervision of the IQAC, and we could mobilize all our human resources- the teaching , the non-teaching , the administration as well as the students who devoted their full time in preparation of this Self Study Report. The Steering Committee set about collecting data from various sources like the library, the Departments, the Office and the Students Union. After collecting the data, the different subcommittees were asked to fill up the Criteria wise inputs with utmost care. The Self Study Report has been prepared by the efficient NAAC Steering Committee with Principal as its Chairman and Dr. Aparajita Nag as Coordinator, after analyzing and collating the data together followed by threadbare deliberations on every criterion. We have great pleasure in presenting our Self Study Report to the National Assessment and Accreditation Council wherein we have tried our best to identify our strengths and weaknesses as well. We look forward to the visit by the NAAC peer team and assess our institution.

Dr. Papia Chakraborti

Principal

14-12-2015



CHAPTER	PAGE NO.
Preface	
Executive Summary	1-9
SWOC Analysis	10 -12
Profile of the College	13-26
CRITERION-WISE INPUTS	
Criterion I : Curricular Aspects	27-44
Criterion II : Teaching-Learning and Evaluation	45-92
Criterion III : Research, Consultancy and Extension	93-132
Criterion IV : Infrastructure and Learning Resources	133-152
Criterion V : Student Support and Progression	153-180
Criterion VI : Governance, Leadership & Management	181-208
Criterion VII : Innovations and Best Practices	209-242
EVALUATIVE REPORTS OF THE DEPARTMENTS	
Arts	
Department of Bengali	243-261
Department of English	262-277
Department of Sanskrit	278-283
Department of History	284-299
Department of Philosophy	300-307
Department of Political Science	308-315
Department of Education	316-319
Department of Journalism and Mass Communication	320-324
Science	
Department of Physics	325-345
Department of Chemistry	346-370
Department of Mathematics	371-407
Department of Botany	408-465
Department of Zoology	466-491
Department of Molecular Biology	492-497
Department of Economics	498-513
Department of Statistics	514-520
Department of Computer Science	521-527
Department of Industrial Fish and Fisheries (IFF)	528-537
Certificate of Declaration	538
Annexures	



Executive Summary

Criterion I

Brahmananda Keshab Chandra College, established in post-partitioned Bengal in the year 1956 as a result of government initiative to cope with the growing demand for college education among the refugees, is one of the premier institutes in North 24 Parganas. It was named after Brahmananda Keshab Chandra Sen, the great socio-religious reformer of the country during Bengal Renaissance in the nineteenth century. The College is situated on 6 acres of land at premises no. 111/2, Barrackpore Trunk Road, Bonhooghly, Kolkata-700 108, near Indian Statistical Institute. The eco-friendly campus of the college with a large water body opposite to the main entrance of the college adds to the natural beauty of the College surroundings. It is one of the few colleges that have a huge playground for the students. Initially affiliated to the University of Calcutta, the college is now been affiliated to West Bengal State University, Barasat from the 2008-2009 Session.

Since its inception, the College aimed at making higher education available to aspiring youth of the country so that they would be able to meet the challenges of an ever-changing world. It is also the mission of the College to foster a sense of social responsibility among the students. The College runs a wide gamut of courses that span a wide spectrum of disciplines. Professionally competent faculty, including guest faculty, impart quality education to the students. Seminars and extension lectures are arranged for the benefit of the students. Between 2010/11-2014/15 sessions 23 departmental and college seminars have been organized. Several faculty of the College are engaged in active research, present papers at national and international conferences in India and abroad and regularly publish research papers. Students of Botany, Zoology, and Industrial Fish and Fisheries (IFF) departments regularly undertake field excursions. The college library is well equipped to cater to the needs of the students. Counseling of students is undertaken on a regular basis by the teachers.

The Internal Quality Assurance Cell and Governing Body work in tandem to launch post-graduate courses in Botany, Mathematics, History and Physics and Undergraduate Honours course in Sanskrit and Education. In recent years new Undergraduate General courses in Education and Journalism and Mass Communication have been introduced. Ongoing construction and extension of college building will provide more space for classrooms. Women's Hostel will be functional from the next academic session. The



College has a well-equipped Gymnasium with state of the art equipment for students and staff. Eco club of the College has undertaken many programmes including tree plantation and green audit. Digital class rooms are made available to the faculty to take classes with power point presentation.

The College has a system of continuous and comprehensive evaluation (CCE) of students in order to ensure that the stated objectives are achieved. The College conducts test examinations and class tests apart from the regular University Examinations. Parent-teacher meetings are held to get feedback from the stakeholders. Moreover, the performance of our students in various national and state level entrance examinations and their subsequent absorption in different higher educational institutes and jobs serves as the yard stick for evaluating the extent to which the College has been able to implement its curriculum.

To address the future professional needs of the students in regional and global employment markets, a Computer Literacy Programme for the students has been introduced as an add on course by the College which includes basic computer knowledge with programming, net surfing and practical sessions. This one year certificate course will provide the students with valuable exposure to different career opportunities. Final year students of the department of Industrial Fish and Fisheries (Major) undertake on-job training at different Central and State Government departments and institutes such as Indian Council of Agricultural Research (ICAR), Krishi Vigyan Kendra (KVK). The College has a Career Counselling Cell which organizes several workshops for career guidance of the students in the college.

Criterion II

Education is not mere learning, but involves fostering a sense of social responsibility among its students, the future pioneers of social change. The new concept of teaching-learning is allied to the importance of Information and Computer Technology. Thus our objective is advancement of learning accompanied by modern teaching aids. The admission process in our college is completely transparent, online and based on merit.

To ensure students' need in terms of knowledge and skill, **Students' Profile Mapping** has begun. Students' and staff of the college are sensitized on gender and environment issues through various seminars, awareness programmes, workshops and gender audit. The college undertakes plantation drives and is also involved in working towards making



available a **Peoples Biodiversity Register**. For monitoring and evaluating the quality of the teaching learning process, the institute seeks self-appraisal of teachers, maintains attendance of students and seeks feedback from students, alumni and the local community. The faculty of the College are highly qualified and competent. Teachers are encouraged to participate in various staff development programmes.

The College, through the IQAC and Research Monitoring Cell encourage faculty members to undertake research activity through institutional and individual projects. Postgraduate courses in Botany and Mathematics are likely to commence from the 2016-2017 academic session. Various innovative teaching methods are adopted by the teachers to make teaching-learning more interesting. The College has received the DBT (Department of Biotechnology) facility of **BOOST-I** (Biotechnology Opportunities Offered for Science and Technology), that will improve the students' aptitude towards life science, research, development and future job opportunities. The IQAC (Internal Quality Assurance Cell) is competent to assure the teaching learning quality. The students' evaluation is based on **Continuous Comprehensive Evaluation System** (CCE). The assessment on Annual basis has been changed to Class Tests, Mid-term and Test examination. The College takes into cognizance the academic potential of its students and faculty and aims to drive towards excellence in the field of Teaching-Learning process.

Criterion III

Research is the cornerstone of any educational institution and the College lays emphasis on research, consultancy and extension activities so as to improve the teaching learning process. The College organizes regular students' seminar, exhibitions and study tours to encourage the research aptitude of the students. Eminent academicians from other institutions are invited to the College to deliver lectures and interact with the students and staff regularly. National and State level seminars are also organized in the College. Programmes for the career development of students have also been organized.

The College has always taken an active role in promoting research among its faculty. 18 faculty members successfully defended their doctoral theses after joining the College. Currently, one faculty member has submitted her doctoral thesis and eight more are working towards their doctoral programmes. Members of faculty regularly publish their research work - in the last five years 137 such papers have been published. The Research Monitoring Cell of the College motivates teachers to undertake projects and the College all provides facilities necessary. A total of 19 research projects have been either completed or are ongoing in the last five years. These include 14 Minor Research Projects, 2 Major Research Projects and 3 collaborative research projects. Postgraduate



students of other institutions have done summer projects under the guidance of some faculty members of this College.

Two ongoing major projects underway are “Biotechnology based Opportunities Offered to Science & Technology departments” funded by West Bengal Department of Bio Technology and ‘Phycodiversity of the Bonhooghly Lake and adjoining water bodies in Kolkata- status and potential implications’ and another funded by the University Grants Commission. The College has provided space for these projects so that a Biotechnology Research Centre can be set up in the College in future.

The funds for research projects are mainly mobilized from grants received from the UGC, DST, DBT and other funding agencies. Upgradation of infrastructure for research in emerging areas is also a priority, and the College has procured some of the latest equipment with UGC and State Government grants. The College library subscribes to 26 journals which are useful for the researchers. The provision of computational, net and reprographic facilities is adequate and the College is working towards its further improvement.

Apart from the annual College Magazine, and a few wall magazines, the College also proposes to publish two Journals, one in Natural Science, and the other in Humanities in the future.

The College does not have any system of interface with industry at present. However a few teachers do consultancy services on an individual basis. Local community participation is actively encouraged in various College activities such as tree plantation and blood donation camps. The College shares its grounds for the sports activities of local schools including those meant for students with special needs. Also, the College premises are offered for the use of Rotary club social service programmes, World Human Rights Organization programmes, as the site for short films and documentaries by non-commercial organisations and State Government Awareness programmes.

The College has set up a NSS unit, awaiting the approval of West Bengal State University. Initial activities of this unit will include Swachha Bharat Campaign, Eco-Club activities, Green Audit, clean campus, blood donation camps and general health awareness. The College has also held several awareness programmes on health, gender issues, human rights and environment in the past five years.



Criterion IV

An educational Institution can reach new heights with improved infrastructural facilities. Brahmananda Keshab Chandra College has been striving to achieve perfection in various parameters for example library facilities, uninterrupted power supply, availability of safe drinking water, all round academic facilities for its stakeholders and availability of digital technology. Curricular and co-curricular activities, class rooms, digital classrooms, seminar halls, tutorial spaces, laboratories, equipment are available in the College. Provisions for indoor and outdoor games, a gymnasium, public address system, redressal of grievances, a staff co-operative credit society- all work in tandem to foster holistic development.

Existence and functioning of various committees work at creating a conducive academic atmosphere while ensuring the optimal use of infrastructure available. The College takes into account the requirements of persons with special needs. The Women's Hostel will be functional from the 2016-2017 academic session. The services of a local doctor is available and the College has first aid boxes on each floor. All special units such as the IQAC, different redressal cells, recreational facilities and canteen are all available within the College campus.

Significant initiatives taken by the Library Advisory Committee have been implemented. The library has a reading room, borrowing facility, e-journal and e-book facility. The library takes a regular feedback from its users which are analyzed to improve its services.

Computer and internet facilities are available to teachers and students. Provision in the annual budget is made for procurement, upgradation, deployment and maintenance of the computers. ICT resources are used by staff and students. The College ensures optimal allocation and utilization of available financial resources for maintenance and upkeep of all infrastructure of the College.

Criterion V

Our students are the central driving force of our College since all the activities of teaching and non teaching staff of the college centre around our stakeholders. The College therefore takes special care to ensure provisions for their mentoring and support.

All information regarding enrolment of students in the institution is provided in the prospectus. The college website is also a source of information to the students. As soon as the students enroll themselves in the institution, their academic, financial and social needs are looked after. The students' aid fund scheme gives financial assistance to



deserving and needy students. Students from backward and minority communities are also given aid by the government. For the last two years financial aid from ‘Kanyashree Prakalpa’ has also been availed by our female students. The needs of differently – abled students are also taken care of. Students are encouraged to take part in co-curricular and extra –curricular activities. Sports and cultural programmes are a regular part of the activities of the College. Preparing wall – magazines, contributing to the College magazine and participating in outreach activities of the College are also done by the students. They have won awards and trophies in sports and posters in various inter-college and intra-college competitions. Students are given training in basic computer applications and English Communication. Slow learners are helped with remedial lessons and academic counselling, while advanced learners gain exposure from participating in seminars and lectures by invited academic personalities. Students are also exposed to practical skills in field trips. They develop team work and decision making skills when they organize exhibitions and programmes in the college. The Grievance Redressal Cell, Anti Ragging Committee, Women Cell, Sexual Harassment Redressal Cell all work in an organized manner in the college so as to create a genial atmosphere that strives to foster a serious academic scenario while working towards the all-round growth of the students. The Career Counselling Cell organizes regular workshops to motivate the students on various job prospects.

The College is committed to students’ progression to higher studies and towards their employment in future. Students at risk of failure or dropout are identified and remedial measures are undertaken. Superannuated faculty members are sometimes keen on conducting extra classes for the benefit of the students.

The College has a registered Alumni Association which is very active and regularly organizes seminars and workshops. There is an Alumni Association Committee in the College which keeps in touch with ex-teachers and also arranges get-togethers along with the teachers’ council. Prizes to meritorious students are given by the Alumni Association.

Criterion VI

Aimed at disseminating higher education at the undergraduate level to students, Brahmananda Keshab Chandra College has been working in the area of higher education for the last sixty years.

While maintaining a hierarchical structure, with the College Governing Body as the administrative head and the Principal as the executing authority, the College works on a participatory, collaborative model. The perspective plan for development, in different areas such as academic, administrative, infrastructure, is taken up by the different



committees of the governing body of the college with active participation and representation of Teachers, non-Teaching Staff and students. The various sub-committees of the Teachers' Council and the Cells of the College are also involved in the decision making process and their suggestions are invited by the Principal. The decisions taken in the Teachers' Council and non-Teaching Staff Association meetings are conveyed to the Principal and the Governing Body by the respective representatives. Departments of the College function in a decentralized mode -departmental meetings are held on a regular basis and important decisions communicated to the Principal.

To improve the overall quality of the College numerous steps have been taken over the last five years. Education and Journalism and Mass Communications have commenced at the undergraduate level from the 2015-16 academic session and plans of beginning postgraduate courses in Botany and Mathematics from the next academic session are afoot. Emphasis is given to technology enabled teaching and learning for which six classrooms had been made digital. E-journals are being made available to both the students and teachers through INFLIBNET facility in the Library.

Faculty members are encouraged to carry active research, present papers in various national and international conferences and publish. Infrastructure is provided to the faculty who undertake research projects. Distinguished academicians are invited by different departments to deliver lectures. Students are encouraged to participate in research through presentations, seminars and projects.

The College takes efforts to upgrade the professional competence of its staff, and their performance is subjected to regular appraisal. Established procedures are in place for financial planning and allocation through budgetary allocation, proper accounting system and external audit.

The College has an operative Internal Quality Assurance Cell (IQAC) since May 2013. Since its inception the IQAC has been working to meet the needs of the College so as to enhance the quality of all the stakeholders of the College.

Criterion VII

The College's commitment to Environment Consciousness is evident from its maintaining 88% (21569 sq. metres) of the college area as a green cover of which 11% is wild vegetation and the rest is occupied by the green playground. The College harbours about 70 plant species comprising different life forms. The College also prepares its students for their environmental responsibilities through seminars and presentations such as '*Biodiversity Conservation in Man-Made Ecosystems*', '*Water Crisis in West Bengal*',



and Field Excursions. In an endeavour to contribute sustainably to biodiversity conservation, the College has submitted a proposal to State Medicinal Plant Board for creating an Herbal Garden in the College premises. This proposal aims to conserve medicinal plants through students' participation. The College follows several energy saving and eco-friendly mechanism for maintaining carbon neutrality such as *Save Energy* stickers, paper recycling, No-Smoking in the campus. The College has submitted a proposal to UGC for installing a roof-top solar plant in the College for using Green Energy.

The innovations in Teaching-Learning practiced in most departments are through students' seminar and projects, parent-teacher meetings, class tests, extra-classes. The College has implemented the DBT-BOOST-I facility to facilitate students to study experimental biotechnology for further research and entrepreneurship.

The innovations in Students Progression involves the transparent process of Online admission, Photo-identity Card, Career Counselling Cell, Grievance Cell, Women's Cell, Equal Opportunities and Minorities Cells that are taken care by the faculty and staff of the College. Students Union is actively involved in organizing important occasions in the College such as Republic Day, Rabindra Jayanti, Swaraswati Puja, Freshers Welcome, College Social, among others. They also organize the Annual Sports, Cultural Competition, Blood Donation Camp and contribute to the publication of the college magazine – *Lekho manjari* and wall magazine *Pro-chesta*.

The College has improved its **Governance and Management** through innovations such as biometric attendance of its faculty and staff, a very active and efficient Teachers Council, a Co-operative society, a corporate bank account, rotational departmental headship, Office and Library automation etc.

One of the best practices of the college is the **Students' Seminar and Projects**. This practice works at making the teaching-learning interactive. As an outcome of this, students have presented paper/poster/ model in Departmental, State level, District level and National level seminars. Capacity building of students' research aptitude has enabled them to provide consultancy services in PBR of Sonamukhi and Village Botanist Manual of West Bengal, an initiative of Trans-Disciplinary Health Sciences and Technology-FRLHT, Bangalore.

Another best practice of the College is the Eco Club. The Club has a written Constitution that aims at developing the scientific temperament and environmental responsibility of the students. The Eco Club members hone their writing and learning talents through publication of scientific writings in the Eco-Wall journal. The activities of the club



include the celebration of World Environment Day, successful Plantation drives, Green Audit of the College and Peoples Biodiversity Register of Bonhooghly Lake.



SWOC Analysis

STRENGTHS	WEAKNESSES
<ol style="list-style-type: none">1. Extremely dedicated, motivated and highly qualified teachers striving to maintain standard of the institution. Also very efficient administrative staff who caters to the diverse needs of students at any hour.2. The college has moved towards modernization by complete computerization with LAN and WIFI.3. On-line admission procedure has been introduced from 2015-2016 session, ensuring complete transparency.4. Students' data handling software has been running smoothly since 2013.5. Linking of accounting and computation through LAN with the students' admission process.6. Following Govt. norms, COSA (Computerization of Salary Account) have started since 2012 onwards.7. All financial transactions are being done in compliance with e-pradan module of Govt. of WB.8. Library automation and digitization is in progress. E-resources availability has been ensured by subscribing to INFLIBNET. The library has a subscription of 26 journals and 27,000 books.9. The eco-friendly sprawling green campus of the college	<ol style="list-style-type: none">1. Lack of space for classrooms and infrastructural facilities in laboratories along with excessive class load which acts as a deterrent to faculty research.2. Insufficient funds from the Government which is not disbursed uniformly over the entire financial year poses problems for the college in planning and execution of projected works.3. Dependence on P.W.D. for civil and electrical work within the college and hostel campus makes quality assurance, maintenance and monitoring difficult.4. The students who are enrolled here mainly belong to the economically weaker sections of the society as well as are first generation learners. Remedial classes are required to address the problems of these students so as to groom the slow learners.



<p>over-viewing the Bon-Hooghly lake is our greatest advantage for which our students are preparing Biodiversity Register as a Best Practice of Eco-club, to promote conservation of nature and its sustainable utilization of resources.</p> <p>10. The Career Counselling Cell has been actively taking care of students' job prospects in various subjects. For better career options placement seminars are allowed to be held frequently by external agencies.</p> <p>11. The College has been providing scholarship to economically backward students as a part of Students Aid-Fund. The Equal Opportunity Cell has been active in spreading awareness among girl students for Kanyashree scheme and also Scholarship for the reserved category students from the Govt. authority.</p>	
<p>OPPORTUNITIES</p> <ol style="list-style-type: none"> 1. Establishment of the IQAC for the last two years has sensitized the Departments regarding quality control, maintenance of students data record, academic expansion and utilization of funds. 2. Value education and Health awareness programs for students including seminars, workshops and NSS activities. 3. Transform administration into an environment friendly paperless technology based unit. 	<p>CHALLENGES</p> <ol style="list-style-type: none"> 1. Generating resources and creating reserve funds for maintaining day-to-day activities of the College and annual maintenance of sophisticated instruments in the laboratories. 2. Transition of all administrative activities from paper based to paper less computer based handling is challenging due to reluctance of knowledge of latest technological trends. 3. The pace of upgrading



<p>4. To ensure regular inflow of Govt. funds for maintenance of the vast campus including the ladies Hostel.</p> <p>5. To ensure regular research activity for the Faculty members by enhancing the number of research proposals for collaborative work with other research institutes and industry.</p>	<p>infrastructure is not commensurate with increase in students' uptake as directed by the affiliating University.</p> <p>4. Complete grooming of students through academic and value education programmes to motivate them to remain focussed in their vision of achieving their goals despite political, religious or socio-economic biasness.</p> <p>5. To modernise the methods and contents of higher education through implementation of technology.</p>
---	--



PROFILE OF THE COLLEGE

1. Name and Address of the College:

Name:	Brahmananda Keshab Chandra College	
Address:	111/2 B. T. Road, Bon Hooghly	
City:	Pin: 700108	State: West Bengal
e-mail :	bkccollegebonhooghly@gmail.com	
Website:	www.bkccollege.org	

2. For Communication:

Designation	Name	Telephone withSTDcode	Mobile	Email
Principal	Papia Chakraborti	O: 033-25775878 R: 033-25385231	9830467390	papiarc@rediffmail.com
Steering Committee Co-ordinator	Aparajita Nag	O: 033-25775878 R: 033-24622590	9836557985	aparajita.nag@gmail.com

3. Status of the Institution:

Affiliated College	<input checked="" type="checkbox"/>
Constituent College	<input type="checkbox"/>
Any other (specify)	<input type="checkbox"/>

4. Type of Institution:

a. By Gender	
i. For Men	<input type="checkbox"/>
ii. For Women	<input type="checkbox"/>
iii. Co-education	<input checked="" type="checkbox"/>
b. By Shift	
i. Regular	<input checked="" type="checkbox"/>
ii. Day	<input type="checkbox"/>



iii. Evening

5. It is a recognized minority institution?

Yes

No

If yes specify the minority status (Religious/ linguistic/ any other) and provide documentary evidence.

Not Applicable

6. Sources of funding:

Government

Self-financing

Any other

7.

a Date of establishment of the college:

24/25/07/1956
(vide memo no
7805(EdnCS) dated
24/25.7.1956

b University to which the college is affiliated/ or which governs the college (If it is a constituent college):

West Bengal State
University (from
2008)
(Affiliated to the
University of
Calcutta from
inception to 2008)

c Details of UGC recognition:

UnderSection	Date,Month&Year (dd-mm-yyyy)	Remarks(Ifany)
i.2(f)	01.01.1969 (See Annexure I)	As per record of the UGC published book
ii.12(B)	01.01.1969 (See Annexure II)	UGC web site

(Enclose the Certificate of recognition u/s2(f) and 12(B) of the UGC Act)



d. Details of recognition/ approval by statutory/ regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.) : Not Applicable

(Enclose the recognition/ approval letter)

8. Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?

Yes No

If yes, has the College applied for availing the autonomous status?

Yes No

9. Is the college recognized

a. by UGC as a College with Potential for Excellence (CPE)?

Yes No

If yes, date of recognition:.....(dd/mm/yyyy)

b. for its performance by any other governmental agency?

Yes No

If yes, Name of the agency.....and

Date of recognition(dd/mm/yyyy)

10. Location of the campus and area in

sq.mts:

Location*	Urban
Campus area in sq.mts.	24281
Built up area in sq.mts.	5367.69

(*Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.



- Auditorium/ seminar complex with infrastructural facilities

- Sportsfacilities

- Playground

√

- Swimming pool

--
- Gymnasium

√

- Hostel

- **Boys' Hostel**

- Number of hostels
- Number of inmates
- Facilities (Mention available facilities)

- **Girls' Hostel**

- Number of hostels : 1 (Yet to be functional)
- Number of inmates : 40 (Approx.)
- Facilities (Mention available facilities) Triple Bedded Rooms, Kitchen, Canteen, Reading Hall, Indoor Games room, Seminar Hall

- **Working women's Hostel**

- Number of inmates
- Facilities (Mention available facilities)

- Residential facilities for teaching and non-teaching staff(give numbers available—cadre wise)

- Cafeteria— √

- Health Centre—

- First aid, Inpatient, Outpatient, Emergency care facility

--
- Ambulance

--
- Health centre staff

--
- Qualified doctor Fulltime

--

 Part-time

--



v. Qualified doctor Fulltime Part-time

- Facilities like banking, post office, book shops :
- Transport facilities to cater to the needs of students and staff : Rented car when needed
- Animal house
- Biological waste disposal
- Generator/ other facility for management/ regulation of electricity and voltage : Central power back-up through an eco-friendly generator
- Solid waste management facility: Proper disposal of E-waste through an NGO DISHA
- Waste water management
- Water harvesting

12. Details of programmes offered by the college (Give data for current academic year)

The data is given for the academic year 2015-16 (First Year)

Sl. No.	Programme Level	Name of the Programme/ Course	Duration in years	Entry Qualification	Medium of instruction	Sanctioned/ approved Student	No. of students admitted
1	Under Graduate	Bengali (H)	3	10+2 Passed	Bengali	80	38
2		Botany (H)	3	10+2 Passed	English and	54	31
3		Chemistry (H)	3	10+2 Passed	English and	80	23
4		Economics (H)	3	10+2 Passed	English and	33	3
5		English (H)	3	10+2 Passed	English	80	41
6		History (H)	3	10+2 Passed	Vernacular	66	14
7		Industrial Fish and Fisheries	3	10+2 Passed	English and Vernacular	33	05
8		Mathematics (H)	3	10+2 Passed	English and	80	19



Sl. No	Programme Level	Name of the Programme/Course	Duration in	Entry Qualification	Medium of instruction	Sanctioned/approved Student	No. of students admitted
9		Philosophy (H)	3	10+2 Passed	Vernacular	80	01
10		Physics (H)	3	10+2 Passed	English and	80	31
11		Political Science (H)	3	10+2 Passed	Vernacular	80	01
12		Zoology (H)	3	10+2 Passed	English and Vernacular	80	59
13		BA (G)	3	10+2 Passed	Vernacular	206	90
14		B.Sc (G)	3	10+2 Passed	English and	165	09
	PG						
	Integrated Programmes PG						
	Ph.D.						
	M.Phil.						
	Ph.D						
	Certificate courses						
	UG						
	PG						
	Any Other (specify and provide details)						

13. Does the college offer self-financed Programmes?



Yes No
 If yes, how many?

14. New programmes introduced in the college during the last five years if any?

Yes No
 If yes, how many? Two

15. List the departments: (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes. Similarly, do not list the departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

Faculty	Department	UG (Honours)	UG (General)	UG (Major)	PG	Research
Science	Botany	√	√			
	Chemistry	√	√			
	Computer Science		√			
	Economics	√	√			
	Industrial Fish and			√		
	Mathematics	√	√			
	Molecular Biology		√			
	Physics	√	√			
	Statistics		√			
	Zoology	√	√			
	Bengali	√	√			
	Education		√			
	English	√	√			
	History	√	√			



Faculty	Department	UG (Honours)	UG (General)	UG (Major)	PG	Research
Arts	Journalism and Mass Communication		√			
	Philosophy	√	√			
	Political Science	√	√			
	Sanskrit		√			
Commerce						
AnyOther (Specify)						

16. Number of Programmes offered under (Programme means a degree course like BA, BSc, MA, M.Com...)

i. Annual System	14
ii. Semester System	
iii. Trimester System	

17. Number of Programmes with

i. Choice Based Credit System	Not Applicable
ii. Inter/Multidisciplinary Approach	Not Applicable
iii. Any other (specify and provide details)	Not Applicable

18. Does the college offer UG and/or PG programmes in Teacher Education?

Yes No



If yes,

a. Year of Introduction of the programme(s) (dd/mm/yyyy)

And number of batches that completed the programme

b. NCTE recognition details (if applicable)

Notification Number:

Date: (dd/mm/yyyy)

Validity:

c. Is the institution opting for assessment and accreditation of Teacher Education Programme separately? Yes / No

19. Does the college offer UG and/or PG programmes in Physical Education?

Yes No

If yes,

a. Year of Introduction of the programme(s) (dd/mm/yyyy)

And number of batches that completed the programme

b. NCTE recognition details (if applicable)

Notification Number:

Date: (dd/mm/yyyy)

Validity:

c. Is the institution opting for assessment and accreditation of Teacher Education Programme separately? Yes / No

20. Number of teaching and non-teaching positions in the Institution

Positions	Teaching faculty						Non-teaching staff		Technical staff	
	Professor		Associate Professor		Assistant Professor					
	*M	*F	*M	*	*M	*F	*	*	*M	*
Sanctioned by the UGC/ University/ State										
<i>Recruited</i>			8	17	17	12	22	4	1	
<i>Yet to recruit</i>										



Sanctioned by the Management/ society or other authorized bodies									
<i>Recruited</i>				4		2	1		
<i>Yet to recruit</i>									

*M-Male*F-Female

21. Qualifications of the teaching staff:

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Femal	Male	Female	Male	Femal	
Permanent teachers							
D.Sc./D.Litt.							
Ph.D.			08	12	07	4	31
M.Phil.				3	1		4
PG				2	9	8	19
Temporary teachers							
Ph.D.							
M.Phil.							
PG					1		1
Part-time teachers							
Ph.D.							
M.Phil.							
PG							

22. Number of Visiting Faculty/ Guest Faculty engaged with the College: **Three**

23. Furnish the number of the students admitted to the college during the last four academic years.



Year	Category	1st Year			2nd Year			3rd Year		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
2014-15	General	235	176	411	122	119	241	114	105	219
	SC	20	17	37	12	13	25	19	3	22
	ST	0	0	0	0	1	1	0	0	0
	OBC	17	7	24	5	2	7	9	4	13
	Total	272	200	472	139	135	274	142	112	254
2013-14	General	202	237	439	156	127	283	145	119	264
	SC	19	14	33	15	4	19	9	4	13
	ST	2	2	4	0	1	1	0	1	1
	OBC	14	7	21	4	2	6	5	1	6
	Total	237	260	497	175	134	309	159	125	284
2012-13	General	294	194	488	159	128	287	132	117	249
	SC	20	3	23	12	3	15	1	7	8
	ST	2	0	2	0	1	1	1	0	1
	OBC	2	2	4	5	3	8	6	2	8
	Total	318	199	517	176	135	311	140	126	266
2011-12	General	341	207	548	151	136	287	161	129	290
	SC	17	9	26	6	6	12	8	5	13
	ST	1	0	1	1	0	1	2	0	2
	OBC	3	2	5	6	1	7	2	1	3
	Total	362	218	580	164	143	307	173	135	308
2010-11	General	358	217	575	178	140	318	126	158	284
	SC	13	3	16	11	10	21	5	4	9
	ST	0	0	0	2	0	2	0	0	0
	OBC	6	0	6	1	1	2	0	1	1
	Total	377	220	597	192	151	343	131	163	294

24. Details on students enrollment in the college during the current academic year (2015-16):

Type of students	UG	PG	M.Phil	Ph.D.	Total
Students from the same State where the college is located	785 (up to				
Students from other states of					
NRI students					
Foreign students					
Total	785				

25. Drop out rate in UG and PG (average of the last two batches)

UG PG



26. Unit Cost of Education

(Unit cost =total annual recurring expenditure (actual) divided by total number of students enrolled)

i. Including the salary component	Rs.41395
ii. Excluding the salary component	Rs. 5659

27. Does the college offer any programme/s in distance education mode (DEP)?

Yes No

If yes,

- i. Is it a registered centre for offering distance education programmes of another University (Yes / No)
- ii. Name of the University which has granted such registration
.....
- iii. Number of programmes offered:
- iv. Programmes carry the recognition of the Distance Education Council..... (Yes / No)

28. Provide Teacher-student ratio for each of the programme/course offered

Department	Student : Teacher (For the Academic Year 2014-15)
Botany	9:1
Chemistry	9:1
Computer Science (General)	22:1
Economics	1:1
Industrial Fish and Fisheries (Major)	37:1
Mathematics	9:1
Molecular Biology (General)	27:1
Physics	9:1
Statistics (General)	9:1



Department	Student : Teacher (For the Academic Year 2014-15)
Zoology	17:1
Bengali	15:1
Education (General)	28:1(2015-16)
English	22:1
History	12:1
Journalism and Mass Communications (General)	33:1(2015-16)
Philosophy	3:1
Political Science	3:1
Sanskrit (General)	43:1

29. Is the college applying for

Accreditation	Cycle1	√
	Cycle2	
	Cycle3	
	Cycle4	
Re-Assessment		

(Cycle1 refers to first accreditation and Cycle2, Cycle3 and Cycle4 refers to re- accreditation)

30. Date of accreditation:

Not Applicable as this is the 1st cycle of accreditation.

31. Number of working days during the last academic year : **253**
(2014-15)

32. Number of teaching days during the last academic year : **183 (2014-15)**

(Teaching days means days on which lectures were engaged)



excluding the examination days)

33. Date of establishment of Internal Quality Assurance

Cell(IQAC).....07/05/2.....(dd/mm/yyyy)

34. Details regarding submission of Annual Quality Assurance Reports(AQAR) to NAAC

This is the 1st cycle of accreditation

35. Any other relevant data (not covered above) the college would like to include:

College has received affiliation for commencing Post Graduate Courses in Botany and Mathematics from WBSCHE; the courses will commence from the next academic session 2016-2017.



1.

CURRICULAR ASPECTS



1.1 CURRICULUM PLANNING AND IMPLEMENTATION

1.1.1 Vision, mission and objectives of the institution, and communication of these ideas to the students, teachers, staff and other stakeholders:

History of the college

Brahmananda Keshab Chandra College was established in 1956 as a result of Government endeavour “to remove congestion in the existing colleges owing to influx of refugee students.” In 1954, Professor J. C. Ghosh, the then Vice-Chancellor of Calcutta University, surveyed the available higher educational facilities in 24 Parganas. The survey revealed that facilities were inadequate for the huge influx of refugees in the area. Professor Ghosh stressed the immediate necessity of setting up at least six colleges in Kolkata and its surroundings to cope with the growing demand for college education. He further suggested that these colleges should be established and financed by the Central Relief and Rehabilitation Ministry, Government of India. Soon after, Dr. B. C. Roy, the then Chief Minister of West Bengal, took up the proposal with the Government of India, which was accepted by the Central Relief and Rehabilitation Ministry. The Ministry agreed to set up six colleges in and around Kolkata and bear the financial commitments as well.

The College was thus established in Bon-Hooghly in the year 1956 as one of the colleges under this scheme with the aim of providing higher education. It was named after Brahmananda Keshab Chandra Sen, the great socio-religious reformer of the country, during the Bengal Renaissance. Initially the college was housed at Sagar Dutta Free High School, Kamarhati and later moved to its own premises in 1957. This college, a UGC registered college (under 2f and 12B) is one of the premier institutes in North 24 Parganas. Initially affiliated to the University of Calcutta, the college has now been affiliated to West Bengal State University, Barasat from the 2008-2009 session.



Vision of the College

- The vision of the college is to make higher education available to aspiring youth of the country.
- Students are equipped to meet the challenges of an ever-changing world through a holistic model of education.
- To optimize the use of available infrastructure for sustained development of the college.

Mission of the College

- The mission of the College is to foster a sense of social responsibility among the students.
- To encourage innovative thinking and creativity among the students.
- To instill in the students moral values, discipline and dynamism along with imparting quality education.
- To supplement and enrich the existing curriculum through seminars and extension lectures delivered by eminent scholars.

Objectives

The Internal Quality Assurance Cell (IQAC) and Governing Body work to frame future plans of the college in the following criteria.

Curricular Aspects

- To commence Postgraduate courses in Physics, History.
- Building up the infrastructural facility for Post Graduate programmes in Botany and Mathematics which will commence from 2016-17 session.
- To commence Undergraduate Honours course in Sanskrit and Education.
- To work at honing the skills of students in various disciplines by including information on advanced technology in relevant fields.

Teaching Learning and Evaluation

- To enable teachers to improve their skills through regular evaluation by students.
- Use of remedial teaching for students who need them.



- Evaluation and improvement of College Examination system.
- Creation of more digital classrooms.
- Computer Aided learning.
- Proposal of creating virtual classroom.
- Promoting fruitful learning through project works, dramatization of texts, exhibitions, student seminars among others.

Research Consultancy and Extension

- Continuation of the endeavour to promote research activity among faculty through institutional and individual research projects.
- Organizing National/International Seminars/ Conferences.
- Students' Seminar by various departments.
- Organizing lectures by eminent academicians.

Infrastructure and Learning Resources

- Women's Hostel to be functional from the next academic session.
- Construction and extension of College building that will provide space for more classrooms.
- Construction of gymnasium with state of the equipment for students is on in full swing.
- Repair and renovation of existing building.
- Garden of medicinal plants to be set up.
- To enhance the resources of the Departmental libraries.
- The Eco-Club of the College has undertaken the task of naming and numbering the flora and fauna of the college.
- Green Audit to be undertaken by the Eco Club

Student Support and Progression

- Facilitating Support services through placement cell.
- Full and part free scholarships to needy students
- Construction of ramp for differently abled.
- Extension of coaching and sports facilities.
- Media Room.
- Medical Aid Fund
- Cultural activities, meets, competitions, exhibitions etc.
- College annual sports.



Governance and Leadership

- Planning and development strategies for resource mobilization.
- Budget and utilization of finance regularly.
- Proposal for faculty development programme of teaching and non-teaching staff.
- Improvement of student-teacher ratio.
- Computer facilities for students.
- Filling up of substantive posts.
- Attempt to process grants from DST and UGC.

Innovative Practices

- Work at re-establishing the NSS scheme.
- Blood Donation camps
- Extension of social participation and community services.
- Awareness programmes.

All stakeholders of the College, students, teachers, staff and others are made aware of the vision, missions and objective through the College prospectus, website of the College, classroom teaching, interactive sessions and parent-teacher meetings. Extra and co-curricular activities of the college such as Freshers' Welcome, Annual Social, Teachers' Day Celebrations, get-together of retired and ex-teachers, Republic Day Celebrations, Independence Day Celebrations, Rabindra Jayanti, Saraswati Puja, Netaji's Birthday, Keshab Chandra Sen's birthday, Foundation Day, Alumni Reunion, also play an important role in this.

1.1.2 Institutional development and deployment of action plans for effective implementation of the curriculum

The College runs a gamut of courses that span a spectrum of disciplines. Professionally competent faculty, including guest faculty, impart quality education to students. Effective implementation of the curriculum necessitates a sound coordination among the colleges and the university which formulates the curriculum. The College for its part plans classes as per routine formulated by the College at the start of the academic session, organizes class tests, mid-term and test examinations, evaluates answer scripts and publishes



results. Based on the results of these tests, efforts are made to further guide students so that they improve in future. Seminars and extension lectures are arranged for the benefit of the students. Students are encouraged to present papers in students' seminar to enhance their understanding of the subject, to instill a sense of confidence in them, and to work at improving their communicative skills. Several teachers of the college are actively involved in research, present papers at national and international conferences in India and abroad and regularly publish research papers in peer reviewed journals. Active and continuous involvement in research and academics is an imperative to good teaching and teachers of the College work towards it. Students of Botany, Zoology and Industrial Fish and Fisheries (IFF) departments regularly undertake field excursions. The College library is well equipped and students have full access to it. Counselling of students is undertaken on a regular basis by the teachers.

1.1.3 Support (procedural and practical) from the University and the institution for effectively translating the curriculum and improving teaching practices:

The University and the College have common and shared responsibility in effectively translating the curriculum and work in tandem to achieve the desired result. Yearly academic activities are conducted according to the academic calendar published by the College in accordance with University guide lines. The College is informed of the changes and modifications in the curriculum through circulars from the University, copies of which are distributed among the faculty members. The University organizes Refresher Course for improving teaching practices and arranges workshop on new syllabi. Faculty members of the College regularly participate in these courses. They are also encouraged to attend conferences and present papers. Many teachers have availed the University Grants Commission (UGC) Minor Research Projects (MRP) and a Major Research Project. Photocopying facilities, computers and internet connections are available to the teachers to facilitate the improvement of the teaching-learning process and aid in research. There are also some digital classrooms where teachers take classes with the help of Power Point presentation.

1.1.4 Institutional contribution to effective curriculum delivery and transaction on the Curriculum provided by the affiliating University



Syllabi for the undergraduate courses taught at the college are framed by West Bengal State University to which the College is affiliated. The college arranges classes, prepares the master routine and departmental routines, circulates notices and regularly organizes students' seminar on the curriculum provided by the University.

Table 1.1: Seminars organized by the college/departments

Sl.No.	Year	College Seminar	Departmental Seminar	No. of Events
1.	2010-11	0	6	6
2.	2011-12	4	2	6
3.	2012-13	0	3	3
4.	2013-14	1	4	5
5.	2014-15	1	2	3

1.1.5 Institutional networking and interacting with beneficiaries such as industry, research bodies and the university in effective operationalisation of the curriculum

- Periodical Laboratory visits are arranged by the department of Botany to Bose Institute, Central National Herbarium, Shibpur, among others.
- Students of the department of Zoology are taken to the Indian Zoological Garden
- The department of Political Science has arranged visits to the West Bengal State Legislative Assembly.
- The department of History organizes visits to the Indian Museum and Victoria Memorial.
- Some of the departments are associated with industries and this in turn benefits the students. Final year students of the department of Industrial Fish and Fisheries (Major) have to undertake on-job training at different Central and State Government departments and institutes such as Indian Council of Agricultural Research (ICAR), Krishi Vigyan Kendra (KVK). This training is self-financed.



- The college has a Career Counseling Cell and the following activities have been held in the College.
 1. ABP Private Limited conducted an examination for interview and workshop on 28th November, 2014.
 2. Workshop organized by Camellia Educare Services Pvt. Ltd. (2012).
 3. NIIT organized an examination in September 2015 and selected candidates who would be granted fellowship.

- Faculty members of the college are actively involved in research. Many teachers act as guest faculty in postgraduate departments and are members of the Board of Studies. Teachers are also involved as paper setters, moderators, examiners, head examiners of the West Bengal State University and other universities. Their feedback contributes to an improvement in the course curriculum.

1.1.6 Contributions of the institution and its staff members to the development of the curriculum by the University

A number of faculty members of the college are members of the Board of Studies of the West Bengal State University and in other colleges that offer postgraduate courses. Their feedback is important in framing the course content, and in innovation of syllabi implementation. Teachers of the college have served as resource persons in workshops on the revised syllabi of the University. Faculty members actively participate in workshops on syllabus revisions organized by the University. The teachers are often asked to contribute to the model question papers prepared by the University for each subject. Almost all faculty members are examiners and/or head examiners in various subjects of the University.

Table 1.2: Faculty involvement in extension activities



Sl. No.	Name	Department	Activity	Institution
1	Dr. Jayanta Kumar Dwibedi	Economics	Member, Board of Studies	West Bengal State University
2	Dr. Bidisha GhoshDastidar	Zoology	Member, Board of Studies	West Bengal State University
3	Dr. Sanjib Chattopadhyay	Zoology	Member, Board of Studies	West Bengal State University
4	Dr. Paritosh Kumar Ray	Zoology	Member, Board of Studies	West Bengal State University
5	Dr. Gangabrata Mukhopadhyay	Mol. Biology	Member, Board of Studies	West Bengal State University
6	Dr. Soma Sen	Chemistry	Member, syllabus revision Committee	West Bengal State University
7	Dr. Manasi Basu	Chemistry	Member, syllabus revision Committee	West Bengal State University
8	Debosree Goldar	Zoology	Member, Governing Body	Nahata College
9	Dr. Papia Chakraborti	Botany	Member, Board of Studies	University of Gourbanga
10	Dr. Indranil Chattopadhyay	History	Guest faculty (PG course)	Bongaon Dinabandhu Mahavidyalaya
11	Dr. Aloke Kumar Chattopadhyay	History	Guest faculty (PG course)	IGNOU at Bhairab Ganguly College
12	Dr. Aparajita Nag	Physics	Resource Person (Refreshers Course)	Academy of Sciences, INSA & NASI
13	Dr. Jayanta Kumar Dwibedi	Economics	Guest faculty (PG Course and Ph. D. course work)	PG in Commerce at Bhairab Ganguly College, Ph. D. course work under Ramakrishna Mission Vivekananda University
14	Dr. Papia Chakraborti	Botany	Resource person (Ph. D course work)	University of Calcutta

1.1.7 Development of curriculum for PG courses (other than those under the purview of the University)

Postgraduate classes in Botany and Mathematics are likely to commence from the next academic session. The process for its commencement has been initiated with a preliminary inspection of available facilities by the West Bengal Higher



Education Council. Faculty members of these two departments are expected to develop curricula for the autonomous post-graduate courses.

1.1.8 Institutional analysis to ensure the achievement of stated objectives of curriculum implementation

The College has a scheme of enforcing continuous and comprehensive evaluation (CCE) of students in order to ensure that the stated objectives are achieved. The College conducts test examinations and class tests apart from the regular University Examinations. Parent-teacher meetings are held in order to get feedback from the stakeholders. Moreover, the performance of the students in various National and State level entrance examinations and their subsequent absorption in different higher education institutes and jobs serves as the yardstick for evaluating the extent to which the college has been able to implement its curriculum.

1.2 ACADEMIC FLEXIBILITY

1.2.1 The goals and objectives of the certificate/diploma/ skill development courses etc., offered by the institution

Computer Literacy programme for the students has been introduced recently by the College. This one year certificate course has been introduced to address the future professional needs of the students. On successful completion of the course, students will be awarded certificates by the college. This provides them with valuable exposure to different career opportunities.

1.2.2 Programmes that facilitate twinning /dual degree

West Bengal State University, the affiliating University provide permission to the students with the flexibility of combining the conventional course and distance mode of education for students. A number of our students avail such opportunities to pursue such parallel courses.



1.2.3 Academic Flexibility, Mobility, Skill Development, Progression to Higher Studies and Employability

Range of Core /Elective options offered by the University and those opted by the college

Table 1.3: Core and Elective subjects offered by the college

Stream	Honours courses(Core)	General Subject Combinations (Any two)
B.A	Bengali	History, Philosophy/ Elective English/ Sanskrit/ Journalism and Mass Communication/ Education
	English	History, Political Science/ Elective Bengali/ Economics/ Journalism and Mass Communication/ Education
	History	Political Science, Philosophy/ Elective English/ Economics / Journalism and Mass Communication/ Education
	Philosophy	History, Political Science/ Sanskrit/ Education
	Political Science	History, Philosophy/ Economics/ Journalism and Mass Communication/ Education
B. Sc	Physics	Mathematics, Chemistry/ Computer Science/ Statistics
	Chemistry	Mathematics and Physics
	Mathematics	Physics, Chemistry/ Computer Science/Statistics
	Botany	Zoology, Chemistry/Molecular Biology
	Zoology	Botany, Chemistry/ Molecular Biology
	Economics	Mathematics, Statistics/ Computer Science/ Political Science



B. Sc (Major)	Industrial Fish and Fisheries	Zoology and Chemistry
--------------------------	--	-----------------------

General Course

Students opting for the general stream have to take up three general subjects as part of their course. **Environmental Science is compulsory for all first year students.**

B.A General Course

Any three of the following subjects:

Elective English, Elective Bengali, Economics, Sanskrit, History, Philosophy, Political Science, Education, Journalism and Mass Communication.

Note: Sanskrit is not offered with Economics or Elective English.

Education is not offered with Economics.

Journalism and Mass Communication is not offered with Philosophy.

Table 1.4: General subjects offered by the college

Stream	General Courses	Subject Combinations
B.SC (Gen)	Physical Science	Mathematics, Physics, Chemistry/ Computer Science/ Molecular Biology/ Statistics
	Bio-Science	Botany, Zoology, Chemistry/ Molecular Biology
	Eco-Science	Mathematics, Economics, Political Science/ Statistics/ Computer Science

The College is affiliated to the West Bengal State University follows all the rules and regulations stipulated by it for undergraduate courses.



- The combination of courses offered is in keeping with University guidelines and depends on infrastructure facilities available in the College.
- The syllabi of the undergraduate courses are essentially modular in structure. Students are required to appear in the University Examinations at the end of each academic year according to the B.A/ B.Sc. Examination (1+1+1) system of West Bengal State University.
- There is no opportunity for credit transfer.
- After admission to the college, the students are allowed to change their general and honours subjects within a stipulated time set by the University. Students failing to secure qualifying marks in their Honours subjects in the University Examinations are transferred to the general stream as per University guidelines.
- Under Enrichment Courses, Computer Literacy programme for all first year students has been introduced recently. This one year certificate course has been introduced to address the future professional needs of the students. This provides them with valuable exposure to different career opportunities.

1.2.4 Institution offering self-financed programmes

The College offers no self-financed programmes. However, postgraduate courses are on the anvil.

1.2.5 College providing additional skill oriented programmes, relevant to regional and global employment markets

Computer Literacy programme for all first year students has been introduced recently. This one year certificate course, certified by the College has been introduced to address the future professional needs of the students. The Course includes basic computer knowledge with programming, net surfing and practical sessions. This provides them with valuable exposure to different career opportunities.

1.2.6 Flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice

The affiliating University, West Bengal State University does provide flexibility of combining the conventional face-to-face and Distance Mode of education. The institution has no objection in students continuing face-to-face and distance mode of education along with the conventional under graduate course.



1.3 CURRICULUM ENRICHMENT

1.3.1 Efforts made by the institution to supplement the University's Curriculum to ensure that the academic programmes and Institution's goals and objectives are integrated:

Various departments of the College are working within the curriculum set by the University and the college constantly works towards a holistic growth of the student. Tutorial classes are held regularly to supplement the University's Curriculum in a manner best suited for the students. Many departments organize remedial classes for honours students. Teachers act as mentors to students and counsel them. Students' Seminar are regularly held in the College where students present papers. (Refer **Table 1.1** and **3.1**)

1.3.2 The efforts made by the institution to modify, enrich and organize the curriculum to explicitly reflect the experiences of the students and cater to needs of the dynamic employment market

Many of the teachers of the institution are members of the Board of Studies of the University (Refer **Table 1.2**) and are involved in the modification of the curriculum in the undergraduate courses. As part of the enrichment programme, students actively participate in various activities including community service, field surveys, excursions and study tours. Students also regularly participate in debates, discussions, student projects and other such programmes. Audio visual aids are used for teaching by many faculty members.

Computer Literacy programme is made available to students of the College. The course caters to the needs of the job market. Basic computer knowledge along with programming, net surfing and practical sessions are the areas covered in the course. On successful completion of the course, students are awarded certificates by the college.

1.3.3 The efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum



As the curriculum followed is set by the University, there is little scope for integrating cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights and ICT into the curriculum. However, the college organizes several seminars/workshops, some with UGC assistance and others self-financed on these issues. Seminars on Climate Change, and Environmental Education have been organized by the College in the past. (Refer 1.3.4)

1.3.4 Various value-added courses/enrichment programmes offered to ensure holistic development of students

Several enrichment programmes have been organized to ensure holistic development of students. The College has organized the following programmes.

- Career Counselling Programmes organized by Ananda Bazar Patrika, NIIT, among others.
- Informal Education in Sanskrit - Coaching classes have been arranged by the Sanskrit department to enable students to appear in competitive exams with special assistance from “Rashtriya Sanskrit Sansthan”.
- Community Orientation Programmes such as Blood Donation camps on 3rd March, 2012 and a Seminar on Diabetes was held on 30th September, 2015.
- Awareness programme on ‘Positive Discrimination’ on 12th September, 2012.
- Awareness programme on ‘Higher Education for Persons with Special Needs’ on 17.08.2012 and 24. 08 2012 respectively.
- Social Welfare Programmes like providing shelter to the water logged people in the nearby areas, tree plantation, distribution of books to the needy students of the local areas and medical checkup camps.
- The College playground is made available to local schools to enable them to conduct their annual sports.

1.3.5 Use of the feedback from stakeholders in enriching the curriculum

Curriculum is framed by the West Bengal State University. Several faculty members are members of the various Board of Studies (Refer **Table 1.2**). The faculty members function as paper-setters, examiners and head-examiners. They provide and share their expertise with the University regard to modification and enrichment of the curriculum.



Students, guardians and the Alumni Association provide the College with valuable suggestions. This works in creating a scenario by which the college endeavours to improve available resources and infrastructure for the benefit of the students. General courses of Education and Journalism and Mass Communication have been introduced on the basis of information received from the above sources. The college will seek feedback from the local community as well.

1.3.6 Institutional monitoring and evaluating the quality of its enrichment Programmes:

Monitoring and evaluation are mainly done through

- Analysis of the performance of students in the examinations and student seminars.
- Placement of students in research, higher education and industry.
- Feedback from alumni.
- Feedback from students.

1.4 FEEDBACK SYSTEM

1.4.1 Contributions of the institution in the design and development of the curriculum prepared by the University

A number of faculty members of the college are members of the Board of Studies of the West Bengal State University and in other colleges that offer postgraduate courses. Their feedback is important in framing course content, and in innovation of syllabus implementation. Teachers of the college have served as resource persons in workshops on the revised syllabus of the university. Faculty members are often asked to contribute to the model question papers prepared by the University for each subject. (Refer **Table 1.2**)

1.4.2 Mechanism to obtain feedback from students and stakeholders on Curriculum to the University



The College has a system of obtaining feedback from all kinds of stakeholders. Parent-teacher meetings are a regular practice which helps in redressal of problems. Feedback received from the students provides us the opportunity to serve them better. The process of getting feedback from the alumni of the College has started. The feedback forms are discussed and scrutinized in detail in the IQAC meeting and necessary steps are taken. (Refer Annexure 1.4.2)

1.4.3 Courses introduced by the institution during the last four years and the rationale for introducing new courses

In recent years new UG courses and PG courses have been introduced by the College.

Table 1.5: New courses introduced

Sl. No.	Year of commencement	UG/PG	Course/Subject	Coordinator
1.	2015	UG	Education(General)	Dr. Indranil Chattopadhyay (Assistant Professor of History)
2.	2015	UG	Journalism and mass communication (General)	Sri Saral Dutta (Assistant Professor of Mathematics)

Postgraduate courses in Botany and Mathematics are on the anvil and modalities for its introduction have been initiated (vide letter no. Aff(WBSU)/MS/213/SCHE/2015 dated 11th June 2015 of WBSU).

Any other relevant information regarding curricular aspects which the college



would like to include.

The George Telegraph Institute, a reputed institution engaged in training and imparting skill development to students to enable them to face the competitive job market has recently evinced interest and has proposed to set up a Career Development Centre in the college.

It is thought that this step will certainly make the curriculum more effective and meaningful to the students.



2.

Teaching Learning and Evaluation





2.1 STUDENT ENROLMENT AND PROFILE

2.1.1 Publicity and transparency in the admission process

- The College follows the rules stipulated by West Bengal State University regarding admission to Undergraduate course. All details regarding admission - courses offered, subject details, rules of admission are available on the College website. (<http://www.bkccollege.org/admission.html>).
- Online admission has begun from the 2015-16 session.
- Students are given a copy of the College Prospectus during admission.
- Banners and hoardings presenting the courses offered and facilities are displayed at strategic locations so as to provide information about the College.

2.1.2 Criteria adopted and process of admission to various programmes

The Admission criteria are as follows:

Table 2.1: Admission criteria

Subject	Admission Criteria
Bengali	Minimum 50% marks in aggregate and 45% marks in the subject or 55% marks in the subject
English	Minimum 50% marks in aggregate and 45% marks in the subject or 55% marks in the subject
History	Minimum 50% marks in aggregate and 45% marks in the subject or 55% marks in the subject
Political Science	Minimum 50% marks in aggregate and 45% marks in the subject or 55% marks in the subject
Philosophy	Minimum 50% marks in aggregate and 45% marks in the subject or 55% marks in the subject
Economics	Minimum 50% marks in aggregate and passed in Mathematics or 55% marks in the subject and passed in Mathematics
Botany	Minimum 50% marks in aggregate and 45% marks in subject and passed in Chemistry or 55% marks in the subject and passed in Chemistry
IFF	Minimum 50% marks in aggregate and 45% marks in Biology and passed in Chemistry and Physics or 55% marks in Biology and passed in Chemistry and Physics
Mathematics	Minimum 50% marks in aggregate and 45% marks in subject and passed in Physics or 55% marks in the subject and passed in Physics
Chemistry	Minimum 50% marks in aggregate and 50% marks in subject with 40% marks in Mathematics and passed in Physics or 55% marks in the subject and with 40% marks in Mathematics and passed in Physics
Physics	Minimum 50% marks in aggregate and 55% marks in Physics and 45% marks in Mathematics
Zoology	Minimum 55% marks in aggregate and 60% marks in Biology. Must have passed Chemistry and Physics.
B.A. General	35% marks in all the combination subjects
B.Sc. General	35% marks in all the combination subjects

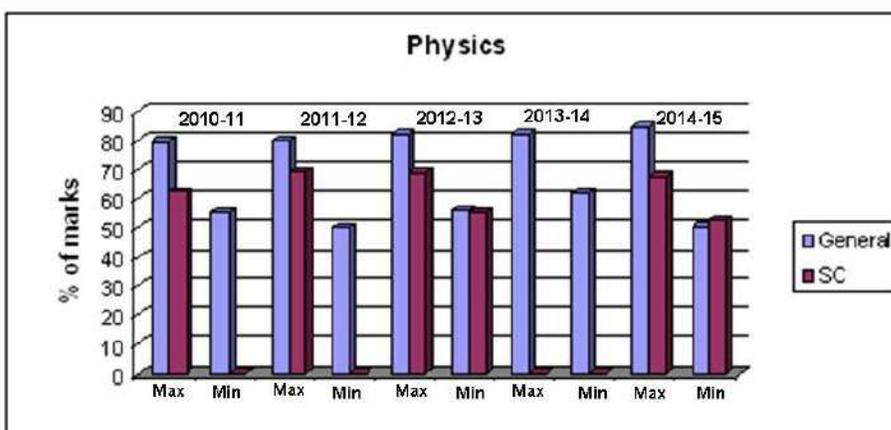
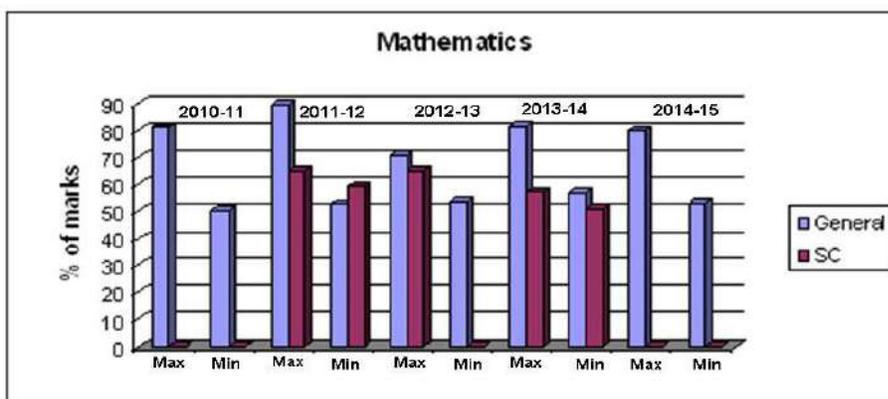


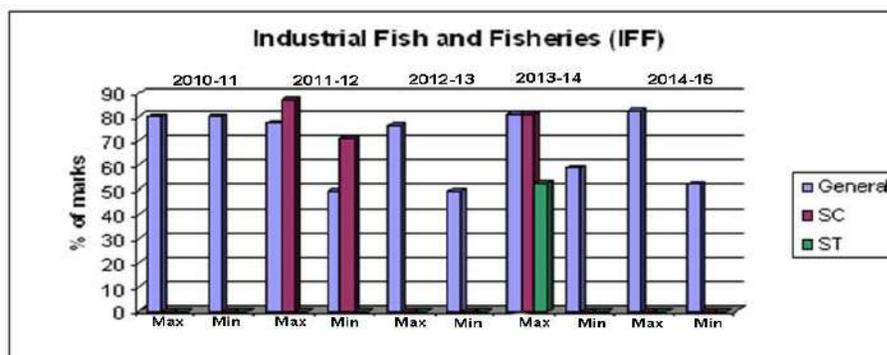
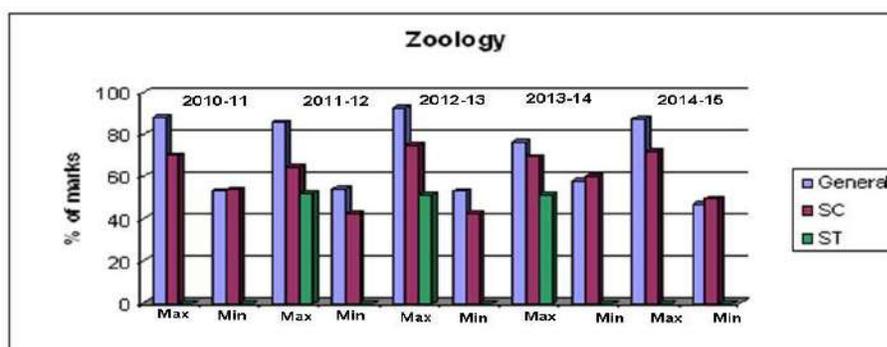
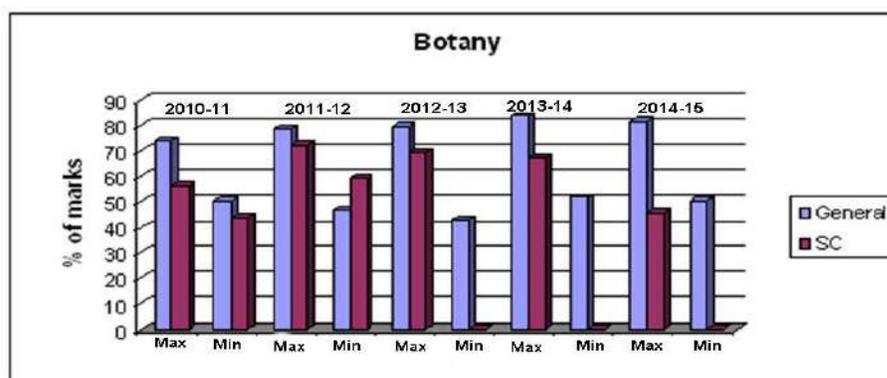
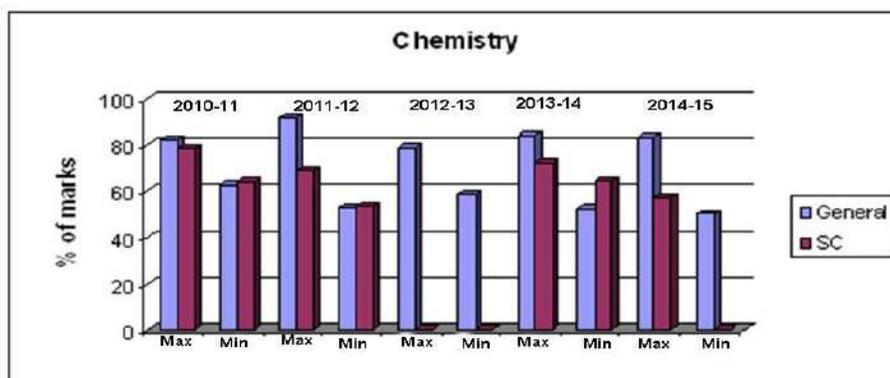
Following is the step wise procedure of the online admission system:

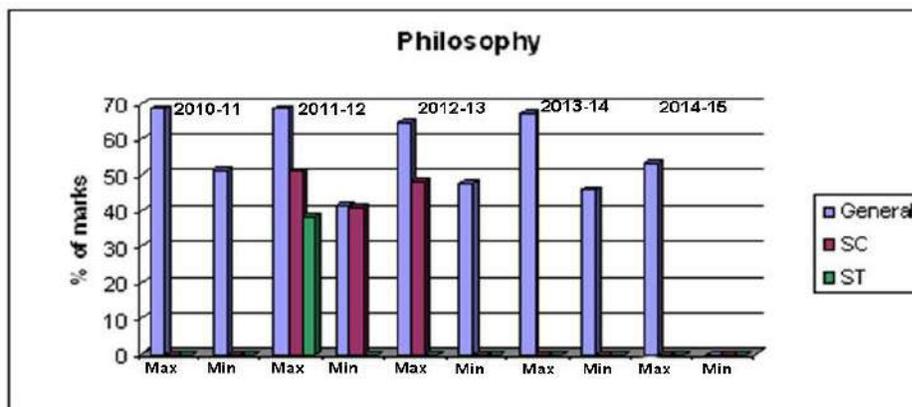
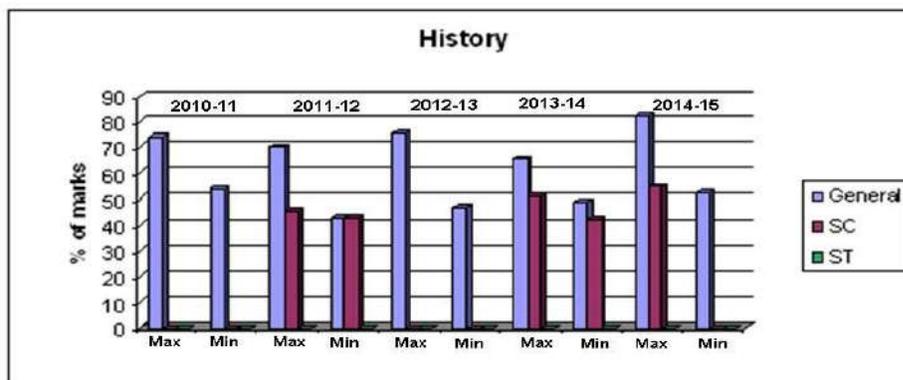
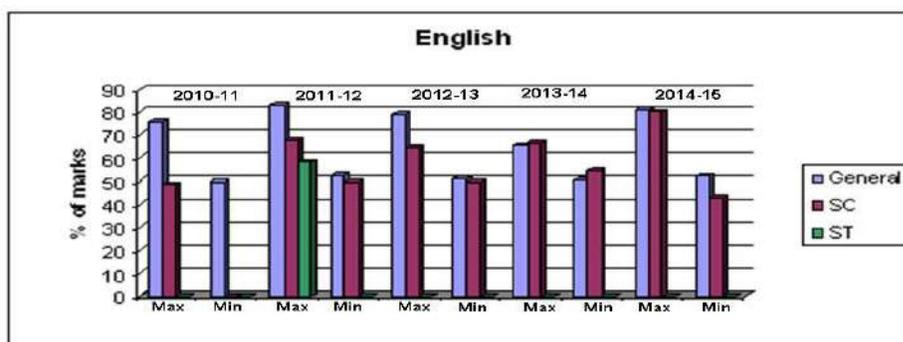
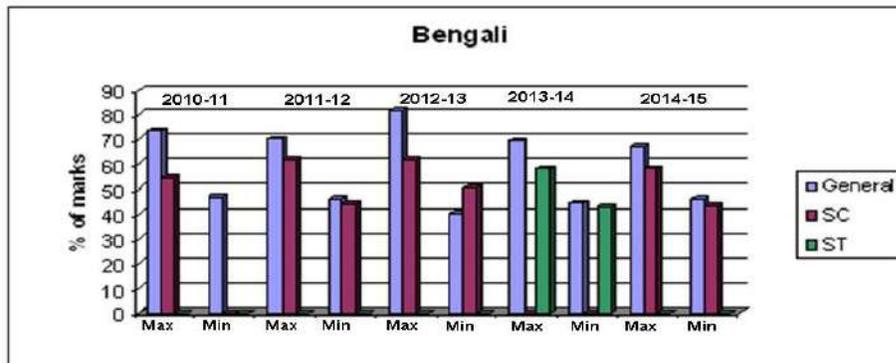
- Filling up of forms through an admission portal link on our College website www.bkccollege.org
- Submission of the hard copy of the filled in form, duly signed by the applicant and parent/ guardian after depositing the application fees to the assigned Bank
- Generation of Merit List, strictly on the basis of marks
- Display of the Merit List on the College notice board and on the College website (http://www.bkccollege.org/merit_new.html)
- Admission after payment of requisite fees.

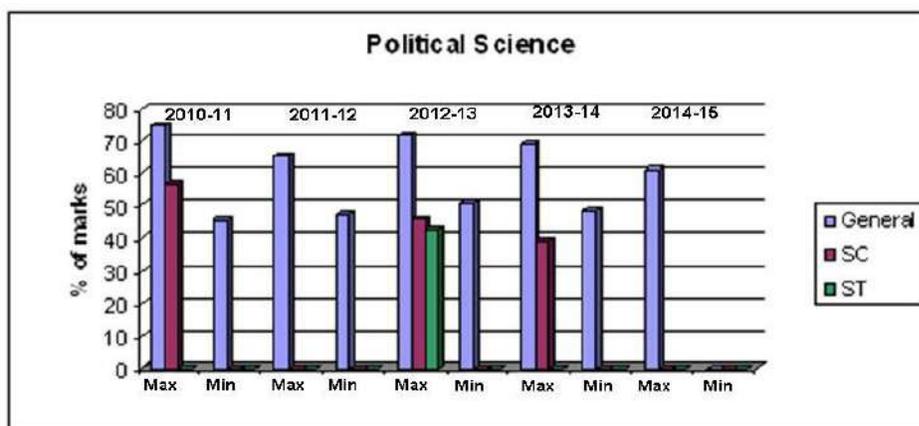
2.1.3 Minimum and maximum percentage of marks for admission at entry level

Diagram 2.1: Minimum and maximum percentage of marks (obtained in the last qualifying examination) for admission at entry level









2.1.4 Existence of Mechanism in the Institution to review the admission process and student profile annually

The admission committee of the College, comprising of the Principal, Secretary of the Teachers’ Council and teachers plays an important role in framing the admission criteria based on the guidelines of the West Bengal State University. The recommendations made by the departments based on the admission process of the previous year are taken into consideration. The departments review the student profile of the previous year and change the criteria for eligibility and cut off marks, if necessary (Refer **Annexure 2.1.4**).

2.1.5 Strategies adopted to increase/improve access for different categories of students, enumeration on how the admission policy of the Institution and its student profiles demonstrate/reflect the national commitment to diversity and inclusion

SC/ST/OBC:

The norm of Government of India is strictly adhered. Course wise number of seats at the entry point in this regard is provided in the following table:



Table 2.2: Course wise number of seats reserved for various categories

CATEGORY		GEN	OBC-A	OBC-B	SC	ST	PH	TOTAL
SUBJECTS								
H O N O U R S	BENGALI	40	08	06	18	05	03	80
	BOTANY	27	05	04	12	04	02	54
	CHEMISTRY	40	08	06	18	05	03	80
	ECONOMICS	17	03	03	07	02	01	33
	ENGLISH	40	08	06	18	05	03	80
	HISTORY	33	07	05	15	04	02	66
	IFF	17	03	03	07	02	01	33
	MATHEMATICS	40	08	06	18	05	03	80
	PHILOSOPHY	40	08	06	18	05	03	80
	PHYSICS	40	08	06	18	05	03	80
	POLITICAL SCIENCE	40	08	06	18	05	03	80
ZOOLOGY	40	08	06	18	05	03	80	
P A S S	B.A.	110	20	14	44	12	06	206
	B.Sc.	88	16	11	35	10	05	165



Table 2.3: Course wise and category wise number of students admitted

Year	Category	1st Year			2nd Year			3rd Year		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
2014-15	General	235	176	411	122	119	241	114	105	219
	SC	20	17	37	12	13	25	19	3	22
	ST	0	0	0	0	1	1	0	0	0
	OBC	17	7	24	5	2	7	9	4	13
	Total	272	200	472	139	135	274	142	112	254
2013-14	General	202	237	439	156	127	283	145	119	264
	SC	19	14	33	15	4	19	9	4	13
	ST	2	2	4	0	1	1	0	1	1
	OBC	14	7	21	4	2	6	5	1	6
	Total	237	260	497	175	134	309	159	125	284
2012-13	General	294	194	488	159	128	287	132	117	249
	SC	20	3	23	12	3	15	1	7	8
	ST	2	0	2	0	1	1	1	0	1
	OBC	2	2	4	5	3	8	6	2	8
	Total	318	199	517	176	135	311	140	126	266
2011-12	General	341	207	548	151	136	287	161	129	290
	SC	17	9	26	6	6	12	8	5	13
	ST	1	0	1	1	0	1	2	0	2
	OBC	3	2	5	6	1	7	2	1	3
	Total	362	218	580	164	143	307	173	135	308
2010-11	General	358	217	575	178	140	318	126	158	284
	SC	13	3	16	11	10	21	5	4	9
	ST	0	0	0	2	0	2	0	0	0
	OBC	6	0	6	1	1	2	0	1	1
	Total	377	220	597	192	151	343	131	163	294

Women:

To promote 'Girl Child Education,' girl students from economically backward families (annual family income Rs. 1, 20,000/- or below) are encouraged to avail the West Bengal Government scheme, 'Kanyashree Prakalpa' to pursue higher education. Following are the recipients who have benefitted from this scheme:

2014 - 15: 53 Students (including 1st Year & 2nd Year)
 2015 - 16: 3 Students (only 1st Yr)



Economically weaker sections:

- Financial assistance from Teachers’ Council fund is also available for needy students of the College.
- Alumni Association of the college also takes initiative to provide financial assistance to meritorious students.
- Every year the College provides scholarship in form of granting ‘full free’ or ‘half free’ tuition fees to the deserving students. Financial aid is provided to needy students at the end of each academic year from the Students’ Aid Fund (Fixed @ Rs. 300/-) through a proper selection procedure by the Students Aid Committee, which is a sub-committee of the Governing Body. The data for last five years in this regard is given below:

Table 2.4: Financial assistance to economically needy students

Year	Stream	Total Students	No. of students given Full Free	No. of students given half Free	Student Aid	Total	Percent
2014-15	B.A.	594	24	15	1	40	6.73
	B.Sc.	429	12	5	-	17	3.96
2013-14	B.A.	626	17	22	-	39	6.23
	B.Sc.	441	10	7	-	17	3.85
2012-13	B.A.	638	0	78	-	78	12.23
	B.Sc.	456	0	19	-	19	4.17
2011-12	B.A.	640	32	23	24	79	12.34
	B.Sc.	555	9	13	1	23	4.14
2010-11	B.A.	696	32	21	18	71	10.20
	B.Sc.	538	12	13	8	33	6.13



2.1.5 Details for various programmes offered by the Institution during the last five years and its trends

Table 2.5: Programme wise demand ratio

Programme (Subjects)	Academic year	Number of applications	Number of students admitted	Demand Ratio
Mathematics	2010-11	95	30	3.16:1
	2011-12	102	44	2.3:1
	2012-13	42	22	1.9:1
	2013-14	58	34	1.7:1
	2014-15	26	15	1.73:1
Physics	2010-11	80	36	2.2:1
	2011-12	125	44	2.8:1
	2012-13	59	28	2.1:1
	2013-14	19	9	2.1:1
	2014-15	45	29	1.5:1
Chemistry	2010-11	122	60	2.03:1
	2011-12	115	43	2.67:1
	2012-13	80	22	3.63:1
	2013-14	60	33	1.81:1
	2014-15	55	46	1.19:1
Botany	2010-11	70	28	2.5:1
	2011-12	87	34	2.55:1
	2012-13	69	25	2.76:1
	2013-14	67	38	1.76:1
	2014-15	69	42	1.64:1
Zoology	2010-11	230	76	3.02:1
	2011-12	253	61	4.15:1
	2012-13	222	56	3.96:1
	2013-14	145	33	4.4:1
	2014-15	227	48	4.73:1
IFF	2010-11	32	19	1.7:1
	2011-12	42	21	2:1
	2012-13	30	22	1.36:1
	2013-14	17	14	1.2:1
	2014-15	13	10	1.3:1
	2010-11	2	1	2:1
	2011-12	12	2	6:1



Programme (Subjects)	Academic year	Number of applications	Number of students admitted	Demand Ratio
Economics	2012-13	9	2	4.5:1
	2013-14	9	1	9:1
	2014-15	9	4	2.5:1
Bengali	2010-11	73	43	1.7:1
	2011-12	73	44	1.6:1
	2012-13	65	35	1.85:1
	2013-14	48	36	1.3:1
	2014-15	21	15	1.4:1
English	2010-11	147	57	2.6:1
	2011-12	153	51	3:1
	2012-13	152	55	2.76:1
	2013-14	91	36	2.5:1
	2014-15	60	36	1.6:1
History	2010-11	32	22	1.45:1
	2011-12	57	30	1.9:1
	2012-13	56	33	1.7:1
	2013-14	24	14	1.7:1
	2014-15	20	11	1.8:1
Philosophy	2010-11	24	13	1.8:1
	2011-12	26	12	2.16:1
	2012-13	25	12	2.1:1
	2013-14	7	3	2.3:1
	2014-15	2	1	2:1
Political Science	2010-11	34	21	1.6:1
	2011-12	33	18	1.8:1
	2012-13	11	11	1
	2013-14	19	12	1.6:1
	2014-15	1	0	---

Reasons for decreasing trend:

- The College was affiliated to the University of Calcutta since its inception. Since its affiliation to the newly established West Bengal State University (2008), a decline has been noticed stemming from an apprehension that this newly formed University would not be at par with the older one.
- A general state of apathy of students towards the general stream and basic subjects for last several years. Students are more attracted to job oriented



professional courses after their high school examination and do not mind paying heavily for the same.

2.2 CATERING TO DIVERSE NEEDS OF STUDENTS

2.2.1 Catering to the needs of differently abled students and adherence to Government policies

- The Institution strictly follows all Government rules and regulations regarding admission of the differently abled students. They are handled with utmost care. Teachers often take special tutorial classes, arranging classes in the ground floor; and even allow escorts with them.
- On 17th and 24th August 2012 a UGC sponsored “Awareness Programme on Higher Education for Persons with Special Needs” was organized in the College.

2.2.2 Institutional assessment of the students’ need in terms of knowledge and skills before the commencement of the programme

The Principal, on behalf of college, makes clear to all the new students that the purpose of their education in the College is an overall development of the individual through education supported by principles and moral values. Prior to their admission, on the basis of merit list, students are counselled so that they develop interest about the subject and are aware of future prospects. On the day of Fresher’s Welcome, the Principal addresses the first year students and informs them about the college discipline, targets to be fulfilled and also encourages them to be socially concerned and spiritually oriented.

For the students of the 1st year ‘Students’ Profile Mapping’ has been initiated to ascertain the ideology of a student and test his moral values and ethics. On the basis of a questionnaire which students will have to fill in, teachers will prepare a report for each student and assess them. The questionnaire will comprise the following:

- Life Skills
- Values and Ethics
 - Attitude towards teacher
 - Attitude towards fellow mates



- Attitude towards college
- Attitude towards environment
- Attitude towards community

2.2.3 Strategies adopted by the Institution to bridge the knowledge gap of the students

Immediately after the commencement of classes, weakness and shortcomings of students are ascertained by the teachers through one to one interaction. Students are introduced to new subjects, some of which were not taught at the Higher Secondary level.. Class tests are conducted regularly to assess the progress of 1st year students and Parent-Teacher meetings are held regularly. Extra classes are taken wherever needed. Special care is taken to improve proficiency in the English language. The College has also introduced an Add-on course, Computer Literacy Programme for the beginners.

2.2.4 Sensitization of staff and students on issues such as gender, inclusion, environment

Students and staff of the College are sensitized on different issues.

➤ **Gender** related issues are conveyed through seminars:

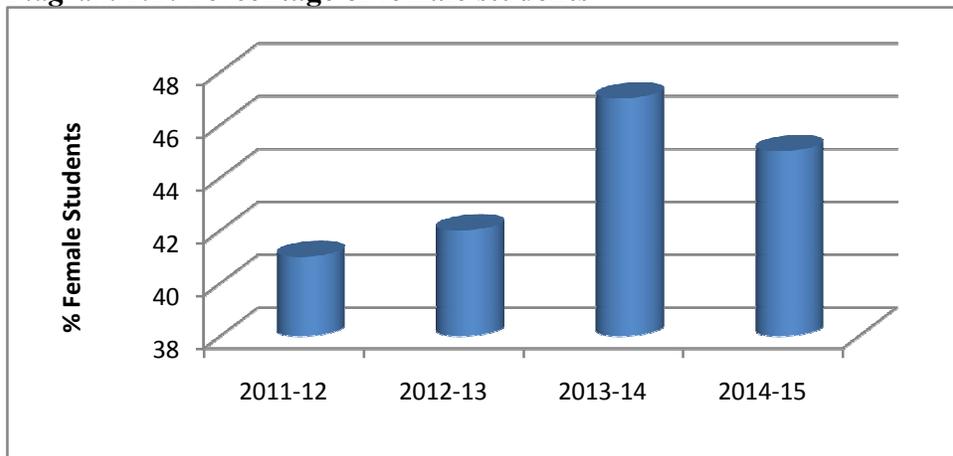
- Brahmananda Keshab Chandra College in collaboration with the Linguistic Research Unit, Indian Statistical Institute, Kolkata organized a UGC Sponsored National Conference on 9th – 10th February 2012, on “Re-writing Culture, Re-telling Narratives: Gender and the Politics of Representation”.
- “International Women’s day” is celebrated every year with lectures delivered by eminent speakers and quiz contests organized on Women rights.
- A workshop on “Positive Discrimination” was held on 12th September 2012. A poster exhibition was held on the occasion where active student participation was noted.
- The institution has conducted a gender audit. Increasing trend in percentage of female students has been noticed.

Table 2.6: Gender wise student enrollment

Session	2011-12	2012-13	2013-14	2014-15
Male	699	634	571	553
Female	496	460	519	447
Total	1195	1094	1090	1000
%Female	41%	42%	47%	45%



Diagram 2.2: Percentage of female students



- Gender sensitising workshops for the students have been organized in the College under the aegis of the **Equal Opportunity Cell** with funding from the UGC. To address the problems of the female students, the college has set up a **Grievance Redressal Cell, Sexual Harassment Redressal Cell and a Women’s Cell** with the teaching, non-teaching staff and students. The College encourages active participation by girl students in all sorts of activities of the college.
- **Environment** related issues were dealt by the following activities:
- A proposal for installation of solar panel on the terrace of the College building has been submitted to the West Bengal Renewable Energy Development Authority (WBREDA). The cost estimate has been submitted to the UGC for necessary funding.
 - On 29th November 2013, the Department of Botany organized a one-day seminar cum workshop on “Biodiversity in a Man-made Ecosystem”. Dr. Anirban Roy of West Bengal Biodiversity Board spoke on the benefits of biodiversity and the need for conservation. The seminar was followed by a students’ poster presentation on Biodiversity. Students of the College actively participated in the proceedings.



Seminar cum workshop on “Biodiversity in a Man-made Ecosystem”

- The Department of Botany in collaboration with Madhyamgram Green March, a registered NGO under the West Bengal Pollution Control Board participated in an Environment Awareness Fair – *Paribesh Sachetanata Mela*, organized by Dum Dum and Madhyamgram Municipalities, sponsored by the Government of West Bengal in 2013-14. Students presented posters on various topics ranging from uses of cryptogams, medicinal plants and pollution issues.



Student of the college receiving award in Paribesh Sachetanata Mela

- The department of Botany initiated the setting up of an “Eco club” in the College for working towards creating an awareness on environmental issues, organizing students’ seminars and project on issues such as pollution and biodiversity.



Seminar on E-Waste Management

- The College maintains the proper recycling of its E-waste. Whereas other junk is auctioned, e-waste such as desktops, CPU, UPS, floppy disks, pen-drives, CDs are deposited in special bins. This waste is then collected by the NGO DISHA (Direct Initiative for Social and Health Actions). The college also organized an awareness seminar on the harmful effects of mismanagement of e-wastes on 6th Oct.2015 which was conducted by DISHA.
- The College undertakes plantation drives during World Environment Day and World Forestry Month (June-July). The students and faculty members of the college are encouraged to regularly maintain the plants.



Plantation drives during World Environment Day and World Forestry Month.

- The Department of Botany has been involved in the People's Biodiversity Register (PBR) in Bankura district, West Bengal in 2014. This is an initiative of National Biodiversity Authority (NBA), New Delhi and the



Institute of Ayurvedic and Integrative Medicine (IAIM), Bangalore. The Department has contributed to the manual for ‘Village Botanists of West Bengal 2014’- an initiative of IAIM and West Bengal State Biodiversity Board.

- To conserve the rich biodiversity of the College campus and the surrounding area, the College proposes to utilize about one hectare of its existing unoccupied land for developing a Herbal Garden, following the objectives of AYUSH, Government of India initiative. The proposed project for the herbal garden (*Ethno-Herbal Garden- at the core of medicinal plant conservation, knowledge dissemination and community participation for a healthy life*) has been submitted to State Medicinal Plant Board. The College also conserves wild plant species on its premises by declaring few spots as reserved pools.
- A Seminar was organized by NAAC (Innovative Practices) on “Water in Crisis - The Case of West Bengal” by Prof Kalyan Rudra on 5th October 2013.



Seminar on “Water in Crisis - The Case of West Bengal”

2.2.5 Institutional response to special educational/learning needs of advanced learners

Faculty members always identify and respond to special educational/ learning needs of advanced learners. Students are encouraged to refer to books and journals available in College library, the departmental seminar library and online resources. They are encouraged to participate in seminars, quiz competitions, debates and other allied activity held in colleges and institutes in Kolkata and its suburbs.



2.2.6 Institutional collection and analysis of data on the academic performance of the students at risk of drop out

All relevant information of admitted students is preserved in the College office as well as in the respective departments. Information about student activity, academic and extracurricular, is maintained by the respective departments. Special care is taken for slow learners and students from economically weaker backgrounds.

2.3 TEACHING-LEARNING PROCESS

2.3.1 Planning and organization of teaching, learning and evaluation schedules

The Principal along with faculty members formulates the Academic Calendar. Care is taken to follow the Calendar. Changes necessitated vide directives from West Bengal State University Academic Calendar are incorporated as and when required. Following is the **Academic Calendar** of this academic year:

- **July**
 - **Academic** session of the College begins with **First year classes**.
 - **College foundation day** is observed on 27th July.
 - Celebration of **Forest week** in the last week of July.
- **August**
 - **Third year** classes resume.
 - **Independence Day** celebration on 15th August
 - **Environment Awareness program through Tree plantation** including the local schools and community.
 - First **Green Audit** by Eco club.
- **September**
 - **Second year** classes resume.
 - **Teachers' Day** Celebration by the Students Union.
 - **Computer Literacy** aptitude test for students.
 - Organizing students for **Science Model Competitions** at District level.
- **October**
 - E-waste disposal promotion as **Community Outreach program**
 - **Class test** for Part I, Part II, and Part III students during 2nd week.



- Declaration of **Attendance percentage** of all students.
- **Fresher's Welcome** and **Annual Social program** organized by the Student's Union
- **November**
 - Celebration of **Birth Anniversary of Keshab Chandra Sen** on 19th November
 - **Educational Excursions** of Botany, Zoology, Industrial Fish and Fishery and History.
 - **Health check up** camp for students.
 - **Blood donation** camp as **Community Outreach program**.
- **December**
 - **Environment Awareness program** such as Quiz and debates with local participation.
 - **College Sports** in the 3rd week of the month.
 - **Cultural Competitions** for the students.
- **January**
 - **Students' Seminar** on selected topics in every Department.
 - **Feedback** from the IIIrd year students.
 - **Test Exam for Part III students** in the last week of January.
 - **Extension activity** by the students.
 - **Republic Day** and Birth anniversary of **Netaji Subhas Chandra Bose** celebrations.
 - **Alumni Association** Reunion and prize distribution ceremony.
- **February**
 - **Feedback** from the IInd year students.
 - **Test Examinations** for the Part II students.
 - **Tutorial classes for Part III students**.
 - **Second Green Audit** by Eco club.
 - **Saraswati Puja** organized by the Students' Union
- **March**
 - **Feedback** from the Ist year students.
 - **Test Examinations** for the Part I students.
 - **Tutorial classes** for Part II students.
- **April**
 - **Part III Examination** of West Bengal State University.
 - **Tutorial classes** for Part I students.



- **May**
 - **Part II** Examination of West Bengal State University.
 - **Computer Literacy Aptitude** Test for students.
 - Celebration of **Rabindra Jayanti** through various cultural programmes.
- **June**
 - **Part I Examination** of West Bengal State University.
 - **Seminar on World Environment Day on 5th June.**
 - **On-line Admission process for 1st year** commences after the declaration of the Class XII results of all Boards.

Teaching plans are made on the basis of the Academic Calendar. At the commencement of the academic session, the Head of the Department and the teachers finalize the teaching plans in the departmental meeting. Teachers keep regular record of the topics taught in the classes. Teaching plan is designed keeping in consideration the college and University examination schedules. Progress of syllabi of different departments is critically analyzed by the teachers in the departmental meeting. Great care is taken to complete the syllabus within schedule

Evaluation blue print: Continuous and Comprehensive Evaluation (CCE) of students is followed in the College. The institution conducts class tests, interactive classes, home assignments, tutorial classes and Test examinations.

- Annual system of assessment is followed as per the guidelines of the West Bengal State University.
- Teaching-learning process is supplemented through discussions of questions of Final Examinations and questions of previous years' university examinations.
- Teachers provide students with Model answers, wherever needed.
- Evaluation schedules are communicated to the students through proper notification.
- Class tests are taken for the Part-I, Part-II and Part-III students throughout the academic session.
- Test Examinations are held in the month of January for 1st year, February for 2nd year and March for 3rd year students as per the University guideline.
- Evaluated answer scripts of college examinations are shown to the students so that they are aware of their lacuna.



- Mark sheets are displayed on the college notice board for the benefit of the students.
- In the Parent-teacher meeting, the results of the examination are analysed.
- Tutorial and counselling classes are arranged according to the academic calendar.

2.3.2 Contribution of IQAC to improve teaching-learning process

The **Internal Quality Assurance Cell (IQAC)** of Brahmananda Keshab Chandra College was formed 18 months ago vide GB resolution no. 6 dated 07-05-2013. Since its inception the IQAC has been working to meet the needs of all the stakeholders of the College viz. students, teachers and non-teaching staff. Some of the achievements of the IQAC Cell are as follows:

- A grant of 20 lakhs from the West Bengal Department of Bio Technology (WBDBT) for BOOST (Biotechnology Opportunities Offered for Science And Technology Program) has been received to set up a Biotechnology Laboratory to organize workshops and training program for students. This will also be the CIC (Central Instrumentation Facility).
- Regular guidance to the junior faculty towards improving their API (Academic Performance Indicator) in order to achieve their future goals as well to provide quality education to the main stakeholders of the institution, the students.
- Developed a student's feedback system for evaluation of the teaching learning process. A method to gather feedback from alumni and parents has also been worked out.
- Increase in infrastructural resources by establishment of Digital classrooms for effective teaching learning process.
- Introduction of an Add-on course on Computer literacy program for the beginners.
- Work on Office Automation through LAN connection.
- Established a Network Resource Centre with WiFi connection through Broadband.
- Equipped the Library with unlimited broadband connection.
- Establishment of an 'Eco club' to spread environmental awareness through Tree Plantation programmes and seminars.
- Has taken initiative to establish solar panels and submitted requisition to the Ministry of Environment, Government of West Bengal and Pollution Control Board, to promote use of renewable energy resources within the College premises.



- Has taken initiative to establish Rain-water Harvesting processes within the College premises.
- IQAC team held regular meetings with the coordinators of the SSR teams and the Heads of the Departments.
- Data acquisition process has begun centrally. Teachers worked at collecting and collating data related to student strength, result, students receiving aids from the office with the help of office staff. The various programmes and seminars organised by the college were also listed.
- IQAC visited most of the departments of the college including office and library. Observations and suggestions of the visiting team were given to the heads of the department.
- IQAC coordinator met teachers; non-teaching staff and office bearers of the students union in a meeting held on 17.9.15 and discussed the steps leading to NAAC peer team visit.
- A letter was sent to the Principal suggesting repair and renovation work of the college which are urgently needed.
- Promotion papers of faculty members due for promotion have been scrutinized and placed before the selection committee.
- IQAC took part in the selection process of Guest Lecturers in Journalism and Mass communications and Education, two new subjects which has been introduced from the academic session 2015-16.
- IQAC team together with coordinator Criterion VII took initiative to arrange two awareness programmes on (i) Diabetes and (ii) E-waste management. Both were very successful with huge participation of students.

2.3.3 Details of students centric learning

Institution has **student centric** learning strategies.

- Visit to the Biotechnology Laboratory for the PART-III students of Botany.
- Project Work for the students of Botany department.
- Uses of Audio visual aids - films adapted from literary texts prescribed in the syllabus are shown regularly to the students of English Department.



- Educational Excursions for the students of Botany, Zoology and Industry Fish and Fishery.



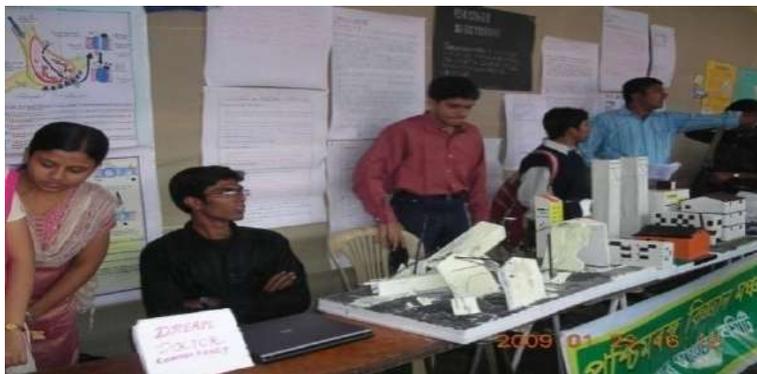
Botanical Excursion to Ravangla, Sikkim 2015



Excursion to Zoological Garden 2015



- Encouraging students to participate in **Science Model Competitions** at District level.



Science Model Competition at the district level

- The college has a unique possession of a foreign made telescope, which is fitted on the roof. Sky watching programmes were arranged for the students during special astronomical events.
- Use of ICT as learning resource for the students of different departments.
- Organizing departmental Seminars and seminar classes.
- Presentation of papers by the students in Seminars in and outside the college.

Collaborative study operates in the college when students are grouped in 3 to 4 numbers for completion of a particular assignment. Project works are assigned in groups. Green audit of the college premises has been done by the students in groups along with the teaching and non teaching staffs. Students of Eco club maintain a small medicinal plant garden.



Green Audit Team



Medicinal plant terrace garden

Department of Botany has been involved in collaborative study in making the “People’s Biodiversity Register (PBR)” exercised in Bankura district, WB, 2014; an initiative of National Biodiversity Authority (NBA), New Delhi and Institute of Ayurvedic and Integrative Medicine (IAIM), Bangalore. Department has contributed to the manual for ‘Village Botanists of West Bengal 2014’-an initiative of IAIM and WB State Biodiversity Board. The Department of English has a Facebook group page for over five years, to promote collaborative study.

As **interactive learning**, the college helps in the preparation of lesson modules through computers and their presentation through power-point, seminars, conferences & workshops have been arranged by the departments. Each dept. organises at least two seminars in an academic session. The college has been investing for setting up Operating System, modern class rooms fitted with LCD Projectors (6 rooms), Laptop (12), Computer (30), OHP, Supportive Softwares (ChemDRA, RASMOL, PDB, JCPDF), and Educational CDs, DVDs course materials and other open source study materials. Physics Honours students are regularly taken to various **Out Reach Programmes** organized by SINP (Saha Institute of Nuclear Physics), IISER (Indian Institute for Science Education and Research) etc. where they get opportunity to interact with distinguished scientists. As a part of celebration of **International Year of Chemistry**, students were taken to Saha Institute of Nuclear Physics, Ramakrishna Mission Vidyamandir, Belur Math and Scottish Church College by Chemistry Department for poster presentation and attending the interactive session after the seminars.



2.3.4 Nurturing critical thinking, creativity and scientific temper among the students to transform them into lifelong learners and innovators

The Institution has various mechanisms to nurture critical thinking, creativity and scientific temper among the students.

- The students of various departments were grouped for making models under the theme of Community Health and Environment in the State Government organized District Youth Science Fair, 2015 for encouraging their critical and scientific thinking.
- The college publishes an annual magazine, '*Lekhamanjari*' each year. It showcases the creative talent of the students who contribute their essays, short stories, poems travelogue and drawings.
- Students of various departments of the college regularly publish a wall magazine namely *Pro-Chesta*, *Spandan* etc. symbolizing their own talents. Teachers pitch in to help edit the work.
- Project works; Seminars through power point presentation, Field reports also form an important facet for encouraging the scientific temperament among the students.
- To promote an interest in the field of chemistry and stimulate scientific curiosity in general, the Department of Chemistry has started Chem Club. The activities of Chem Club include :
 - Organizing seminars by eminent academicians , faculties and students
 - Organizing poster presentation, exhibitions and wall magazines
 - Organizing important events : International year of Chemistry, P. C. Roy's Birthday
 - Organizing outreach programmes for students
 - Decoration of bulletin boards, documentation of each event through photographs
- Eminent professors/scientists have visited our institution and motivated our students for critical thinking.
 - Dr. Tapati Bhattacharyya, Dept. of History, Acharya Prafulla Chandra College, 2015.
 - Dr. Ritu Mathur, Dept. of History, Mrinalini Datta Mahavidyapith, 2015.
 - Dr. Sukanya Sarkar, Dept. of History, Sarojini Naidu College for Women, 2015.
 - Prof. Narayan Banerjee, Department of Physics, Indian Institute of Science Education and Research, Kolkata, 2014.



- Prof. Kuntal Ghosh, Department of Physics, Indian Statistical Institute, 2014.
 - Dr. Debabrata Saha, Senior Scientist, Institute of Trans-Disciplinary Health Sciences and Technology-FRLHT, Bangalore, 2014.
 - Dr. Swapan Kumar Mondal, Associate Professor, Dept. of History, Dinabandhu Mahavidyalaya, Bongaon, 2014.
 - Dr. Hariramurthi, Associate Professor, School of Health Sciences, Institute of Trans-Disciplinary Health Sciences and Technology-Foundation for Revitalization of Local Health Traditions, Bangalore, 2013.
 - Prof. Kalyan Rudra, Chairman, Pollution Control Board, West Bengal, 2013
 - Dr. Debasis Majumder, Associate Professor, Dept. of Economics, Bangabasi College, 2013.
 - Dr. Aishika Chakraborty, Associate Professor, Women Studies, Jadavpur University, 2013.
 - Dr. Rana Sen, Associate Professor, Dept. of Chemistry, Scottish Church College, 2010.
- The students are encouraged to present papers/posters in national and state level seminars, workshop and environment fairs to nurture their scientific aptitude.
- Develop their creative skills through cultural competitions. The students participate actively to celebrate Rabindra Jayanti each year. The students also organize a Fresher's welcome and Saraswati Puja every year which encourages them to develop their creative abilities.



Rabindra Jayanti celebration in the college



2.3.5 Technologies and facilities available and used by the faculty for effective teaching

- Six large classrooms are equipped with fixed LCD projectors and screens to ensure audio-visual learning. In addition to these, the College also possesses movable LCD projectors and screens. Teachers also use desktop and/or palm top projectors.
- Department of Botany is equipped with a Digital Microscope to improve the learning quality during practical classes.
- There is an adequate computer facility with internet connection of Alliance Broadband and BSNL.
- A television is available for use as a teaching aid. The departments of English and History have put it to good use.
- The department of Political Science has a digital camera used to document events held in the College.
- Microphones are installed in larger classrooms.
- As an audio-visual aid for effective teaching, movies adapted from literary texts are regularly shown to the students of English Department.

2.3.6 Exposure of the students and faculty to advanced level of knowledge and skill

- UGC sponsored National Seminar on “Botanical Resources and Human Welfare”, organized by Department of Botany, Ramakrishna Mission Vivekananda Centenary, College in collaboration with Department of Botany, Brahmananda Keshab Chandra College, Kolkata on 6th September, 2013.



Teacher in Charge Dr. Soma Sen addressing the audience



- The College provides facility of blended learning that is face to face learning along with ICT based learning.
- On-Job-Training for all the final year students of Industrial Fish and Fishery (B.Sc. Major) are organized every year at different organizations for development of advance level of practical knowledge
- The College arranges expert lectures by academicians from reputed institutes like Indian Statistical Institute, University of Calcutta, Jadavpur University, Kalyani University among others.
- The various departments of the College organize seminars and workshops. Some of the seminars are national level seminars where experts from all India are invited and faculty members and students actively participate.
- Coaching classes are arranged by Sanskrit department to enable students to appear in competitive exams with special assistance from “Rashtriya Sanskrit Sansthan”.
- Prof. Dulal Chandra Sanyal, University of Kalyani University delivered an invited lecture on “Mathematical Modeling in Pharmacology” on 17.02.2014.
- Prof. Amartya Dutta, Indian Statistical Institute, Kolkata delivered a lecture on “Bhavana: From Brahmagupta to Bhargava” on 29.09.2015.
- Dr. Debashish Majumder, Associate Professor, Economics, Bangabashi College, Kolkata delivered a lecture on “Structural Changes in Indian Economy: An Overview of Service-led Growth” on 6.08.2013.
- A lecture on Taxonomy was delivered by Dr. Subir Bandopadhyay, Scientist, BSI, on the important features of Acharya Jagadish Chandra Bose Botanical Garden, Shibpur during every educational field trip to Botanical Survey of India (BSI), Kolkata to the students of the department of Botany.



Excursion to Botanical Garden



*Dr. Subir Bandopadhyay
addressing the students at BSI*



2.3.7 Academic, personal and psycho-social support and guidance services provided to students.

Academic support is offered to students in the form of Classroom teaching, Tutorial classes, Class tests and Evaluation of answer scripts. Remedial classes for 40% and Counselling classes for 30% of the total students are held regularly. Guidelines are provided for projects, paper presentation and posters in seminars and educational fairs.

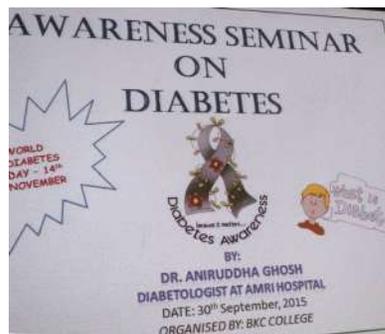
A Career Counseling Cell has been formed in the College. Sanskrit Department, as mentioned earlier did arrange for tutorial classes with special assistance from 'Rashtriya Sanskrit Sansthan'. The students of Botany Department are engaged in various students' projects on Biodiversity Conservation, Waste Management, Medicinal Plants and Pharmacognosy for which they are assessed internally. These projects also train them on research methodology, use of computers, data collection and presentation.

Teachers take an active part in counseling at the time of admission, during classroom teaching, prior to University exams and after exams for further studies. In all the departments regular parent-teacher meetings are held. Several enrichment programs are organized to ensure all round development of the students. The College has organized:

- Career Counseling Programs through workshops and seminars.
 - Seminar by Jetking, organized by the Students' Union on 5th December 2014
 - Workshop by Ananda Bazar Patrika on 28th November 2014
 - Preparatory Training for Government Service entry level examinations as per UGC XIth Plan in collaboration with "Camellia Educare Services Pvt. Ltd."
- Blood Donation camp was held on 3rd March, 2012 with the help of Students' Union and the Local Municipal Corporation and Alumni Association.



- A Seminar on awareness about Diabetes on 30th September, 2015 by Dr. Aniruddha Ghosh, Diabetologist, AMRI Hospital, Kolkata.



Dr. Aniruddha Ghosh delivering a lecture on 'awareness about Diabetes'

- Awareness program on 'Positive Discrimination' on 12th September, 2012.
- Awareness program on 'Higher Education for Persons with Special Needs' on 17th August 2012 and 24th August 2012 respectively.
- Social Welfare Programs
 - Providing shelter to the water logged people of the locality
 - Tree plantation on World Environment Day and World Forestry Month in collaboration with the local schools and the community
 - Distribution of books to the needy students of the local areas (3rd March, 2012)
 - Regular medical checkup camps.
- Awareness seminar on the harmful effects of the mismanagement of e-wastes on 6th October 2015 by DISHA.
- Drug Awareness Program on 18th November 2015

2.3.8 Innovative teaching approaches/methods adopted by the faculty and impact of such practices on student learning

- Under Enrichment courses Computer Literacy Program for all first year students has been introduced recently. This one year certificate course has been introduced to address the future professional needs of the students.
- Most large classrooms are provided with an LCD projector to make the teaching and learning interesting. The use of Information and Communication Technologies (ICT) as teaching methodology among all the departments is on an increase. In rooms that do not have such facility, teachers use desktop or palm top projectors to make classroom teaching more interesting.



- Students are encouraged to prepare projects on various topics. They also present papers in departmental seminars.
- The College has been able to avail the DBT (Department of Biotechnology) facility of BOOST that will provide a platform for the students to explore and experiment with the tools of biotechnology. This provides a wide scope for improving the students' aptitude towards life science, research and development and future job opportunities.
- All departments are provided with various teaching tools such as bottle specimens, permanent slides, charts, maps and movies. Science departments are specially equipped with sophisticated instruments such as digital microscope for improving learning quality.
- For imparting practical knowledge of the theoretical concepts taught in the class, students of Political Science were taken on a visit to the West Bengal Legislative Assembly and also to Gram Pradhan's office.
- Educational excursions, for example, visit to museums and other places of interest are regularly organized by the Department of History.
- The Departments of History and English arrange screening of films that would work as an aid to help students learn and know more on issues and texts pertaining to their syllabi.

2.3.9 Library resources available

The Library is an important part of the teaching-learning process. Collection and preservation of library resources is done through adequate racks and almirahs. Our Library is storehouse of knowledge pertaining to all disciplines. It is well stocked with books and journals. The College library believes in the 'Five Laws of Library Science' formulated by the 'Father of Indian Library & Information Science', Prof. S. R. Ranganathan-

- Books are for use
- Every reader has his/her book
- Every book has its reader
- Save the time of the reader
- Library is a growing organism

The College library is operational with almost 27,000 books. New books are added every year. The library is equipped with unlimited broadband connection. Students, teachers and non-teaching staffs are assisted by library staff and the librarian during college hours. The College subscribes to 26 journals and periodicals. The College has applied for the 'INFLIBNET' connection. The process of automation of library is in progress using customized KOHA software.



2.3.10 Challenges faced by the Institution in completing the curriculum on time

There are various reasons (for e.g. State and Central elections, Natural Calamities) for which the university examinations are sometimes delayed. To cope with such situations, the college arranges special measures like taking extra classes and tutorials.

2.3.11 Monitoring and evaluating of the quality of teaching

- The appraisal of teachers is monitored by the Principal on a structured format.
- Students' attendance is monitored by the respective departments and the Principal and later communicated to the parent/guardian.
- Assessment of teachers through feedback from students, alumni, parents, parent-teacher interaction and university results.
- Maintenance of academic register by faculty members.

2.4 TEACHER QUALITY

2.4.1 Strategies adopted by the college in planning and management of human resource to meet the changing requirement of the curriculum

The West Bengal College Service Commission (WBCSC) recommends teachers for sponsored colleges. The College Governing Body prepares the requisition of teachers on the basis of vacant sanctioned posts. Applications are also submitted to the Directorate of Public Instruction, Government of India for sanctioning additional post. On the recommendation of the WBCSC, the College appoints new teachers. The College has appointed **28 Assistant Professors** (10 in 2010-11 and 18 in 2014-15) on the basis of recommendations from WBCSC during the last five years.

In addition, the College appoints part-time teachers as and when required on the basis of recommendation of Selection Committee constituted by Principal and members of IQAC through the College Governing Body. A contractual teacher teaches in the department of Computer Science. Part time teachers have been appointed in this academic year for the two newly introduced subjects in the undergraduate level, Education and Journalism and Mass Communication.



The faculty members of the College are highly qualified as is evident from the following table.

Table 2.7: Qualification of the faculty members

Highest qualification	Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	
Permanent Teachers					
Ph.D.	8	12	7	4	31
M. Phil.		3	1		4
PG		2	9	8	19
Contractual Teachers					
Ph.D.					
M. Phil.					
PG			1		1

2.4.2 Efforts undertaken by the institution to cope with the growing demand/scarcity of qualified senior faculty to teach new programmes

M.Sc. courses in Botany and Mathematics are likely to commence and the teachers of those departments are developing curricula for the autonomous post-graduate courses. Members of Higher Education Council inspected and approved the same (vide Letter no. Aff (WBSU) /MS/213/SCHE/2015, dtd.11.06.2015 through West Bengal State Council of Higher Education).

The College has been able to avail the DBT (Department of Biotechnology) facility of BOOST that will provide a platform for the students to explore and experiment with the tools of biotechnology. An e-tendering process is underway. After the installation of the instruments, workshops and training programmes in Biotechnology will be arranged.

2.4.3 Strategies adopted in enhancing the teacher quality

The faculty members of the College participate in UGC sponsored Refresher Courses, Workshops, Orientation and Staff Training Programmes to keep themselves abreast on the recent developments in their respective disciplines.

a) Nomination to staff development programmes

**Table 2.8: Faculty involvement in staff development programmes**

Academic Staff Development Programmes	Number of faculty nominated
Refresher courses (RC)	13
HRD programmes	3
Orientation programmes (OP)	8
Staff training conducted by the University	1
Staff training conducted by other institutions	3
Summer / winter schools, workshops etc.	19

b) Training Programs organized by the institution

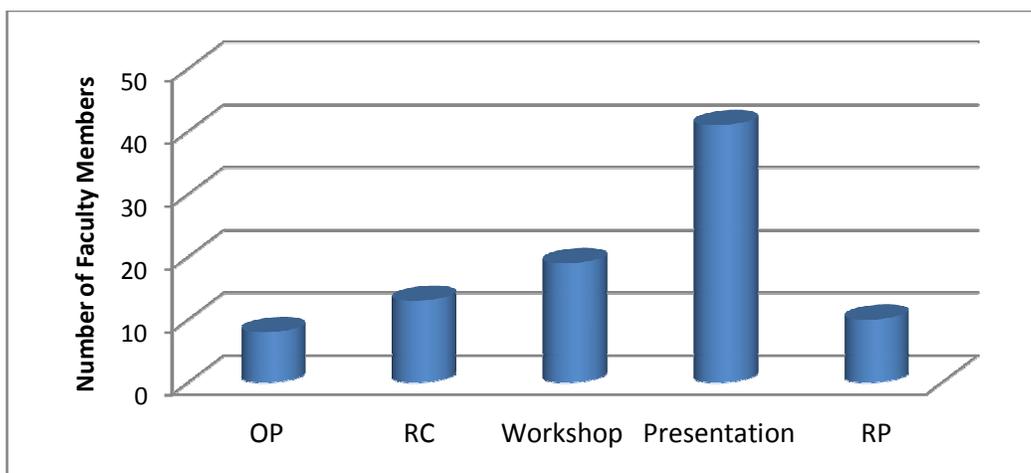
- Teachers of various departments attend the Curriculum Development Workshop of the affiliating university
- The department of Mathematics is going to organize a Teachers' Training Workshop in collaboration with Indian Statistical Institute, Kolkata and National Centre for Mathematics (NCM) in the first week of February 2016.

b) Number of faculty members participated in conferences and symposia:**Table 2.9: Participation of Faculty Members in conferences and symposia**

Activity	International level	National level	State level
Attended	10	24	11
Presented paper	17	18	6
Resource person(RP)	3	6	1



Diagram 2.3: Faculty involvement in staff development programmes



2.4.4 Policies/systems available to recharge teachers

To **recharge teachers** the College encourages senior faculty members to take postgraduate classes in other colleges of the parent university and other universities such as Vidyasagar University, Rabindra Bharati University, Kalyani University and the University of Calcutta. The College is going to begin two autonomous postgraduate courses from the 2016-2017 academic session. The College also regularly organizes lectures by eminent academicians.

The institution through the **IQAC** and **Research Monitoring Cell** promote the continuation of the endeavour among faculty members to undertake research activity through institutional and individual projects. The faculty members apply for minor and major research projects to the various research funding agencies. On the basis of application, the UGC (ERO)/DBT/DST grants the research project with financial assistance. The institution grants study leave for the faculty members pursuing research work. Following are the ongoing research projects of our College:



Ongoing Major Research Projects

- Dr Papia Chakraborti, Department of Botany - UGC - Phycodiversity of the Bon Hooghly Lake and adjoining water bodies in Kolkata status and potential implication. 2014-17.
- Dr. Papia Chakraborty, Department of Botany, West Bengal Department of Biotechnology, BOOST-I (Biotechnology Opportunities Offered for Science and Technology), 2014-19.

Ongoing Minor Research Projects

- Dr. Kartik Kumar Nandi, UGC - Designing Of Sustainable Experiments; Green Reagents/Methodologies For Organic Chemistry Laboratory, 2014-16
- Dr. Manas Kumar Roy, Department of Physics, UGC- Dynamics of ferroelectric Nano-particles Suspended in Non-polar fluid. 2015-17.
- Smt. Munmun Biswas, Department of Statistics- UGC- Exact Distribution-free Two Sample Test Applicable to High Dimensional Data, 2015-17.
- Dr. Nishi Pulugurtha, Department of English - UGC - Telegu Cinema and the Diaspora: Understanding Transnational Cultural Practices. 2015-17.
- Dr. Songlap Sarkar, Department of Bengali, UGC - Bangla chhotogalpe prabin nagarik. 2013-15.
- Dr. Swarup Manna, Department of Chemistry, UGC- “A Versatile ‘Click’ Method for Scalable Production of Functionized CNTs and CNT Nanocomposites for Aeronautical Applications. 2015-17
- Smt. Debasree Goldar, Department of Zoology, UGC- “Bio-monitoring of water pollution by heavy metals in some oxbow lake in the southern parts of West Bengal. 2014-16.

Collaborative Research Project

- Dr. Jayanta Kumar Dwibedi, Department of Economics, Centre for West Bengal Economy, Jadavpur University and Centre for Training and Research in Public Finance and Policy- “Efficient utilization of funds at rural local governments: The case of West Bengal”, with Prof. Vivekananda Mukherjee of Jadavpur University.

Teachers pursue their research projects on the basis of the following research facilities provided by the College.



- Central Instrumentation Facility of the Biotechnology Laboratory (BOOST) which will have modern equipments for example, Thermal cycler, Centrifuge, UV-Trans-illuminator, UV-VIS Spectrophotometer, -20°C freezer, Horizontal Shaker, BOD Incubator, among others.
 - Arrangement of Network Resource Centre with Wi-Fi connection through Broadband
 - Authority sanctions leave to attend research related conferences.
 - Facilitate timely audit and submission of utilization certificate to the funding agencies.
 - Easy access to journals and periodicals in the college library.
 - Faculty members guide M. Sc. students of other universities.
 - Individual teachers collaborate with other institutes and universities while undertaking their research projects.

Outcome:

- 8 teachers are pursuing Ph.D. work and have registered in universities/institutes.
- 27 teachers completed Ph.D and 1 teacher was awarded M.Phil while in service.
- 10 faculty members acted as resource person in their respective field of research activity in state, national and international level.
- About 75% of faculty members presented papers in state, national and international conferences and symposia.

2.4.5 Number of faculty, who received awards / recognition at the state, national and international level for excellence in teaching

Teachers getting awards and recognitions

- Following teachers were awarded with Doctor of Philosophy:
 - Dr. Indranil Chattopadhyay (Department of History, 2010)
 - Dr. Alope Kumar Chattopadhyay (Department of History, 2010)
 - Dr. Shyamal Sen (Department of Mathematics, 2011)
 - Dr. Manas Kumar Roy (Department of Physics, 2013)
 - Dr. Subhrajyoti Debnath (Department of Mathematics, 2013)
- Dr. Biswarupa Ghosh of the Department of Botany has received the Best Poster Award for the paper on “Bat Pollination of *Daubanga grandiflora*’ in the Fourth International Conference of Science organized by World Science Congress, at Jadavpur University Kolkata, 16th -18th December, 2014-15.



- Dr. Nishi Pulugurtha, Department of English, was awarded UGC Travel Grant for attending international and peer reviewed conference “Appropriation in an Age of Global Shakespeare”, organized by University of Georgia, USA, 12th – 14th November 2015.
- Dr. Papia Chakraborti, Associate Professor in Botany, has joined as the Principal of the College on 2nd July 2015, after serving the college for 17 years.
- Dr. Jayanta Kumar Dwivedi was awarded UGC travel grant for attending international conference to present his paper at the 6th Annual International symposium on ‘Economic Theory, Policy and Applications’, organized by Athens Institute for Education and research (ATINER), Athens, Greece, 25th July – 28th July 2011.
- Dr. Indranil Chattopadhyay, Department of History, was awarded with Goutam Chattopadhyay Award for best article in Paschimbanga Itihas Samsad, 2011.
- Dr. Nishi Pulugurtha, Department of English, was awarded with UGC Travel Grant for attending the Coleridge Summer Conference to present her paper titled “Coleridge, Poetry, Additions and Revisions”, organized by Friends of Coleridge, Cannington, Somerset, England, 21st July – 28th July, 2010.
- Associateship was awarded to Dr. Nishi Pulugurtha by the Indian Institute of Advanced Study, Shimla, June 2009 and October 2010.

Teachers Appointed as member of Board of Studies in various Universities

- Dr Soma Sen of Department of Chemistry is a member of UG Board of Studies of West Bengal State University
- Dr. Manasi Basu of Department of Chemistry is member of the syllabus development committee by Board of Studies in Chemistry
- Dr. Jayanta Kumar Dwivedi of Department of Economics is a member of UG Board of Studies of West Bengal State University
- Dr. Paritosh Kumar Roy of Department of Zoology is a member of:
 - UG Board of Studies in Zoology, Industrial Fish and Fisheries and Sericulture of West Bengal State University.
 - Expert Committee in Industrial Fish and Fisheries of University of Calcutta.
 - Board of Examination of M.Sc. in Zoology of Vidyasagar University
- Dr. Papia Chakraborti of Department of Botany is a member of UG Board of Studies of Gour Banga Viswavidyalay.
- Dr. Gangabrata Mukherjee is a member of Board of Studies in Department of Physics, University of Calcutta.



Teachers engaged in Post Graduate Teaching as Guest Faculties

- Dr. Papia Chakraborti is associated with the postgraduate Department of Botany, University of Calcutta, as a resource person in pre-PhD course work in 2011.
- Dr Gangabrata Mukherjee in the Department of Chemistry, Scottish Church College, University of Calcutta (2013-15) and Department of Physics, Acharya Prafulla Chandra College, West Bengal State University (2011-12)
- Dr. Indranil Chattopadhyay in Postgraduate Department of History, Distance Course, Kalyani University since 2010.
- Dr. Jayanta Kumar Dwivedi in Department of Economics, Calcutta University (2009-10), Rabindra Bharati University (2010-12), in P.G. Department of Commerce, Bhairab Ganguly College (2010-14) and Ph.D course work, Ramakrishna Mission Vivekananda University, Belur Math, (2014-15).
- Dr. Manasi Basu in the P.G. Department of Chemistry, Acharya Prafulla Chandra College, 2010-2014.
- Smt. Nayna Guha Majumder in Department of Radio Physics, University of Calcuttasince 2006, Department of Electronic and Information Technology, postgraduate in Economics and Management
- Dr. Safayet Karim Choudhury in PG. Department of Physics, Acharya Prafulla Chandra College, 2010-14.
- Dr Sangita Gangopadhyay in the Department of Botany at Jogamaya Devi College P.G. study Centre under Directorate of Distance Education, Vidyasagar University since 2010.
- Dr. Shampa Mitra in P.G. Department of Bengali, Rabindra Bharati University since 2010
- Dr. Shukla Mukhopadhyay in P.G. Department of Physics, Vidyasagar Open University, 2010-13.
- Dr. Soma Sen in P.G. Department of Chemistry, Acharya Prafulla Chandra College, (2012-15)
- Dr. Subhendu Patra in P.G. Department of Zoology, Netaji Subhas Open University at Durgapur Govt. College Centre, 2010-14.
- Dr. Subhrojyoti Debnath in P.G Department of Mathematics, Kalyani University (2013-15)
- Dr. Debasree Goldar is a member of Governing Body of Nahata J.N.M.S Mahavidyalaya, Nahata.



- Dr. Nishi Pulugurtha in the department of English, West Bengal State University (2010-2011) and department of English, Rabindra Bharati University (2014-till date)

2.4.6 Evaluation of the teachers by the students

Yes, College has a highly structured mechanism of evaluation of teachers by the students.

Student Evaluation: The institution has a system of evaluation of the teachers by the Students' Feedback subsequently developed following the guidelines laid down by NAAC. Feedback from the outgoing IIIrd year students are collected through a structured questionnaire on different aspects of the college immediately before the filling up of examination forms in the month of February-March of every year. The feedback is analysed and strengths and the weaknesses of the individual teacher is noted according to the suggestion of the students. Analytical Reports are placed in the meeting of IQAC.

Outcome: Scrutiny of the 'Feedback Evaluation' from the students helps to make the teaching more interactive and learning more student centric. For betterment of teaching learning mechanism, Principal, Head and senior faculty members interact with the teachers to satisfy the demands of the students.

2.5 EVALUATION PROCESS AND REFORMS

2.5.1 Awareness of stakeholders especially students and faculty members towards the evaluation process

The stakeholders of the institution especially students and the faculty are made aware of the evaluation processes by the following methods:

- Prospectus
- Academic Calendar
- Official notices circulated for the teachers and the students
- Departmental notices
- Circulars from the University



The Principal informs the students about the main points of the evaluation process, importance of attendance, internal and external assessment methods at the beginning of the academic session. The students are briefed about the assessment process of the practical curriculum by the senior teachers of the departments. During the Parent-teacher meeting the whole evaluation process is explained to the parents.

Students have to appear and qualify in the Test Examinations conducted by the College prior to the University Examination. Moreover, Class tests and Practical exams are the main methods of institutional evaluation. In addition, projects and the presentations are also evaluated for the internal assessment. Attendance in practical classes is also taken into consideration for the award of the internal assessment marks of the practical examination conducted by the university.

The evaluated answer scripts are shown to the students and their shortcomings are discussed by the concerned teacher.

2.5.2 Major evaluation reforms of the university adopted by the institution and reforms initiated by the institution

Class tests, seminars and projects are evaluated by the teachers and advanced and slow learners are identified.

The West Bengal State University, to which our College is affiliated, has started giving weightage on attendance in Practical Examination of general courses since 2009-10 academic years. In this process 80% marks is given by the internal teachers through a **method of Continuous Comprehensive Evaluation** depending on the Attendance and Performance in the practical classes throughout the year and rest 20% through Viva-voce.

The major evaluation reforms are initiated by the affiliating University through up gradation in curriculum for which the college along with the University organizes curriculum development workshops in which a large number of our faculty members participate.

The Examination pattern of the college has been reformed. The assessment on Annual basis has been changed to Class Tests, Mid-term and Test Examination. The college maintains **Continuous Comprehensive Evaluation system (CCE)**.



2.5.3 Effective implementation of evaluation reforms and those initiated by the institution on its own

There is an Academic Subcommittee in the College to see the effective implementation of the evaluation process. The College administration maintains regular contact with the University administration, the Controller of Examinations and other University officials. Most of our Faculty members are appointed as head examiners, paper setters, moderators and/or examiners, some others are the members of boards of studies in their respective departments. They put forward their suggestions in the respective meetings regarding the implementation of the evaluation reforms of the university as directed by the Examination Committee of the University.

2.5.4 Formative and summative evaluation approaches adopted to measure student achievement.

In the **Formative Assessment** the students are judged by a continuous process of examinations, for example, Class tests, Tests, Laboratory Quiz, Projects, and Laboratory performance. This provides them with an effective feedback about understanding their subject. The assessment is done by the concerned teachers and the corrected scripts are shown to the students. Special practical and theoretical classes and tutorials are arranged for the slow learners. Test Examination is held by the institution prior to the University Examination as scheduled in the Academic Calendar.

Summative Evaluation is done by the University at the end of each Academic session and the papers are assessed by the examiners appointed by the University. Following is the examination pattern of West Bengal State University to which our College is affiliated:

Part I: 2 Honours papers, of 100 marks each + 2 General papers of two subjects, each of 100 marks + Environmental Studies paper of 50 marks

Part II: 2 Honours paper, of 100 marks each + 2 General papers of 2 subjects each, of 100 marks each.

Part III: 4 Honours paper, each of 100 marks

2.5.5 Monitoring and communicating the progress and performance of students



Internal evaluation is based on programmed transparent system involving class tests, tests, projects, assignments and seminars. The questions of class tests and test examinations are framed on the university pattern to judge the student and make them aware of the technicalities in answering the questions to perform better in the final university examination. Through the Continuous Evaluation Process the students are intimated regularly about their progress.

The answer scripts of the internal assessments are shown to the students and their problems are discussed. The students are intimated regularly about their progress through the Continuous Evaluation Process. Technology is used to prepare list of examinees and maintain record of marks obtained in test examination in the database of the college.

Table 2.10: Department wise results summary

Departments	2010-11		2011-12		2012-13		2013-14		2014-15	
	Appeared	Pass %	Appeared	Pass %	Appeared	Pass %	Appeared	Pass %	Appeared	Pass %
Bengali (Hons)	39	85%	36	94%	31	84%	28	71%	23	96%
English (Hons)	23	74%	28	89%	10	100%	9	89%	17	100%
History (Hons)	28	89%	13	85%	10	100%	15	53%	11	91%
Philoisophy (Hons)	21	86%	0	0%	4	75%	2	100%	7	100%
Pol. Sc. (Hons)	5	80%	6	83%	3	67%	7	71%	2	100%
Botany (Hons)	5	100%	2	0%	4	75%	6	67%	8	75%
Chemistry (Hons)	9	100%	8	100%	18	100%	6	100%	3	100%
Economics (Hons)	0	0%	0	0%	0	0%	0	0%	0	0%
Zoology (Hons)	30	90%	34	88%	27	96%	21	100%	17	100%
IFF (Major)	4	100%	3	67%	11	100%	6	100%	17	94%
Mathematics (Hons)	9	89%	9	89%	5	100%	13	77%	10	90%
Physics (Hons)	6	83%	12	58%	13	77%	12	83%	8	88%
B. Sc (Gen)	41	83%	45	71%	45	80%	48	85%	42	98%
BA (Gen)	102	64%	118	43%	110	62%	113	42%	113	83%
Total (Hons)	322	79%	314	68%	291	78%	286	66%	278	90%

2.5.6 Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students.



The system of internal assessment of honours students has no role as far as the evaluation of final university examination is concerned. Only in the practical examination of the general subjects' attendance and class performance throughout the year is given special weightage, the marks for which is added to the internal assessment.

To maintain rigour and transparency in the internal assessment, the teachers focus on the question pattern approved by the University. The record of marks of all internal examinations is maintained centrally.

Independent learning, communication skills of students are assessed through students' seminars and projects. Answer scripts of class tests and Test Examination are shown to the examinees and their problems addressed. All queries regarding assessment are explained. Grievances with University level assessment are addressed by arranging for a review of the answer scripts. The University conducts the entire process of re-evaluation according to its set rules.

2.5.7 Redressal of grievances with reference to evaluation in the college and University level

At the College examination, if there is any dissatisfaction among the students regarding the evaluation of the answer scripts, the students directly approach the concerned faculty member. They follow the following steps to redress their grievances:

- Answer scripts are shown to the students.
- Their flaws are explained by the concerned teacher and ways for improved performance are discussed.
- The College has a Grievance Redressal Cell to look into matters

For redressal of grievances at the University level with reference to evaluation, the following steps are followed:

- The students may apply for re-evaluation of answer scripts in the prescribed proforma forwarded by the college authority.
- The scripts are then re-examined by a different examiner or by the Head examiner.
- After review a fresh mark-sheet is provided to the students by the university showing improvement/ no change in marks.



2.5.8 Does the institution and individual teachers use assessment evaluation as an indicator?

Prior to evaluation of the answer scripts in the university examination, the Head Examiners (HE) of the respective paper organises a meeting to frame an assessment scale of evaluation. For most of the subjects the HE prepares a model answer. The Model answers are discussed in the examiners' meeting and evaluation is made according to guidelines decided upon.

2.6 STUDENT PERFORMANCE AND LEARNING OUTCOMES

2.6.1 Institutional strategies to facilitate the achievement of the intended learning outcomes

Teaching, learning and assessment strategies of the College are so structured to facilitate the learning outcomes. The College encourages learning through assignments, projects, seminars and practical classes, through which the students acquire and develop skills for data collection, analysis and presentation. The College promotes field trips, educational excursions, laboratory visits, industrial visits and interaction with experts through seminars and workshops which enhance their knowledge, interactive and collaborative learning skills and develop consciousness about various subjects and issues. These projects train them in areas of research methodology, use of computers, data collection and presentation. Such experience prepares them to take part in national surveys and higher studies.

2.6.2 Measures/initiatives taken up by the institution to enhance the Social and economic relevance of the courses offered

- As an initiative taken by the College to enhance the innovation and the research aptitude, the Departments of Botany and Mathematics are prepared to begin Post Graduation courses in 2016 on the recommendation of the West Bengal Council of Higher Education.
- The College has been able to avail the DBT (Department of Biotechnology) facility of BOOST that will provide a platform for the students to explore and experiment with the tools of biotechnology. This will provide scope for improving the students' aptitude towards life science, and foster research and development and future job opportunities in the field.



- Many students are encouraged to present papers/posters in national and state level seminars, workshop and environment fairs. Such exposure has developed their research and scientific aptitude.
- Computer Literacy Program for all first year students has been introduced. This one year certificate course has been introduced to address the future professional needs of the students.
- **A Career Counseling Cell** is present in the college.
- On-Job-Training for all the final year students of Industrial Fish and Fishery (B.Sc. Major) are organized every year in different organizations and universities.

2.6.3 Methods adopted by the institution to collect and analyse data on student performance and learning outcomes

The collection of data on student learning outcomes is performed by the following means:

- Results of class tests by the respective departments.
- Results of the Test Examination by the college office.
- Results of the Final University Examination by the college office.
- Data on students' progression in PG level is also in progress.
- Departments collect feedback from the various stakeholders.

Data received from the above methods are analysed in the:

- departmental meeting
- meeting of Academic sub-committee
- meeting of Teachers Council

2.6.4 Methods adopted towards monitoring the achievement of learning outcomes

The College monitors the performance by the results of the:

- Class Tests which are displayed on the departmental notice board
- Test Examinations are displayed on the college notice board
- Final University Examination results also displayed on the college notice board

Answer scripts are shown to the examinees, so that they can analyse their drawbacks and work to improve. Faculty members assess student progression and



performance so that remedial measures can be taken to improve student performance in university examinations.

2.6.5 Attributes specified by the college/affiliating university and ensuring the attainment of these by the students

All the activities of the College and the departments are aimed to develop various skills such as writing, communicating, leadership qualities and managerial skills. These value added skills would work to enhance the overall development of students.

2.6.6 Any other relevant information regarding Teaching Learning and Evaluation which the college would like to include.

NIL



3.

Research, Consultancy and Extension

Self Study Report (2015) | Brahmananda Keshab Chandra College, Kolkata



3.1 PROMOTION OF RESEARCH

The College gives importance to research, consultancy and extension activities of the faculty members. Well-equipped laboratories, library, internet resources facilitate research activities in various subjects. Teachers as well as students are encouraged to participate in workshops and conferences.

- The College has a vibrant research atmosphere. Most faculty members are engaged in active research. They regularly present their research papers in seminars, workshops and conferences and also undertake projects funded by different agencies.
- The College ensures that the faculty members pursuing their doctoral work are not hampered towards completing their thesis.
- The college has organized National and State level Seminars and symposia, sponsored by the University Grants Commission, Department of Science and Technology and other organizations.
- The college has a Research Monitoring Cell comprising the Principal as Chairperson and five senior teachers. The primary objective of this committee is to encourage faculty members to pursue active research, to screen project proposals to be funded by external agencies and to facilitate the necessary administrative procedure.
- The college takes special care to inculcate research aptitude among students by organizing departmental seminars, student seminars, poster exhibitions, excursions and study tours. Students are encouraged to participate in Science fairs. Some departments assign project work to students. The college has an Eco club, formed at the initiative of Botany Department. Students are encouraged to contribute to the college magazine and wall magazines.

3.1.1 Research Centre at the Institution

- The Department of Biotechnology, Government of West Bengal has initiated an academic programme for improvement of infrastructure in UG/PG degree Colleges in West Bengal as an integral part of promotion of biotechnology. This aims at enhancing the availability of trained manpower which will serve as a national intellectual corpus repository in Biotechnology and Science and Technology sectors. The West Bengal Department of Bio Technology has funded a project “Biotechnology based Opportunities Offered to Science & Technology departments” or BOOST-I (2014) with Dr. Papia Chakraborti as



the Programme Coordinator. The Scheme, of Rs. 20 lakhs, is to be used for development of infrastructure facilities for teaching and research, upgradation of existing facilities involved in UG/PG teaching and research, acquisition of essential equipment, networking and computational facilities. The Project Implementation Group consists of faculty members of the department of Botany:

1. Dr Sangita Gangopadhyay
2. Dr. Biswarupa Ghosh
3. Dr. Swapan Mandal
4. Dr. Dipanshu Biswas
5. Prof. Chandan Barman

The duration of support for the project will be 5 years and the selection was done through a peer review mechanism.

- Dr. Papia Chakraborti is also the Principal Investigator of a Major Research project ‘Phycodiversity of the Bonhooghly Lake and adjoining water bodies in Kolkata- status and potential implications’ funded by University Grants Commission.
- The college authority has provided a room for these projects to build up the necessary infrastructure so that a Biotechnology Research Centre can be set up in the college in future.

3.1.2 Research Committee of the Institution

Our college has an active Research Monitoring Cell, operating since 2010 to promote and facilitate the culture of research activities among college faculty.

The composition of the Research Monitoring Cell is as follows:

1. Chairperson: Dr. Papia Chakraborti (Principal)
2. Dr. Alope Kumar Chattopadhyay
3. Dr. Aparajita Nag
4. Dr. Nishi Pulugurtha
5. Dr. Jayanta Kumar Dwibedi
6. Dr. Kartik Kumar Nandi

The activities of the Research Monitoring Cell are:

- Coordinating between the research funding agencies such as University Grants Commission, Department of Biotechnology, Department of Science and Technology and faculty members who apply for research grants.
- Screening project proposals which are to be submitted to various research funding agencies.
- Monitoring the progress of research work



- Resolving any administrative difficulties faced in the course of carrying out research projects.

Recommendations of the Research Monitoring Cell and its Impact:

- Faculty members are regularly encouraged to submit research projects to different funding agencies. This enables a thriving research atmosphere in the college and specially motivates the younger faculty members to be actively involved in research work.
- The Research Monitoring cell recommended the college authority through IQAC to upgrade its internet and library facilities. This has been of great help for the furtherance of research by faculty members.

3.1.3 Measures taken by the institution to facilitate smooth progress and implementation of research schemes/projects

Institutional support is provided to enable implementation of research schemes in the following ways:

- Autonomy of the Principal Investigator is ensured.
- Timely availability and release of funds is facilitated.
- Assistance is provided to enable timely submission of Utilization Certificate to the funding authorities.
- There is a provision for educational leave for faculty engaged in research if and when required. Any leave required to attend research related conferences is sanctioned by the college authority following standard procedures.
- Internet and computing facilities are available in the College.
- Adequate laboratory facilities are provided for scientific research. The principal investigator is provided space in the laboratory of the respective department to arrange his/her equipment during an ongoing project. After the completion of a project, these equipments are maintained and utilized by the concerned department.
- The College library plays an important role in facilitating research work. Several journals, including e-journals (please see the list below) are subscribed by the College library. Apart from this, the Library also ensures that the books purchased under research grants are properly stocked after the completion of a particular project.

LIST OF JOURNALS IN THE COLLEGE LIBRARY

(Journals purchased from UGC XIIth plan and State Grant)

1. *Pramana*
2. *Current Sciences*
3. *Economic and Political Weekly*



4. *Journal of Indian Chemical Society*
5. *Library Herald*
6. *Desh*
7. *Inland Fisheries Society of India*
8. *Essays and Studies, Journal of JNU Centre of English Studies*
9. *Journal of Sanskrit Sahityo Parishad*
10. *Science and Culture*
11. *Journal of Genetics*
12. *Journal of Biosciences*
13. *Medicinal and Aromatic Plant Abstract*
14. *Journal of Chemical Sciences*
15. *RESONANCE-Journal of Science Education*
16. *Indian Journal of Biotechnology*
17. *Indian Journal of Experimental Biology*
18. *Annals of Library & information Studies*
19. *Katha Sahitya*
20. *Journal of Indian Council of Philosophical research*
21. *Indian History Congress*
22. *DIGIT*
23. *Electronics for You*
24. *Indian Journal of Pure and Applied Mathematics*
25. *Mathematics Today*
26. *Sankhya*

3.1.4 Efforts made by the institution in developing scientific temper and research culture and aptitude among students

The steps taken to enhance research aptitude of the students are:

- Departmental seminars are organized where eminent scholars are invited (Refer **Table 3.5**). This enables the students to broaden their outlook about their subject. Also their information about the current research activities in their field is increased. The details of departmental seminars are given in the evaluative profile of the respective departments.
- Student activities such as student seminars (Refer **Table 3.1**), student projects, exhibitions are arranged at a frequent basis.
- The science students are encouraged to take part in Science Fairs organized in nearby localities.
- Excursions and study tours are organized regularly. Apart from the educational excursions as specified by the university curriculum for the students of Botany, Industrial Fish and Fisheries and Zoology (details are



- given in the evaluative profile of the respective departments); the departments of English, History, Philosophy, Physics, Chemistry and Political Science also arrange for study tours. For instance, in recent years the department of History organized educational tours to ‘The Indian Museum’ and ‘Victoria Memorial’. The department of Political Science organized education tours to West Bengal State Assembly and Panchayat Office, Rajarhat.
- The department of Physics accompanied the Honours students to various programs outside the college as follows:
 - (i) The Outreach Program at Saha Institute of Nuclear Physics (SINP) on 28.02.2009 and 13.10.2015
 - (ii) The Outreach Program at Science City on INO: A window to the Universe organized by IISER and Science City on 08.11.2013
 - (iii) UGC sponsored National Seminar on Recent Advances in the Frontiers of Physics organized by Bidhannagar College on 14.09.2013
 - The department of Chemistry accompanied the Honours students at
 - (i) The celebrations of International year of Chemistry at SINP on 16.11.2011, Ramakrishna mission Vidyamandir on 25.03.2011 and Scottish Church College on 19.12.2011.
 - (ii) Celebration of 150th birth Anniversary of Acharya Prafulla Chandra Roy at SINP on 20.12.10.
 - (iii) 100th Indian Science congress at Bose Institute from 3.01.13-7.01.13.
 - Frequent film screenings based on texts are organized by the English Department for better exposure of the students to the culture which is a part of their study. In recent years, the department organized a screening of Shakespeare’s “Twelfth Night” on 02.04.2015 and the film “Elizabeth” on 16.08.2013.
 - Awareness programs ranging from gender issues, diabetes to e-waste management have been organized by the College (Refer **Table no.3.11**).
 - An Eco-club has been formed in the college at the initiative of the department of Botany. Members of the Club have been involved in conducting the green audit of the College. A plantation drive was organized by the Club on 29.08.2014.
 - The Department of Chemistry has formed a ‘Chem Club’ which launched a wall magazine called “W-alchemy” on 29.07.2015. The aim of this magazine is to create awareness about the fundamental facts of the subject with focus on the ways chemistry affects our lives.
 - The College publishes an annual magazine *Lekho Manjari*. Students also regularly contribute article to wall magazines, ‘Pro-Chesta’ and ‘Spandan’. These magazines showcase the literary and artistic reflection of the students. Staff of the College also contribute to the annual magazine.

**Table 3.1: Students' Seminar Organized by Different Departments**

Sl. No	Year	Department	Topic
1	2015	Bengali	Kathasahitye Saratchandra: Punarbichar O Mulyayan
2	2015	Mathematics	Various Aspects of Mathematics
3	2014	Chemistry	Different topics in Chemistry
4	2014	Physics	OPAMP and Its application
5	2014	Physics	Solving Quantum Mechanical Problems using Linear Algebra and Complex Numbers
6	2014	English	Milton's <i>Paradise lost</i>
7	2013	English	Bicentennial of <i>Pride and Prejudice</i>
8	2012	History	Ishwar, Sannyasi O Samrat: Prachin Bharat
9	2012	English	300 Years of <i>The Rape of the Lock</i>
10	2011	English	Elizabethan and Jacobean Drama
11	2011	History	Madhyajuge Rastra o Samaj: Sanghattheke Samannyay
12	2010	English	The English Novel
13	2010	Chemistry	Different topics in Chemistry
14	2010	Bengali	Sardhosatobarsher Aloy Rabindranath

3.1.5 Details of faculty involvement in active research

Listed below is an overview of the research activities of the college faculty in the last five years. Details of various publications, projects and paper presentations are given in the evaluative report of the concerned departments.

Table 3.2: Faculty Involvement in Active Research

Year	No. of Publication	No of Projects Undertaken	No. of Papers Presented in National and International Seminars and Conferences
------	--------------------	---------------------------	--



			Seminar Presentation (International)	Seminar Presentation (National & others)
2015	33	6	13	25
2014	33	5	16	18
2013	30	1	3	15
2012	18	4	14	18
2011	23	3	7	25
Total	137	19	53	101

In case of completed projects year assigned in the table is the year of completion and in case of ongoing projects year assigned as per year of initiation

3.1.6 Details of workshops /training programmes /sensitization programmes conducted/organized by the institution

Apart from the activities listed in Table 3.1, the college has organized several workshops and sensitization programmes (Refer **Table no 3.11**) to enhance the research aptitude of faculty members and students. The college has also organized regular programmes for the career development of students. These are listed below.

Table 3.3: Career Development Workshops/ Seminars for students

Sl. No.	Date	Topic
1.	18.9.2015, 19.9.2015	NIIT Aptitude Test and Workshop
2.	05.12.2014	Seminar by Jetking organized by Students' Union
3.	28.11.2014	Workshop by Ananda Bazar Patrika
4.	2012(Every Saturday &	Preparatory training for Government Service entry level examinations as per UGC XI th plan in collaboration with



Sl. No.	Date	Topic
	Sunday)	“Camellia Educare Services Pvt. Ltd.”

3.1.7 Details of prioritized research areas and the expertise available with the institution.

The active research areas pursued by college faculty at present are listed below:

Table 3.4: Prioritized research areas of the faculty members

Department	Name of Teaching Staff	Area of Present Research
Bengali	Sampa Mitra	Bengali Theatre
	Sanglap Sarkar	Short Stories
	Smritikana Chakraborty	Mediaeval Bengali Literature
	Shampa Bhattacharya	Bengali Theatre
English	Nishi Pulugurtha	British Romantic Literature, Indian Writing in English, Diaspora Studies and Film
History	Indranil Chattopadhyay	Political History of India
Political Science	Ruma Guha	Kashmir Crisis
Economics	Jayanta Kumar Dwibedi	Trade & Development , Public Finance
Botany	Biswarupa Ghosh	Plant Taxonomy and Ecology
	Chandan Barman	Plant Developmental Biology
	Sangita Gangopadhyay	Tissue Culture, Micropropagation, Bio-Technology
	Dipanshu Kumar Viswas	Bio-technology
	Papia Chakraborti	Phycodiversity and advanced Bio-technology
Chemistry	Kartik Kumar Nandi	Green Chemistry
	Swarup Manna	Study of Nanocomposites



Mathematics	Sheikh Ahmed Hossain	Financial Mathematics
	Shyamal Sen	Multi-Objective Optimization in Uncertain Environment
	Saral Dutta	Cryptography
	Subhrojyoti Debnath	Bio-Mathematics
Physics	Manas Kumar Roy	Material Science and Structural Geology
	Shib Shankar Singha	Laser Raman Spectroscopy
	PinakiPatra	Non-local Quantum Field Theory
Statistics	Munmun Biswas	Non-Parametric Testing
Zoology	Madhumita Roy	Ecological Modeling and System Ecology
	Debashree Golder	Toxicology

3.1.8 Efforts made by the institution to attract researchers of eminence to visit the campus and interact with teachers and students

The College regularly organizes departmental seminars/ workshops (details in evaluative profile of respective departments) as well as awareness programmes. These activities enhance the research temperament of the staff and students of the College. Eminent academicians are invited to deliver lectures in the College.

Table 3.5: Eminent Academicians visited during last five years

Sl No.	Department	Name and Designation of the Academician	Year of Visit
1	Mathematics	Dr. Amartya Kumar Dutta, Professor, Indian Statistical Institute	2015
2	History	Dr. Sukanya Sarkar, Department of History, Sarojini Naidu College for Women	2015



3	History	Dr. Ritu Mathur, Department of History, Mrinalini Datta Mahavidyapith	2015
4	History	Dr. Tapati Bhattacharyya, Department of History, Acharya Prafulla Chandra College	2015
5	History	Dr. Swapan Kumar Mondal, Associate Professor, Department of History, Dinabandhu Mahavidyalaya, Bongaon	2015
6	Botany	Dr. Debabrata Saha, Senior Scientist, Institute of Trans-Disciplinary Health Sciences and Technology-FRLHT, Bangalore	2014
7	Mathematics	Prof. Dulal Chandra Sanyal, Professor University of Kalyani	2014
8	Physics	Prof. Narayan Banerjee, Professor IISER Kolkata	2014
9	Physics	Dr Kuntal Ghosh, Machine Intelligence Unit, ISI Kolkata.	2014
10	History	Dr. Aishika Chakraborty, Associate Professor, School of Women's Studies, Jadavpur University	2013
11	Economics	Dr. Debasis Majumder, Associate Professor, Department of Economics, Bangabasi College	2013
12	Botany	Prof. Kalyan Rudra, Chairman, Pollution Control Board, West Bengal	2013
13	Botany	Dr. Hariramurthi, Associate Professor, School of Health Sciences, Institute of Trans-Disciplinary Health Sciences and Technology-FRLHT, Bangalore	2013
14.	Botany	Dr. Anirban Roy, Senior Research Officer, West Bengal Biodiversity Board.	2013
14	Chemistry	Dr. RanaSen, Associate Professor, Department of Chemistry, Scottish Church College, Kolkata	2010

3.1.9 Sabbatical Leave for research activities

The College has no provision for sabbatical leave. However, faculty members can avail Study Leave, as guided by the university. The college authority grants duty



leave, according to stipulated rules, to any faculty member who wishes to attend a state, national or international level workshop/ seminar/ conference etc. to present a paper or act as a resource person. Duty leave was granted to Dr Nishi Pulugurtha, Associate Professor of English for carrying out research work at Indian Institute of Advanced Studies, Shimla in June 2009 and October 2010.

3.1.10 Initiatives taken up by the institution in creating/advocating research awareness

The College is determined to foster research among the faculty.

- Faculty members are encouraged to do research work (Refer **Tables 3.2 and 3.4**).
- Several members of faculty completed their thesis and many others are pursuing their doctoral research. The congenial atmosphere of the college, facilitates such work. (Refer **Table 3.6**).
- Students are also encouraged to participate in various activities to hone their research skills (Refer **Table 3.1**).
- Eminent scholars are invited to interact with students and faculty (Refer **Table no. 3.5**).
- The College organizes national and state level seminars/ workshops with the aid of funding from sources like University Grants Commission, Department of Science and Technology, Department of Biotechnology among others. Some of these are organized in collaboration with other educational institutions (Refer **Table no. 3.15**).

Table 3.6: List of members of faculty who are either pursuing or have been awarded their doctoral degree after joining

Sl. No	Name	Department	Institute	Year of Ph.D.
1	Shampa Bhattacharya	Bengali	Rabindra Bharati University	2003
2	Smritikana Chakraborty	Bengali	University of Calcutta	2004
3	Songlap Sarkar	Bengali	Burdwadh University	2009



Sl. No	Name	Department	Institute	Year of Ph.D.
4	Chandan Burman	Botany	University of Delhi	ongoing
5	Papia Chakraborti	Botany	University of Calcutta	2000
6	Manasi Basu	Chemistry	Jadavpur University	2003
7	Rathindranatha Mallick	Economics	Vidyasagar University	ongoing
8	Susmita Haldar	Economics	University of Calcutta	ongoing
9	Jayanta Kumar Dwibedi	Economics	University of Calcutta	2008
10	Nishi Pulugurtha	English	University of Calcutta	2003
11	Aishika Chakraborty	History	University of Calcutta	2006
12	Aloke Kumar Chattopadhyay	History	University of Calcutta	2010
13	Indranil Chattopadhyay	History	University of North Bengal	2010
14	Shyamal Sen	Mathematics	University of Kalyani	2011
15	Subhrojyoti Debnath	Mathematics	University of Kalyani	2013
16	Sheikh Ahmed Hussain	Mathematics	National Institute of Technology, Durgapur	ongoing
17	Gangabrata Mukhopadhyay	Molecular biology	University of Calcutta	1990
18	Shib Shankar Singha	Physics	University of Calcutta	ongoing
19	Pinaki Patra	Physics	Kalyani University	ongoing
20	Aparajita Nag	Physics	Jadavpur University	2001



Sl. No	Name	Department	Institute	Year of Ph.D.
21	Manas Kumar Roy	Physics	West Bengal University of Technology	2013
22	Ruma Guha	Political science	University of Calcutta	2000
23	Swatilekha Poddar	Sanskrit	Rabindra Bharati University	ongoing
24	Munmun Biswas	Statistics	Indian Statistical Institute	submitted
25	Ranjit Kumar Mitra	Statistics	Burdwan University	1990
26	Debashree Goldar	Zoology	West Bengal State University	ongoing
27	Sanjib Chattopadhyay	Zoology	University of Calcutta	1997

3.2 RESOURCE MOBILIZATION FOR RESEARCH

3.2.1 Budget utilization for research

The College allocated an amount of Rs. 3.88 lacs from UGC XIIth plan to set up the infrastructure for setting up the Laboratory for Biotechnology for the WBDBT sponsored BOOST programme in 2014. College funds are allocated for departmental seminars and student seminars and other research related activities like exhibitions and study tours. The College allocated fund from UGC grants under XIth and XIIth Plan for study tours also.

3.2.2 Provision of seed money

At present the college has no financial autonomy to support research projects. The college primarily acts as a disbursing authority for sanctioned research projects from various sources such as DBT, CSIR, UGC, DST, among others.

3.2.3 Financial provisions made available to support student research projects by students



Students can do their research works in different departments utilizing the available resources. Students of other institutions are also encouraged to do their project works with the existing infrastructure and expertise of our faculty members of the college. Postgraduate students in chemistry of West Bengal State University, RKM VC College, Rahara and APC College, New Barrackpur have done summer projects under the guidance of Dr. Kartik Kumar Nandi of the department of chemistry of the College. A post graduate student in Physics of APC college has done project under the guidance of Dr Manas Kumar Roy of the department of physics.

3.2.4 Inter-disciplinary research

The ongoing and recent interdisciplinary research projects carried out by members of faculty are given below:

- (i) Botany/ Biotechnology: BOOST Programme- Dr. Papia Chakraborti
- (ii) Chemistry/ Physics: Nanotechnology- Dr. Swarup Manna
- (iii) Chemistry/ Environmental Science: Green Chemistry- Dr. Kartik Kumar Nandi
- (iv) Literature/Film Studies: Dr. Nishi Pulugurtha

3.2.5 Optimal use of various equipment and research facilities of the institution

The College ensures optimal use of various equipment and research facilities of the Institution by its staff and students.

- (i) Scientific equipment are shared amongst the science departments for effective transfer of technical skills.
- (ii) Special equipments like LCD projectors, laptops and camera possessed by different departments are shared by all the departments as per their need while organizing activities such as seminars and exhibitions.
- (iii) Scientific equipment purchased for specific projects are utilized in the college laboratories after the completion of the project.
- (iv) Books purchased for specific projects are stocked in the general library and the respective departmental libraries after the completion of the



project. These are used as reference books for the benefit of staff and students.

- (v) Internet and computational facilities including specialized software are made available to all teachers and students.

3.2.6 Special grants or finances from the industry or other beneficiary agency for developing research facility

The Department of Biotechnology, Government of West Bengal has initiated an academic programme for improvement of infrastructure in UG/PG degree Colleges in West Bengal as an integral part of promotion of biotechnology. This aims at enhancing the availability of trained manpower which will serve as a national intellectual corpus repository in Biotechnology and Science and Technology sectors. The WB DBT has funded the Department of Botany of this College, a course in Biological Sciences with evidence of a biotechnology component for support under the scheme entitled **“Biotechnology based Opportunities Offered to Science & Technology departments” or BOOST-I, in 2014** The Programme Coordinator is Dr. Papia Chakraborti. The Scheme has provided Rs. 20 lakhs for development of infrastructure facilities for teaching and research, upgradation of existing facilities involved in UG/PG teaching and research, acquisition of essential equipment, networking & computational facilities. The facilities will support the efforts of the department as a whole with a number of faculty members.

3.2.7 The support provided to the faculty in securing research funds from various funding agencies, industry and other organizations

The Institution, with the aid of its Research Monitoring Cell, provides necessary help to interested faculty members to apply for research grants from different sponsoring agencies and also assists them wherever required. A total of **19** research projects have been either completed or are ongoing in the last five years. These include collaborative research projects also. Details of ongoing and completed projects and grants received by the faculty researchers are shown in the



following table :

Table 3.7: Details of ongoing and completed research projects during last five years

Table 3.7A: Minor Research Projects

Sl. No	Faculty Researcher and Department	Funding Agencies	Tenure	Title of research project	Total grant sanctioned (in Rs)	Total grant received till date (in Rs)
1.	Nishi Pulugurtha, Dept. of English	UGC	2015-17 (Ongoing)	Telugu Cinema and the Diaspora: Understanding Transnational Cultural Practices	200000	180000
2.	Swarup Manna, Dept. of Chemistry	UGC	2015-17 (Ongoing)	A Versatile 'Click' Method for Scalable Production of Functionalized CNTs and CNT Nanocomposites for Aeronautical Applications	420000	327500
3.	Manas Kumar Roy, Dept. of Physics	UGC	2015-17 (Ongoing)	Dynamics of ferroelectric Nano-particles Suspended in Non-polar fluid	490000	410000
4.	Munmun Biswas, Dept. of Statistics	UGC	2015-17 (Ongoing)	Exact Distribution-free Two Sample Test Applicable to High Dimensional Data	400000	325000
5.	Kartik Kumar Nandi, Dept. of Chemistry	UGC	2014-16 (Ongoing)	Designing Of Sustainable Experiments; Green Reagents/Methodologies For Organic Chemistry Laboratory.	360000	280000
6.	Debashree Golder, Dept. of Zoology	UGC	2014-16 (Ongoing)	Bio-monitoring of water pollution by heavy metals in some Oxbow Lake in the southern parts of West	260000	190000



Sl. No	Faculty Researcher and Department	Funding Agencies	Tenure	Title of research project	Total grant sanctioned (in Rs)	Total grant received till date (in Rs)
				Bengal		
7.	Songlap Sarkar, Dept. of Bengali	UGC	2013-15 (Ongoing)	Bangla chhotogalpe prabin nagarik	122000	96000
8.	Papia Chakraborti, Dept. of Botany	Ministry of Environment & Forests, Govt. of India.	2011-12	Role of aquatic weeds in bioremediation of water pollution	10000	10000
9.	Kartik Kumar Nandi, Dept. of Chemistry	UGC	2010-12	One-Pot Green ... Polynuclear Aromatics/ferrocenyls/ He	180000	180000
10.	Sanjib Chattopadhyay, Dept. of Zoology	UGC	2010-12	Role of aquatic weeds in bioremediation of water pollution	147000	147000
11.	Sukla Mukhopadhyay, Dept. of Physics	UGC	2010-12	Study of Polaronic Conduction Mechanism in Low Dimensional Semi Conductors in the Presence of Laser Field	120000	120000
12.	Nishi Pulugurtha, Dept. of English	UGC	2009-11	Diasporic Imagination and Female Subjectivity: A Study of the Poetry of Chitra Banerjee Divakaruni, Meena Alexander, Uma Parameswaran and Sujata	116000	115998



Sl. No	Faculty Researcher and Department	Funding Agencies	Tenure	Title of research project	Total grant sanctioned (in Rs)	Total grant received till date (in Rs)
13	Jayanta Kumar Dwivedi, Dept. of Economics	UGC	2009-11	Revisiting the Link between Child Labour and Economic Growth: A Reconciliation of Conflicting Views. Funded by University Grants Commission.	106000	100035
14	Nayna Guha Majumder, Dept. of Economics	UGC	2009-11	Cost Benefit Analysis of Arsenic	75000	75000

Table 3.7 B: Major Research Projects

Sl. No	Faculty Researcher and Department	Funding Agencies	Tenure	Title of research project	Total grant sanctioned Rs.	Total grant received till date Rs.
1.	Papia Chakraborti, Botany	West Bengal , Department of Biotechnology	2014-19 (Ongoing)	BOOST-I (Biotechnology Opportunities Offered for Science And Technology) Program	20 lakhs	20 lakhs
2.	Papia Chakraborti, Botany	UGC	2014-17 (Ongoing)	Phycodiversity of the Bon-Hooghly Lake and Adjoining Water Bodies in Kolkata- Status	13.7 lacs	7,39,500



				and its Potential Implications		
--	--	--	--	--------------------------------	--	--

3.3 RESEARCH FACILITIES

3.3.1 Research facilities available to the students and research scholars with in the campus

The following research facilities are available for research in the College:

- Laboratories with latest equipments
- Computer facilities with necessary software and Internet connections
- Photocopying facility
- College library with advanced books and journals including E-journals
- Well stocked departmental libraries
- Space/ Enclosures to carry out research projects

3.3.2 Institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers

The College has set up a Research Monitoring Cell. The Cell has stipulated the following strategies:

- Copies of published research papers of the members of faculty are kept for future use in the College library
- The Cell keeps abreast of the various research projects funded by University Grants Commission, Department of Science and Technology, Department of Biotechnology and other funding agencies.
- The updated information regarding the various funding agencies and fellowships is provided to the teachers to facilitate submission of their proposals on time.
- The infrastructural facilities provided by the college to carry out research projects are regularly monitored. Any upgradation required is notified to the college authority for subsequent action following proper procedures.

3.3.3 Special grants or finances from the industry or other beneficiary agency for developing research facilities



College received regular grants from UGC under its normal plan-programmes and special grants during XI plan for purchasing scientific equipment (Refer **Table 6.4**). Recently we have also received grant from the Government of West Bengal (Refer **Table 6.4**).

- Instruments purchased are Digital Microscope (De Winter, Italy), Projection Microscope, Microscope with Oil-immersion lens, BOD Incubator, Shaker Incubator, Working bench with Laminar Air-Flow, Table-top Cold Centrifuge, Spectrophotometer, Cathode Ray Oscilloscope, Function Generators, Power Supplies of different ranges, Colorimeter, pH meter, Polarimeter, Potentiometer, Desk top Computers, Laptop Computers, Scanner-Printer-Copiers, Printers, Copier machine.
- The WB DBT has funded the Department of Botany of this College, a course in Biological Sciences with evidence of a biotechnology component for support under the scheme entitled “**Biotechnology based Opportunities Offered to Science & Technology departments**” or **BOOST-I, in 2014** for procuring several sophisticated instruments like Thermal cycler, UV-Vis Spectrophotometer, Variable Speed Table-top micro centrifuge, Protein and DNA gel apparatus, UV Trans illuminator, BOD Incubator, -20C Freezer, Laminar air flow apparatus, Water bath with Thermostat control, Distillation unit, Autoclave with digital display, Orbital Shaker, Vortex, Semi-micro Balance.

3.3.4 Research facilities made available to the students and research scholars outside the campus/other research laboratories

Faculty members working in Major/Minor Research Projects or supervising the students /scholars outside the college use the research facilities and research laboratories outside the College as well.



Table 3.8: Faculty members using research facilities outside the college

Department	Name of Teaching Staff	Institutes/ Research Laboratories used
Bengali	Sampa Mitra	Rabindra Bharati University
	Sanglap Sarkar	
	Smitikana Chakraborty	Bangiyo Sahitya Parishad
	Shampa Bhattacharya	Natya-Shodh Sansthan
English	Nishi Pulugurtha	(i) Rabindra Bharati University (ii) Centre for Studies in Romantic Literature (iii) British Council Library
History	Indranil Chattopadhyay	(i) National Library (ii) Bangiya Sahitya Parishad (iii) State Archives
Political Science	Ruma Guha	British Council Library
Economics	Jayanta Kumar Dwibedi	Centre for studies in Social Science, Calcutta
	Susmita Haldar	University of Calcutta
	Rathindranath Mallick	(i) University of Calcutta (ii) Vidyasagar University
Botany	Biswarupa Ghosh	North Eastern Hill University
	Chandan Barman	Delhi University
	Sangita Gangopadhyay	Bose Institute, Kolkata
	Dipanshu Kumar Viswas	Banaras Hindu University
	Papia Chakraborti	University of Calcutta, Ballygange Campus and IIT, Kharagpur
Chemistry	Kartik Kumar Nandi	Indian Association for the Cultivation of Science
	Swarup Manna	Indian Association for the Cultivation of Science
Mathematics	Sheikh Ahmed Hossain	
	Shyamal Sen	Indian Statistical Institute, Kolkata



	Saral Dutta	Indian Statistical Institute, Kolkata
	Subhrojyoti Debnath	University of Kalyani
Physics	Manas Kumar Roy	Jadavpur University
	Shib Shankar Singha	(i) Bose Institute (ii) IISER
	Pinaki Patra	Kalyani University
Statistics	Munmun Biswas	Indian Statistical Institute, Kolkata
Zoology	Madhumita Roy	(i) Visvabharati University (ii) Indian Statistical Institute
	Debashree Golder	(i) West Bengal State University (ii) Jadavpur University (iii) CIFRI-Barrackpore

3.3.5 Details on the library/information resource centre or any other facilities available specifically for the researchers

The College library subscribes to 26 journals which are useful for the researchers (Refer 3.1.3). Moreover it has a rich collection of reference books and ensures that such books are regularly purchased. The College has adequate computational and internet facilities. Latest laboratory equipment, depending on the research requirements of the faculty of science departments, are available in the College.

3.3.6 Collaborative research facilities developed/created by the research institutes in the college.

Even though faculty members of our College are involved in collaborative research activities with other institutes (Refer Tables 3.9 and 3.7.1), no collaborative research facility has been developed in the College as yet.

Postgraduate students in chemistry of different institutes have done summer projects under the guidance of Dr. Kartik Kumar Nandi of the department of chemistry. Dr Manas kumar Roy also guided a postgraduate student in Physics.



Dr Jayanta kumar Dwibedi, Associate Professor, Department of Economics has research projects in collaboration with other institutes.

Table 3.9: Collaborative Research Projects of Dr Jayanta kumar Dwibedi

Sl. No	Funding Agencies	Tenure	Title of research project	Other Collaborators	Institution
1.	State Finance Commission, Govt. of West Bengal	2014-15	Evaluation of State Finance: West Bengal	Prof. Sugata Marjit (CSSSC) and Dr. Tushar K. Nandi (CTRPFP, CSSSC)	Centre for Studies in Social Sciences, Calcutta (CSSSC)
2.	Central Finance Commission, Govt. of India	2013-14	Evaluation of State Finance	Prof. Sugata Marjit (CSSSC) and Prof Jaydev Sasmal (VU)	Centre for Studies in Social Sciences, Calcutta (CSSSC)
3.	Centre for West Bengal Economy, Jadavpur University and Centre for Training and Research in Public Finance and Policy	Ongoing (2015--)	Efficient Utilization of funds at rural local governments: The case of West Bengal	Prof. Vivekananda Mukherjee (JU)	Jadavpur University

3.4 RESEARCH PUBLICATION AND AWARDS



3.4.1 Major research achievements of the staff and students

Details of publications and other research activities of the faculty members and students are listed in the evaluative profile of the respective departments. An overview of publications by faculty members in the last five years is given in **Table 3.10**.

3.4.2 Publication or partner in publication of research journal(s) by the college

Proposals were made in the GB meeting held on 27.03.2015 to publish two open access peer-reviewed journals one each in Humanities and Natural Sciences.

At present the college neither publishes nor is a partner in publication of any research journal.

3.4.3 Details of publications by the faculty

An overview of the publications of the members of faculty in the last five years is given below:

Table 3.10: Publication by faculty Members

Year	Journal Publication	Book /Book chapter	Seminar Proceedings	Total Publication
2015	24	4	5	33
2014	22	9	2	33
2013	16	4	10	30
2012	6	8	4	18
2011	11	6	6	23
Total	79	31	27	137



Details of publications by the faculty members are given in the respective departmental profiles.

3.4.4 Research awards/recognition received and incentives given to any college faculty

The following is the list of research awards/recognition received and incentives given to college faculty:

1. Dr. Nishi Pulugurtha was awarded UGC travel grant for attending international and peer reviewed conference to present paper titled “Reworking Shakespeare in Telugu Cinema” organized by the University of Georgia (UGA), Athens, Georgia, USA, 12th to 14th November 2015
2. Dr. Biswarupa Ghosh received the Best Poster Award for the paper on “Bat Pollination of Daubangagrandidiflora” in 4th International Conference of Science organized by World Science Congress at Jadavpur University, Kolkata from 16th-18th December 2014.
3. Dr. Indranil Chattopadhyay received ‘Goutam Chhtrapadhyay Memorial Prize’ for best article in Paschim Banga Itihas Sansad 2011.
4. Dr. Jayanta Kumar Dwibedi was awarded UGC travel grant for attending international conference to present his paper at the 6th Annual International symposium on ‘Economic Theory, Policy and Applications’, organized by Athens Institute for Education and research (ATINER), Athens, Greece, 25th July – 28th July 2011.
5. Dr. Nishi Pulugurtha was awarded a UGC travel grant for attending international conference to present paper titled “Coleridge, Poetry, Additions and Revisions” at the 12th Coleridge Summer Conference, organized by Friends of Coleridge, Cannington, Somerset, England, 21st July – 28th July 2010.
6. Dr. Nishi Pulugurthawas awarded Associateship by the Indian Institute of Advanced Studies, Shimla in 2009.

3.5 CONSULTANCY

3.5.1 Systems and strategies for establishing institute-industry interface

The College does not have any system for interface with industry at present.



However a few teachers do consultancy services individually (Refer 3.5.4)

3.5.2 Policy of the institution to promote consultancy

At present the College has no policy regarding consultancy.

3.5.3 Encouragement by the college for consultancy services

The College has not formulated any strategy as yet regarding consultancy services and hence the need for any such encouragement does not arise.

3.5.4 Broad areas and major consultancy services provided by the institution.

As mentioned above, the institution is not involved in any consultancy services. However, a few teachers of the college do offer consultancy services on an individual basis as listed below:

Dr. PapiaChakraborti:

Technical Advisor (Botanist) in preparation of PBR (Peoples Biodiversity Register) of Madhyamgram Municipality (2010-2012)

Vice President of Madhyamgram Green March; an NGO under West Bengal Pollution Control Board (2011-2014)

Principal Investigator in NEAC(National Environment Awareness Campaign) under MoEF, Government of India (2011)

Dr. Aparajita Nag:

Executive committee member of an NGO • • VivekChetana” 2/3A, Keyatala Road Kolkata-700029 which is involved in the betterment of under-privileged women and children.

Executive member of • Society for Direct Initiative for Social and Health Action” 20/4 Sil Lane, Kolkata-700015 an NGO active in the area of environment, environmental health and human rights.

Dr. Biswarupa Ghosh:



Editor for the preparation of Village Botanist Manual of Uttarakhand in Hindi in collaboration with the institute of Centre for Conservation of Natural Resources, Trans-Disciplinary Health Services and Technology-FRHLT, Bangalore and Brahmananda Keshab Chandra College (2010-11)

Editor for the preparation of Village Botanist Manual of West Bengal in Bengali in collaboration with the institute of Centre for Conservation of Natural Resources, Trans-Disciplinary Health Services and Technology-FRHLT, Bangalore and Brahmananda Keshab Chandra College (2013-14)

Technical Resource Person for Taxonomic input and recruiting students as field assistant for the preparation of PBR of Sonamukhi, Bankura district, West Bengal in collaboration with National Biodiversity Authority of India, School of Health Sciences, Institute of Trans-Disciplinary Health Sciences and Technology-FRHLT, Bangalore and Brahmananda Keshab Chandra College(2014-15).

3.5.5 Policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development

As mentioned earlier the College has no policy regarding consultancy as yet.

3.6 EXTENSION ACTIVITIES AND INSTITUTIONAL SOCIAL RESPONSIBILITY

The College was set up with the aim of filling up a vacuum in higher education in areas with influx of population from the neighbouring countries. As a consequence one of the aims of the college is to cater to the higher educational needs of the under-privileged sections of the society and also assist in creating awareness about the general issues faced by the society such as gender discrimination, health, cleanliness among others. Even though lack of funds is a constraint, the College strives to share its infrastructure and human resource for the benefit of the neighbouring areas as far as possible.

3.6.1 Institution-neighbourhood –community network and student engagement

The Cashier of the college Smt Sima Das after being elected as the councilor of ward no 14 of Baranagar Municipality is actively involved with the development



of the locality. The students and staff of the College share a healthy relationship with the local population. They engage in several activities which are beneficial to the society. The following activities were organized using college infrastructure in the last five years:

Table 3.11: Use of college for the benefit of locality

Sl. No.	Date	Purpose	Organization/Institution	College Infrastructure used
1.	27.07.2015	Tree Plantation Programme	Baranagar Municipality	College premises
2.	09.01.2015	Annual Sports Day of School	Vivekananda Vidyapith, Rabindranagar	College Ground
3.	06.08.2014 to 13.08.2014	Inter-Class Football Tournament of School	Jyotinagar Bidyasree Niketan, Jyotinagar	College Ground
4.	30.03.2014	Cricket Tournament of your club	Purbanchal Sangha, Jyotinagar	College Ground
5.	25.01.2014 to 26.01.2014	Annual Sports	Jyotinagar Bidyasree Niketan, Jyotinagar	College Ground
6.	08.02.2014	Annual sports	Vivekananda Vidyapith, Rabindranagar	College Ground
7.	11.07.2013 to 16.07.2013	Inter-Class Tournament	Jyotinagar Bidyasree Niketan, Jyotinagar	College Ground
8.	01.06.2013 to 02.06.2013	Football Tournament	United of Evergreen Organization, Jyotinagar	College Ground
9.	25.05.2013	Shooting of a short film on different forms of creative	AVILASH, RaghunathPur	College Premises



Sl. No.	Date	Purpose	Organization/Institution	College Infrastructure used
		cultural activities by a non-commercial apolitical cultural organisation		
10	20.03.2013	Shooting some scene of a Telefilm	Manas Kanya	College Premises
11	15.01.2013	Sports	Dibyangon	College Ground
12	18.02.2013 to 19.02.2013	Annual Sports	Jyotinagar Bidyasree Niketan, Jyotinagar	College Ground
13	25.01.2013	Celebration of National Voter's Day	Office of the Sub-Divisional Officers, Govt. of India	College Premises
14	03.02.2013	Sports	Paschimbanga Rajya Pratibandhi Sammilani Sansad, Barasat	College Ground
15	27.01.2013	“Bed-roll” distribution among the poor children of the locality before winter season	Rotary Club of Calcutta North Suburban	College Ground
16	10.12.2012	Celebration of world Human Rights Day	World Human Rights Organisation	College Premises

The College has an active Alumni Association. Due to space constraints, the College has not been able to provide separate space for the Alumni Association. However, the College provides its infrastructure to the association for their various activities. The College has an Alumni Association Committee whose



objective is to interact with the alumni of the College and ex-faculty of the College. Regular meetings are held with this committee and the association.

Table 3.12: College premises used for the activities of Alumni Association

Sl. No.	Date	Purpose	College Infrastructure Used
1.	10.05.2015	Monthly meeting of the Executive Committee Members to fix the date of seminar to be arranged on the occasion of the Foundation Day of the College	College Room No.3
2.	08.03.2015	Monthly meeting of the Executive Committee Members to transact reviews of the 16 th Reunion held on 4 th January, 2015, observance of the Foundation Day of our College and other issues	College Room No.3
3.	04.01.2015	16 th Annual Congregation of ex-students, Teachers and Non-teaching Staff	Gallery Nos. 1 & 2
4.	09.11.2014	Monthly meeting of the Executive Committee Members to fix the date of the Annual Congregation (Re-union) & distribution of responsibilities to organize the said programme along with Award Ceremony	College Room No. 3
5.	18.08.2013	Celebration of the 57 th Anniversary of the Foundation Day of our College (27 th July, 1956) by organising a seminar	College Room No. 7
6.	07.03.2013	Condolence meeting of Prof. Ranjit Bandhyopadhyay	College Room No. 7
7.	20.01.2012	14 th Reunion of Ex-students, teachers and non-teaching staff	Gallery Nos.1 & 2

3.6.2 Students' involvement in various social movements/activities



Students of the College are actively involved in several social activities such as blood donation camps, activities of Eco-Club such as Green Audit, Afforestation Drive and Plantation Drive, among others.

National Service Scheme: The College has applied to West Bengal State University for the necessary approval for establishing a unit of National Service Scheme (NSS). The following team supervises the NSS Unit of the college, once established:

1. Sri Md. Mainul Islam (Coordinator)-Assistant Professor in History
2. Dr. Biswarupa Ghosh –Assistant Professor in Botany
3. Smt. Debasree Golder- Assistant Professor in Zoology
4. Dr. Amit Mondal—Assistant Professor in Chemistry
5. Smt. Swatilekha Podder—Assistant Professor in Sanskrit
6. Sri Sujit Ghosh—Library Clerk
7. Mir Tariffujjaman—Laboratory Assistant in Botany

Initial activities of this unit will include Swachha Bharat Campaign, Eco-Club activities, Green Audit, clean campus, blood donation camps and health awareness. Students have evinced a keen enthusiasm in this scheme. More than 100 students have already enrolled for the scheme. The NSS unit of Brahmananda Keshab Chandra College, though not yet officially formed, organized “Nirmal Bangla Awareness Programme” as part of Swachha Bharat in the College premises on 04.12.2015. Staff and students of the College participated in this programme by cleaning the rooms and corridors of the college building. This was followed by hand washing with soap as part of cleanliness drive.

3.6.3 Methods used by the institution to solicit stakeholder perception on the overall performance and quality of the institution

Till recently, the College was dependent on informal methods like casual discussions with various stakeholders and also formal methods such as written communication from the students’ body to ensure that the quality of the College in maintaining discipline, imparting education and other areas was maintained. Currently, the process has been formalized and the College has started collecting feedback in a formal manner from the stakeholders namely, students, alumni and local community to assess their perception about the college. It is expected that this would improve the decision making process required to enhance the quality



of the College.

3.6.4 Extension and outreach programmes

The awareness programmes organized by the College in the last five years are as follows:

Table 3.13: Extension and Outreach Programmes Organized by the college during last five years

Date	Subject	Topic	Financial assistance
18.11.2015	Health	“ Health is Wealth: Say no to Drugs” by K. Viswanath, Mukti Foundation, Kolkata.	College
06.10.2015	Environment	"Management of E-Waste" organized with Society for Direct Initiative for Social and Health action	College
30.9.2015	Health	Awareness Seminar on Diabetes by Dr. Aniruddha Ghosh, AMRI, Kolkata	College
03.02.2014	Human rights	"Save the girl Child" in collaboration with the Ministry of Health & Family Welfare, government of West Bengal	College
29.11.2013	Environment	Biodiversity in a man-made ecosystem organized	College
05.10.2013	Environment	"Water in crisis-the case of West Bengal" delivered by Dr Kalyan Rudra	College
12.09.2012	Gender	"Positive discrimination" organized with Department of Women Studies, Jadavpur University	UGC XI Plan Merged scheme



24.08.2012	Human rights	"Higher education for persons with special Needs" organized with Bikashayan, Bonhooghly	UGC XI Plan Merged scheme
17.08.2012	Human rights	"Higher education for persons with special Needs" organized with Bikashayan, Bonhooghly	UGC XI Plan Merged scheme

3.6.5 Participation of students and faculty in extension activities

All the staff and students of the college actively participate in the extension activities of the College (Refer **Table 3.13**). Furthermore, many faculty members are involved in individual extension work:

- (i) Dr. Papia Chakraborti made a presentation on ‘Earth Day 2012 campaign’ which was organized by ‘Madhyamgram Green March’ on creating awareness among the local community including the school children.
- (ii) Prof. Nayna Guha Majumdar is a member and does active work with DNGM Research Foundation which is very actively engaged in Arsenic contamination and research and medical aid work with projects from WHO, World Bank, UNICEF and Government of West Bengal.
- (iii) Prof. Susmita Haldar is actively involved with Drishti, a school for children with special needs.
- (iv) Dr. Soma Sen, Dr. Sampa Bhattacharya, Prof. Nayna Guha Majumdar and Prof. Suchira Sarkar are associated with Binapani Asram: Binapani Educational and Welfare Trust, Mauldanga, Bolpur. It is a public charitable Trust to propagate formal education among the children of tribal community, essentially Santhals.
- (v) Dr. Soma Sen, Dr. Putul Chakraborti and Dr. Smritikana Chakraborty are associated with Federation Hall Society: A Heritage Institute of social and cultural activities since 1905 in their library movement.
- (vi) Dr. Nishi Pulugurtha does active work in the following organizations:



- (a) Remedy Clinic Study Group Ethics Committee (Member)
- (b) Alzheimer's and Related Diseases Society of India, Kolkata Chapter
- (c) Rotary Club of Dum Dum
- (vii) Dr. Aparajita Nag delivered lectures on "Toxicity of Mercury and its Management in School Laboratories" at Vidyasagar School and Scottish Church Collegiate School in 2011 as a part of an awareness program organized by 'Society for Direct Initiative for Social and Health Action'.

3.6.6 Social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society

The College has organized awareness programmes to sensitize students about issues such as gender, students with special needs, lifestyle diseases, effect of drug intake, environmental issues among others. Students are made aware of their rights and duties so that they can become responsible citizens.

Members of Eco Club members of Bonhooghly Conservation Group of 2013-14, have done a commendable task of completing the **People's Biodiversity Register** of the Bon-Hooghly Lake under the supervision of the Dr. Biswarupa Ghosh of the department of Botany. The study assessed the age structure, literacy and educational profile as well as employment status of the people around the lake. The study assessed the use of the lake by the community for various purposes. It was recorded that the lake is a source of water for various daily activities such as bathing, fishing, washing clothes, washing cars and various religious activities. It was observed that the lake also forms an integral part of their daily social life. The study assessed the use of the flora for food, medicine, religious activities among others. During monsoons the dirty water from nearby drains flows into the lake polluting it lake and negatively affecting its biodiversity. The regular immersion of idols in the lake water results in siltation and introduction of toxic chemicals in the water poses a threat to its aquatic biodiversity. The Eco Club members work to create door-to-door awareness among the inhabitants of the vicinity regarding the misuse of the lake and the negative impact on its aquatic and terrestrial biodiversity.

3.6.7 Methods by which the extension activities organized by the institution complement students' academic learning experience



The extension activities organized by the College enable students to grasp the problems in their community and society at large and strive to work at resolving some of them.

The College is highly committed to conserve the rich biodiversity of the College campus and the surrounding area. The documentation of the flora of the campus of the College was carried out by the Eco Club students of Botany III year General as a part of their project work in 2013. In 2015, Eco-Club members along with students of various other Departments were actively involved in the documentation of the flora within the College campus. In this endeavour the students of various other Social Science and Humanities Departments got to know interesting facts about various plants and environment from their accompanying Teachers' and Technical Assistants who monitored the process. The Department of Botany also took the initiative to put up signage on few large trees stating their taxonomic position and medicinal uses.

3.6.8 Involvement of the community in the institution's reach out activities and contribution to the community development

- Tree Plantation Programme organised by Baranagar Municipality on 27th July , 2015 in College premises, where active participation of the local community along with the students and staff of the college was observed.
- The local community is invited to participate in various awareness programmes organized by the College. Regular feedback from the local community is taken to improve the performance of the college.
- The local community participated in the Blood Donation Camp organized by the college on 03.03.2012

3.6.9 Constructive relationships forged with other institutions of the locality for working on various outreach and extension activities.

The College has collaborations with the Society for differently abled children and has offered help for renovation of a section of the playground solely for their use. The College proposes to collaborate with Bikashayan, an organization which works with students with special needs.

3.6.10 Details of awards received by the institution for extension activities and social development



Staff and students of the College have received awards for extension activities.

Table 3.14: Awards received for extension activities

Sl. No.	Name	Academic Session	Awards
1.	Dr. Biswarupa Ghosh	2014-15	'Best Poster Award' for the paper on "Bat Pollination of Daubangagrandidiflora" in 4 th International Conference of Science organized by World Science Congress at Jadavpur University, Kolkata
2.	Rituparna Saha	III Year (G) 2013-14	First Prize for Slogan to SAVE ENVIRONMENT, held at Madhyamgram Municipality Environment Fair
3.	Arijit Dasgupta	III Year (H) 2013-14	Second Prize for Slogan to SAVE ENVIRONMENT, held at Madhyamgram Municipality Environment Fair
4.	Nitish Paul	III Year (H) 2011-12	Best Model Award in the National Level Seminar on "Physics Behind Electronics/Optoelectronics and their applications"

3.7 COLLABORATION

3.7.1 Collaboration and interaction of the institution with research laboratories, institutes and industry for research activities

Several faculty members have collaborative arrangements with other academic institutions and research laboratories for their research work. Prof. Debasree Golder has collaboration with the Department of Metallurgical and Material Engineering, Jadavpur University. Dr Manas Kumar Roy is associated with the Geology department of Jadavpur University. Dr. Jayanta Kumar Dwibedi does



various collaborative work with Prof. Sugata Marjit (Centre for Studies in Social Sciences, Calcutta), Dr. Tushar K. Nandi (Centre for Studies in Social Sciences, Calcutta), Prof. Jaydev Sasmal (Vidyasagar University) and Prof. Vivekananda Mukherjee (Jadavpur University (Refer **Table No.3.9**))

Collaboration with the University Grants Commission, Department of Biotechnology, Department of Science and Technology and other such organizations through various research projects undertaken by faculty members have also helped in the upgradation of academic facilities and infrastructure facilities such as laboratories.

3.7.2 Details on the MoUs /collaborative arrangements with institutions of national importance/other universities/ industries/Corporate (Corporate entities) etc.

The College has entered into collaborative arrangement with neighbouring institutes:

- With Prasanta Chandra Mahalanobis College, Bon-Hooghly for students enrichment for Mathematics Honours.
- With Hiralal College, Dakshineswar for faculty exchange programme on different subjects.
- With Rabindrabharati University for faculty exchange programme in Bengali and Sanskrit.
- With Hiralal College, Dakshineswar for student extension programme for Industrial Fish and Fisheries in future.

Individual faculty member do have such collaborations in the course of their research activities (Refer **Table 3.9**). Also, the College organizes seminars and conferences in collaboration with other academic institutions from time to time (Refer **Table 3.15**).

3.7.3 Industry-institution-community interactions

The College is not involved in any such interactions as yet.

3.7.4 Details of national and international conferences organized by the college



UGC Sponsored Two Day National Conference on **Re-writing culture, Re-telling Narratives: Gender and the Politics of Representation** was organized by the departments of Bengali, English, History and Philosophy in collaboration with the Linguistic Research Unit, Indian Statistical Institute, Kolkata, 9th -10th February 2012.



UGC Sponsored National Conference on “Re-writing Culture, Re-Telling Narratives: Gender and the Politics of Representation”, 9th-10th February 2010

Table 3.15: Seminars and Workshops organized by the college

Date	Organised by	Topic	Funding	In collaboration with
10-06-2015	College	Management of E-Waste	College	Society for Direct Initiative for Social and Health action
09-07-2015	Department. of History	Foundation Course in History	College	APC College, Dumdum Sarojini Naidu College and Mrinalini Dutta Mahavidyapith, Kolkata
29/11/2013	Department. of Botany	Biodiversity in a man-made ecosystem	College	West Bengal Biodiversity Board
10-05-2013	College	Water in Crisis-The Case West Bengal	College	



Date	Organised by	Topic	Funding	In collaboration with
09-06-2013	Department of Botany	Botanical Resources and Human Welfare	UGC	Ramakrishna Mission Vivekananda Centenary College, Rahara
09-12-2012	College	Positive Discrimination	UGC	
24/8/2012	College	Higher Education for Persons with Special Needs	UGC	
17/8/2012	College	Higher Education for Persons with Special Needs	UGC	

3.7.5 Formal MoUs and agreements

The college has such agreements at present. (Refer 3.7.2)

3.7.6 Systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/ collaborations

The College encourages interactive research work to a great extent. Members of the Faculty are also encouraged to collaborate in their research activities with researchers in other institutions (Refer Table 3.8 and 3.9).



4.

Infrastructure and Learning Resources

Self Study Report (2015) | Brahmananda Keshab Chandra College, Kolkata



4.1 PHYSICAL FACILITIES

Infrastructure facilities are the backbone of any educational institution. An educational institution can reach new heights only if it has proper facilities like well equipped laboratories, an up to date library, sufficient number of computers with internet connection, Wi-Fi access, classrooms equipped for audio-visual learning, office and library automation, uninterrupted power supply, adequate number of toilets for students and staff, availability of safe drinking water, amenities so that the students can participate in cultural activities and sports for their all-round development.

Brahmananda Keshab Chandra College always strives to achieve perfection in these parameters. The College campus is built on approximately 6 acres of land. The covered area of the College is 5367.69 sq meters. It comprises a main building, an annexure building which houses the Molecular Biology Department, a building that houses the Canteen, common rooms for girls and boys, Staff Quarters, a Women's Hostel, a large playground and a gymnasium. The College also possesses a small but thriving botanical garden.

4.1.1 The policy of the institution for creation and enhancement of infrastructure that facilitate effective teaching and learning

- The College ensures that all the departments are modernized on a regular basis so that students and faculty members can avail of modern technological methods for effective teaching and learning. Five large classrooms are equipped with fixed LCD projectors to ensure audio-visual learning. In addition to these, the College also possesses movable LCD projectors and palm top LCD projectors which can be used wherever required.
- The College has plans to introduce new courses. As a step in this direction, general courses in Journalism and Mass Communication and Education have been introduced in the Undergraduate Humanities courses from the current academic session. The College has initiated the necessary modalities for introducing Post Graduate courses in Botany and Mathematics. Plans to introduce Honours courses in some existing general subjects like Sanskrit and Statistics are on the anvil (**Refer 6.2.2**). These subjects have been chosen keeping in mind the demand.
- Introduction of new courses require more classrooms to be made available. The College Library too needs more space. In order to address this issue, the College plans to build more buildings on its campus,



without encroaching on the college playground. A new three storey building is under construction with financial assistance from the UGC and MPLAD. The College has facilities for indoor games like table tennis and also a playground for outdoor sports like football, volleyball, cricket among others.

- The College Gymnasium is well equipped with a multi-gym, a range of free weights and aerobic equipments. The gymnasium is available to students and members of staff.
- To increase space available for indoor extra-curricular activities, the College has applied for a state grant to construct a new building which will house the Canteen, Common Rooms, room for indoor games and Students Union room.

Some of the other challenges before the College are:

- (i) To build an auditorium to host seminars, workshops and cultural programmes.
- (ii) Construction of ramps for the benefit of physically challenged students and staff.
- (iii) Make available a Cheap Store for students.
- (iv) Further enhance the botanical garden of the college.

4.1.2 Details of the available facilities

1. Curricular and co-curricular activities

The following infrastructure is available in the college:

- A library with about 27, 000 books. New books are added every year. The process of automation of the library is underway.
- Almost all departments have a seminar library.
- Twenty classrooms are available for classes, tutorials and seminars.
- At present there are sixteen well-equipped laboratories. Equipment costing over 1 lakh is present in the Botany and Industrial Fish and Fisheries departments.
- Adequate computer access with internet facilities.
- ICT tools like LCD projectors are used as modern teaching aids.
- A television set is available for use as an audio visual teaching aid.
- Microphone systems are installed in larger classrooms.



2. Extra-curricular activities

- The College campus includes a large playground which is used by students. In keeping with the policy of serving the larger community, the College ground is made available to various local schools.
- Separate common rooms for girls and boys are available. These are equipped with indoor game facilities like table tennis and carrom.
- The College has a well-equipped gymnasium.
- The College has a Canteen which provides wholesome food at subsidized rates.
- To instill confidence and work on public speaking skills of students, several departments organize students' seminar every year. Students are encouraged to do research on their presentation by using the resources of the library and online facilities.
- Science students actively participate in science fairs.
- Students actively participate in cultural programmes such as Rabindra Jayanti, Birthday of Keshab Chandra Sen, the Saraswati Puja, the College Social, Fresher's Welcome and various cultural competitions.
- The College organizes regular awareness programmes on topics as diverse as health, gender, special needs, e-waste among others.
- The College organizes blood donations camps.
- The Students' union plays an active role in all these programmes.
- The College has a cooperative society called 'B. K. C. College Staff Co-operative Credit Society'. Initiated in 1995, it now has 61 members. The Society has a Board of Directors of which 12 members are elected once every five years. The Board of Directors in their first meeting select the office bearers. A 12% dividend is distributed annually to its shareholders. The society disburses a loan upto a maximum limit of Rs. 2, 00,000/- at an interest of 10% per annum on reducing balance. The limit of the total paid up capital of this society is Rs. 10,00,000/- and that of individual total share is Rs. 10,000/-. The society convenes Half Yearly General Meeting and an Annual General Meeting. The annual audit is done by Government appointed Auditor.

4.1.3 The plan of the institution to ensure that the available infrastructure is in line with its academic growth and is optimally utilized.

- The Development Sub-Committee and the Building Sub-Committee of the Governing Body meet regularly to analyze the existing infrastructure and to plan for further enhancement where required.



- The renovation of the main College building has been recently completed with upgradation of laboratories.
- The construction of Women’s hostel in the College campus is complete.
- New laboratory equipment has been purchased.
- The college has five well equipped digital classrooms and one smart classroom. There are several projectors which are used when needed in other classrooms.
- Several computers have been purchased along with the necessary software and other accessories such as photocopying machines and scanners to enhance the teaching-learning process as well as for the purpose of automation of library and office.
- Several computers have LAN facility and Wi-Fi facility. The college office is connected to Principal’s office through LAN.
- Dr. Papia Chakraborti, the Principal of the College and formerly faculty member of the Botany department received a grant for a major research project by DBT-BOOST (letter no.337/WBBDC/IP-2/2013). Under this scheme the process of e-tendering for procurement of several sanctioned equipment have been completed which will be useful for Biotechnology studies in future. This will also be beneficial to the postgraduate course in Botany that will commence from the next academic session.

The list of the equipment sanctioned under the above scheme are given in the following table.

Table 4.1: Instruments sanctioned under DBT-BOOST programme

Sl. No.	ITEM (DBT BOOST)	COST
1	UV/VIS Spectrophotometer	Rs. 4.0 lakhs
2	Thermal Cycler	Rs. 2.5 Lakhs
3	UV Transilluminator	Rs. 1.3 Lakhs

- Plans for constructing an auditorium in the college campus will start as soon the necessary funds are arranged.

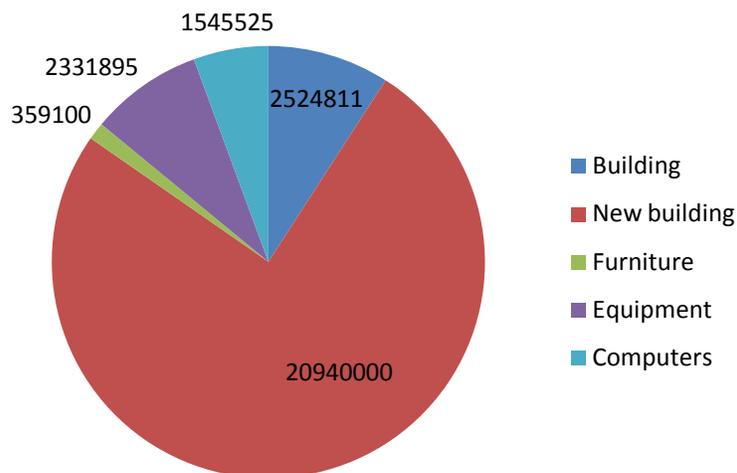
Table 4.2: Expenditure of major facilities

Facilities Developed/Augmented	Amount Spent in the period 2010-2015(in Rupees)
Renovation of main building	25, 24, 811



Construction of Women’s Hostel and a 3 storey building	2, 09, 40,000
Purchase of equipment other than computers	23, 31, 895
Computers	15, 45, 525
Furniture	3, 59, 100

Diagram4.1: Expenditure in the period 2010-15 for facilities developed/ augmented





OVERVIEW OF THE COLLEGE PREMISES

Diagram 4.2: Layout of the college building



Diagram 4.3: Ground Floor

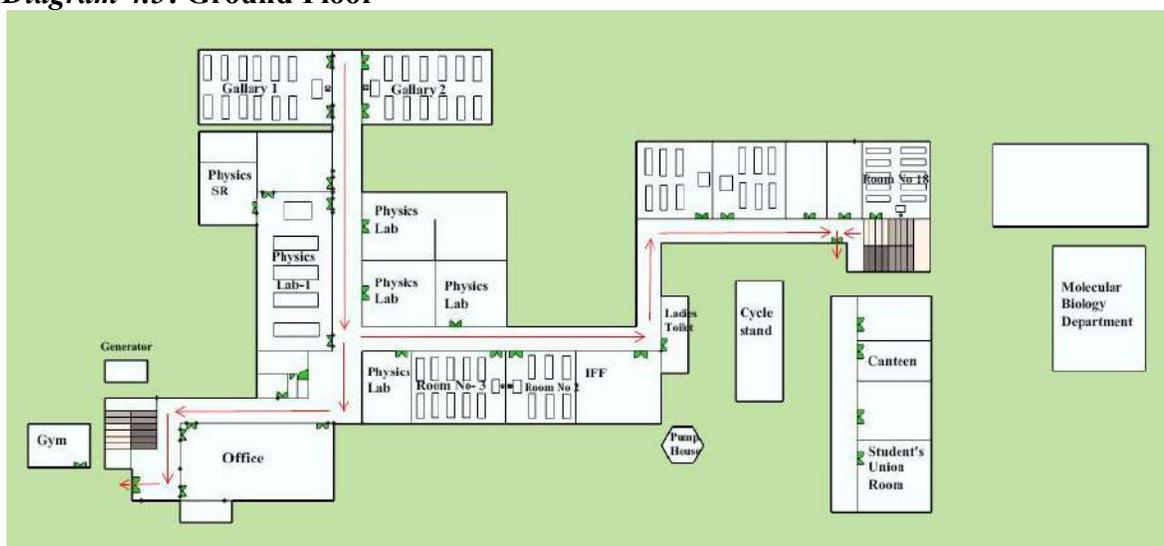




Diagram 4.4: First Floor

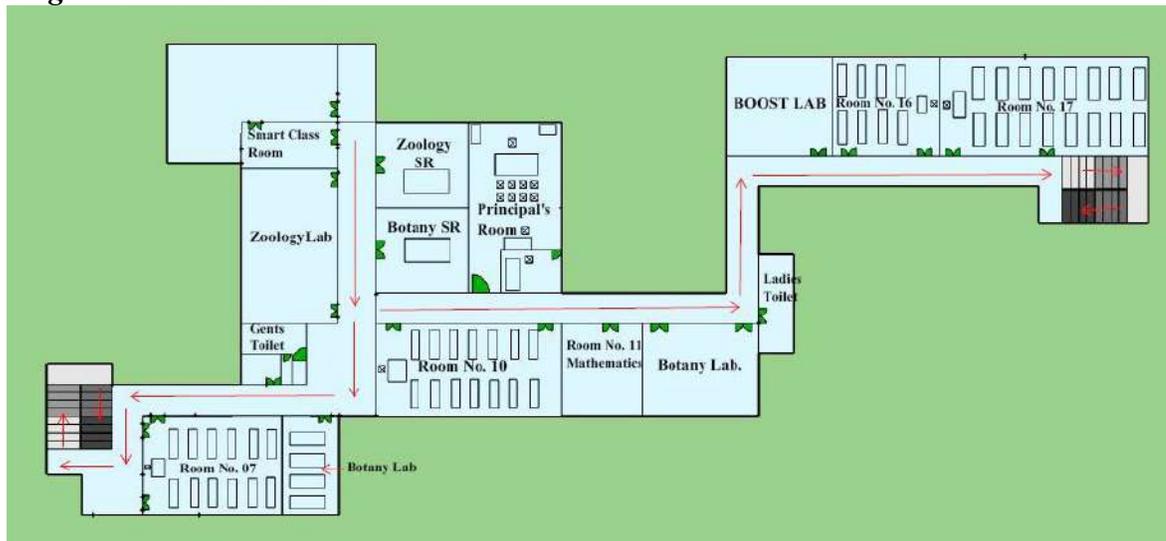
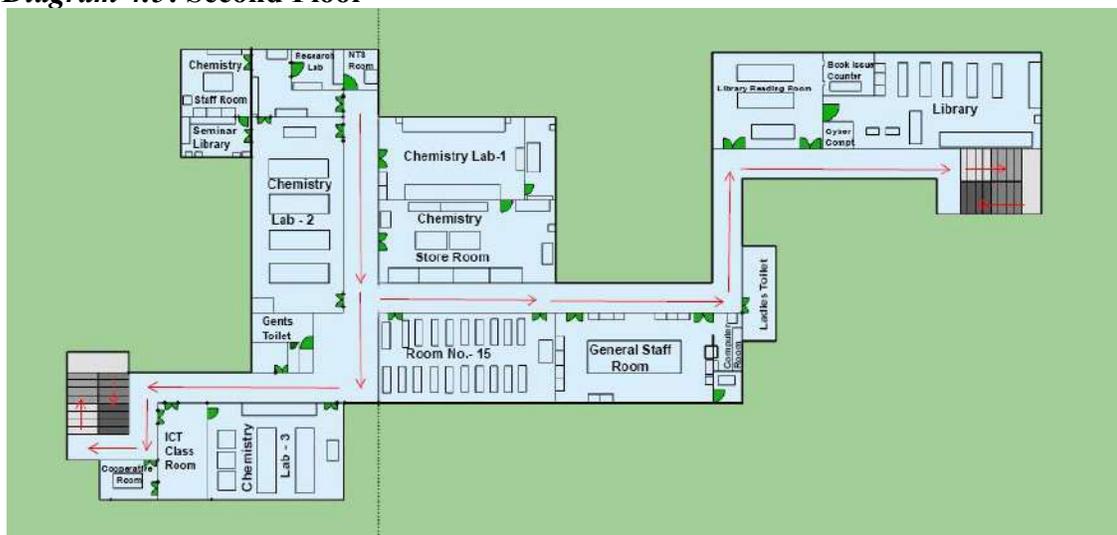


Diagram 4.5: Second Floor





4.1.4 Steps taken by the institution to ensure that the infrastructure facilities meet the requirements of students with physical disabilities

The College has wheel chairs for the benefit of differently abled students. The college has prioritized the building of ramps in its development program. A software will be purchased for the visually challenged in future, meanwhile a computer has been earmarked for this purpose. A computer has been purchased to meet the requirements of the visually challenged students.

4.1.5 Residential facility and various provisions available within them

The College has almost completed the process of building a three storied women's hostel in its premises. Capable of accommodating over 40 students, the hostel will be functional from the next academic session.

4.1.6 Health care on the campus and off the campus available to students and staff

The College ensures that a well equipped First-Aid box is kept in all the laboratories in each floor and College office. The College is within a reasonable distance from Baranagar Municipality Hospital and R.G. Kar Hospital, which can be easily reached in case of an emergency.

The College has access to a doctor who can be communicated with in case of any emergency.

4.1.7 Details of the common facilities available on the campus-space for special units

- The IQAC cell has a separate room with computer and printer facilities.
- The Grievance Redressal unit, Women's Cell, Sexual Harassment Cell, Anti-Ragging Committee, Career Counselling Cell share the common infrastructural facilities of the College.
- Fire extinguishers in each floor.
- A generator of 30 kVA, 24 kW, single phase (of Kirloskar electric make) for uninterrupted power supply in the whole building.
- The College canteen provides food at subsidized rates.
- Separate common rooms for girls and boys with facilities for indoor games are available.
- The college has several water purifiers and also a water cooler.



- Internet access is available to students and staff.
- Photocopying facilities are available in the College.
- A colour television with dish connection is available for the students.
- There is a general teaching staff room on the second floor of the College building. Each laboratory based department has a separate room for its teaching staff.

4.2 LIBRARY AS A LEARNING RESOURCE

4.2.1 Details of the Library Advisory Committee

Library Advisory Committee Members

- (i) The Principal (Chairperson)
- (ii) The Librarian (Convener)
- (iii) Bursar
- (iv) Teachers' Council Secretary
- (v) Dr. Alope Kumar Chattopadhyay
- (vi) Prof. Shampa Ghosh
- (vii) Dr. Manas Roy
- (viii) Dr. Subhrojyoti Debnath
- (ix) Non-Teaching Staff Union Secretary
- (x) Shri Salil Neogi
- (xi) Shri Prithwiraj Majumdar
- (xii) Smt. Rinku Dey
- (xiii) Students' Union General Secretary
- (xiv) Alope Das (Invitee member)

On the recommendation of the Library Advisory Committee, automation of library is underway. The committee has also suggested that the books in the library be reorganized so that those books which need binding and restoration be identified. This work has been completed by the help of the staff. The Committee has also reviewed the library rules and has reformulated them for better functioning of the library.

4.2.2 Physical details

- **Total area of the library** 157.8075 Sq. Mts.
- **Total Seating Capacity:** 60 students and 5 staff members (apart from the library staff)

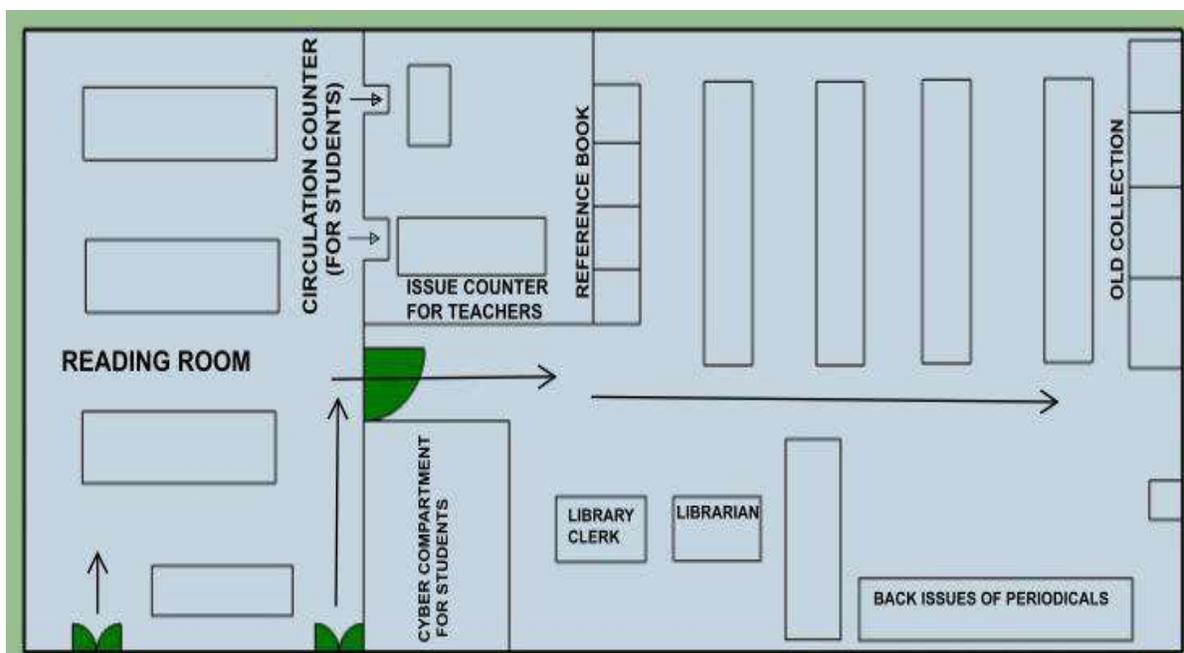


- **Working Hours:** 10:30 a.m. to 5:15 p.m.
(from Monday to Friday)
10:30 a.m. to 2:15p.m. (on Saturday)
(12 noon to 4:00 p.m. from Monday to Friday
during summer recess)

- **Layout of the Library:**

The Library is a large hall which is divided into three zones - Reading Room, Work Space for Library Staff which is also used as the Network Resource Centre, and the Stack section for books which also has a seating arrangement for faculty members.

Diagram 4.6: Layout of the library



4.2.3 Purchase and use of current titles, print and e-journals and other reading materials by the library

List of text books and reference books to be purchased are decided upon by the faculty of the concerned departments, keeping in mind the book grant



received from the UGC and the requirements of the students. The enlisted vendors and publishers supply the books following standard financial procedure. In this way, the library ensures purchase of current titles at the best possible prices. After acquisition of books, accession and categorization of the books are done before they are made available to users.

Table 4.3: List of Library Holdings

	Year I 2010-11		Year II 2011-12		Year III 2012-13		Year IV 2013-14		Year V 2014-15	
	No.	Total Cost (in Rs.)	No.	Total Cost (in Rs.)	No.	Total Cost (in Rs.)	No.	Total Cost (in Rs.)	No.	Total Cost (in Rs.)
Text Books	267	106771	94	22691	06	1175	06	1136	438	163637
Referen ce Books	04	3095	03	540					15	9355
Journals /Periodi cals									26	115380
e- resource s										



Diagram 4.7: Expenditure for library holdings in the period 2010-15

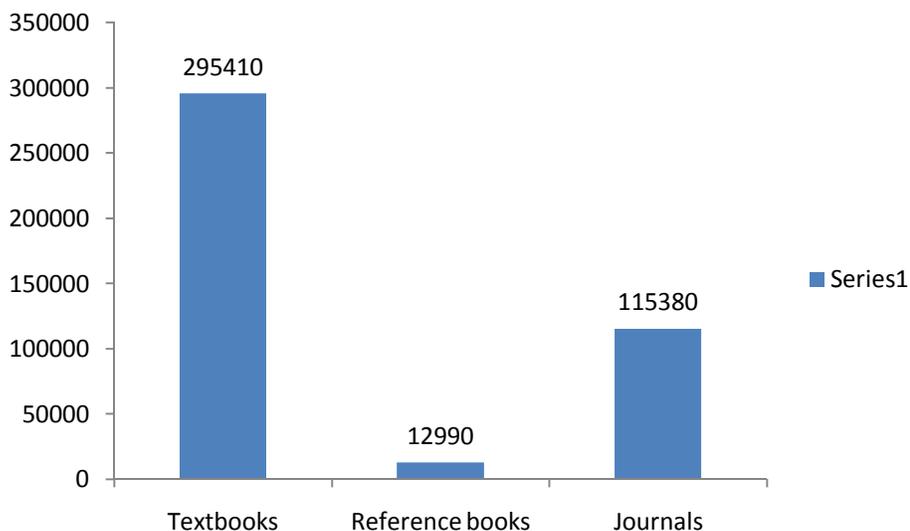
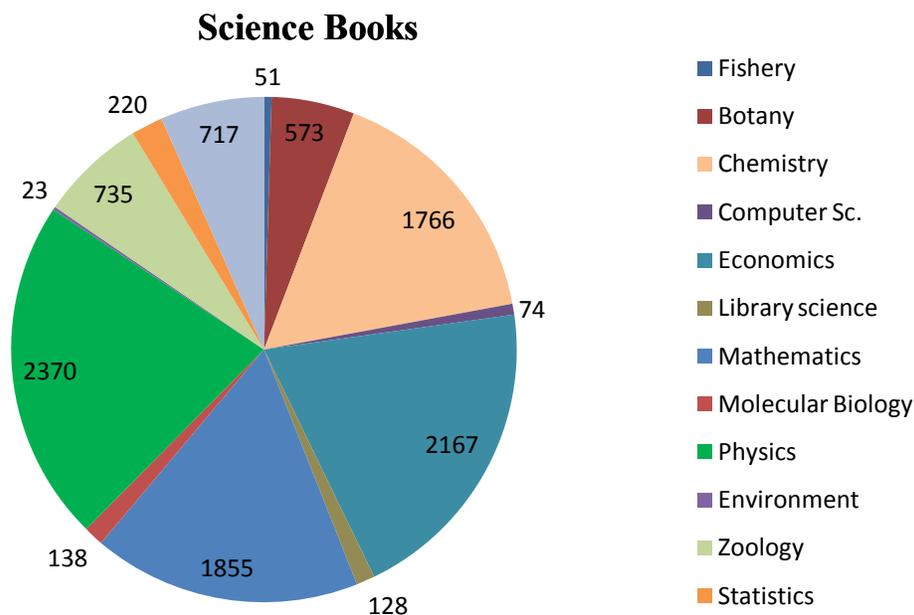
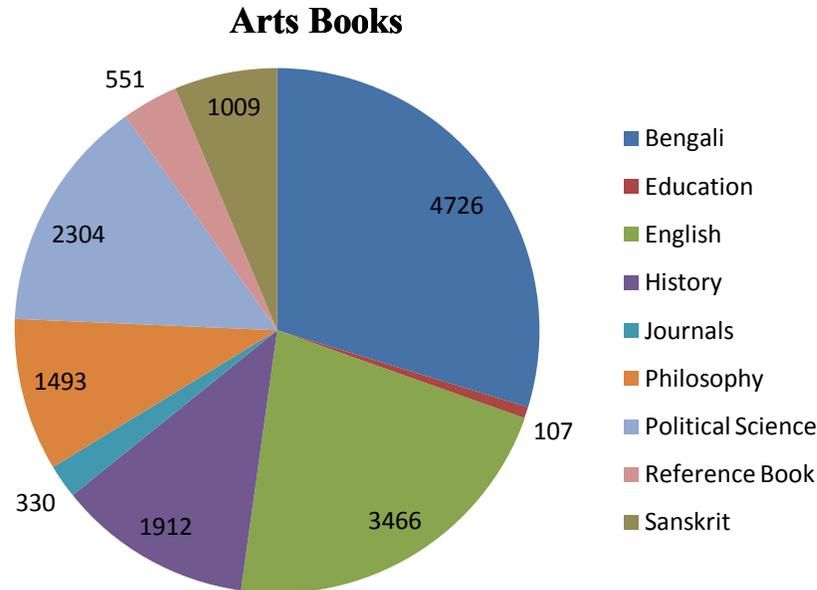


Diagram 4.8: Details of the Library books till date





4.2.4 Details on ICT and other tools deployed to provide maximum access to the library collection

Information about the College Library is available on the College website. The website is regularly updated to give current information. Apart from manual stock keeping, an intensive database of all the books in the library was made a few years ago. Recently library automation has been begun using KOHA software. KOHA is a web-based ILS, with a SQL database (MySQL preferred) backend with cataloguing data stored in MARC and accessible via Z39.50 or SRU. The user interface is very configurable and adaptable and has been translated into many languages. KOHA has most of the features that would be expected in an ILS, including:

- Various Web 2.0 facilities like tagging, comment, Social sharing and RSS feeds
- Union catalog facility
- Customizable search
- Circulation and borrower management
- Full acquisitions system including budgets and pricing information (including supplier and currency conversion)
- Simple acquisition system for departmental libraries



- Ability to cope with a number of branches, patrons, patron categories, item categories, items, currencies and other data
- Serial system for magazines or newspapers
- Reporting
- Reading lists for members
- Off-line Circulation

The College library has two computers for public access with internet facility, the bandwidth speed being 4 mbps. The College is working towards increasing the number of computers in the library with the aid of State grants and/ or University Grants Commission grants. The library has also applied for INFLIBNET recently.

4.2.5 Details of:

- Average number of walk-ins per day :50.879
- Average number of books issued per day :35.9
- Average number of books returned per day :31.4
- Ratio of library books to students enrolled :26715:1000
- Average number of books added during last three year :197

4.2.6 Details of the specialized services provided by the Library

The College library has an adequate number of reference books which are available to the students for perusal in the reading room and also to the staff of the College. The College library has a reprography facility. This facility is made available to students and staff alike at a minimal cost. The access to library is made more fruitful by providing the students with a reading list in consultation with the departments concerned. The students are informed about the rules and regulations formulated by the library advisory committee at the commencement of their course in the College. The library staff assists the library users in their search for specific books as well as browsing the internet. Library has applied for the INFLIBNET which is going to improve library facilities to a great extent.

4.2.7 Support provided by the library staff to the students and teachers of the College

- Access to the Library is available during regular College hours.
- The students and teachers are assisted by the library staff in selecting relevant books and searching the internet.



- The students and staff of the College are kept aware of the library rules so that the library can function in a user friendly way.

4.2.8 Special facilities offered by the library to the visually/physically challenged persons.

The library has no such facility at present.

4.2.9 Strategies deployed by the library to collect feedback from its users and the method of analysis of this feedback.

The library takes regular feedback from its users informally. Any text book or reference book which is found wanting in the library is reported to the Development committee (which looks after grants received from the University Grants Commission and State Government). It is then ensured that the relevant books are procured at the earliest. Also deficiencies in infrastructure are discussed in the Library Advisory Committee. This committee then works to see that the problem is redressed and library services are improved.

4.3 IT INFRASTRUCTURE

4.3.1 Details of the computing facility available (hardware and software) at the institution.

Table 4.4: Details of the computing facility available

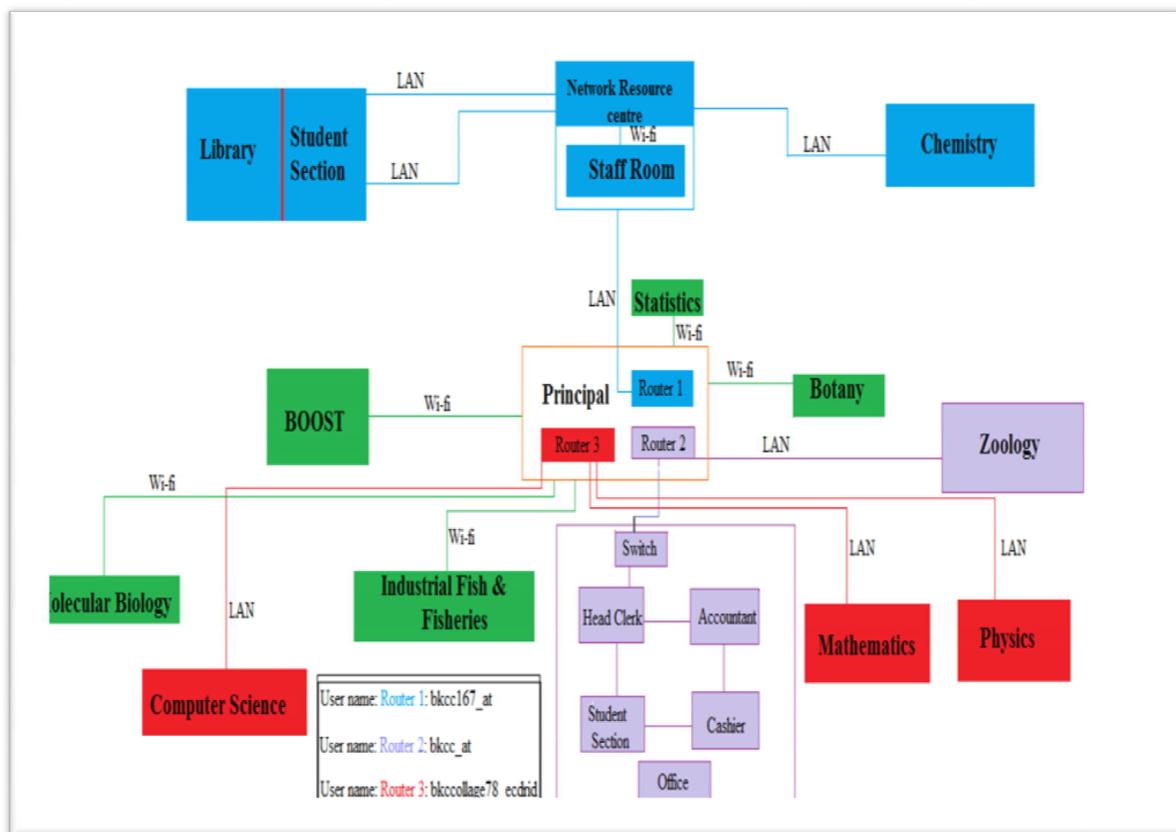
• Number of computers (with configuration):	34(desktops) + 12(laptops) =46. All are dual core and above
• Computer-Student ratio:	46:1000
• Stand alone facility:	06
• LAN facility:	08
• Licensed software:	26
• Number of nodes/ computers with internet facility:	13

4.3.1 Details of the computer and internet facility made available to the faculty and students on the campus and off-campus.



The students of Computer Science, Mathematics and Physics departments have access to computers in their respective laboratories which they use for computer programming as part of their course. Apart from this all the departments have their own computers (either laptop or desktop) which are used as teaching aids and also for administrative purposes of the department. The College office is completely automated and connected to Principal’s room via LAN. Specific computer programs are used to create students' database, for smooth running of accounts and finance by the administration despite inadequate man power. The automation of library has started. The College has internet facility available for all the staff and students of the college. The College website is updated regularly. College admission is conducted online.

Diagram 4.9: Schematic representation of Network facility in the college





4.3.2 Institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities

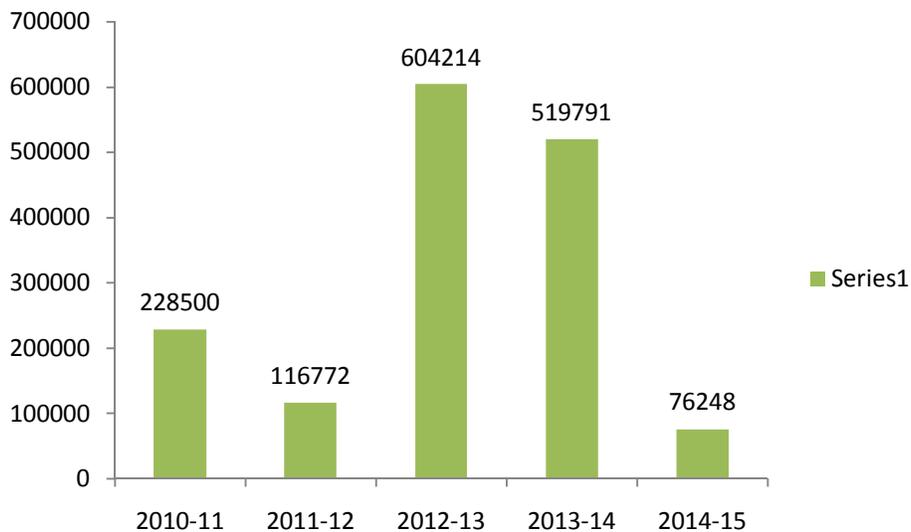
The existing IT infrastructure is upgraded as and when required. All computers are properly maintained by the concerned departments. Any further purchase of computers or computer software is done through regular financial process (invitation of quotation from vendors). Internet connection is available to the students and staff of the College. The College plans to increase the use of LAN to facilitate teaching programs and administrative work.

4.3.3 Details on the provision made in the annual budget for procurement, up-gradation, deployment and maintenance of the computers and their accessories in the institution

The allocation of budget in the last five years for computers is as follows:

2010-11	2011-12	2012-13	2013-14	2014-15
228500	116772	604214	519791	76248

Diagram 4.10: Expenditure on computers in the period 2010-15





4.3.4 The methods used by the institution to facilitate extensive use of ICT resources including development and use of computer-aided teaching/learning materials by its staff and students.

All the departments have been provided computers to aid in their teaching program and for administrative purposes. LCD projectors have been purchased which are used for class lectures and seminars. The College has one smart classroom and five digital classrooms. The College is hoping to build three more smart classrooms in the near future.

4.3.5 The learning activities and technologies by the institution to place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.

The students are encouraged to deliver seminar lectures as an extension of their course. For this the faculty encourage them to do on-line research. English and History departments also arrange for visual teaching material for the students to make them inquisitive about the culture of the period they study.

4.3.6 National Knowledge Network connectivity

The College does not avail this service at present.

4.4 MAINTENANCE OF CAMPUS FACILITIES

4.4.1 Details of budget allocated during last five year

Table 4.5: Expenditure incurred during last five year

Item	2010-11	2011-12	2012-13	2013-14	2014-15
Building	---	---	1,00,01,700	3, 98, 956	1, 30, 64,155
Furniture	61,600	52,300	1,96,100	19,000	30,100
Equipment	5,10, 301	4,65,886	5,70,413	7,31,709	53,586
Computers	2, 28, 500	1,16,772	6,04,214	5,19,791	76,248
Vehicles	74, 511	65,535	67,608	60,981	64,604
Any other	8,07,318	1,98,447	13,72,973	12,03,289	12,85,351



4.4.1 The institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college.

Laboratory equipments and computers are under the safekeeping of the concerned Head of the Department. The equipment in the library are looked after by the Librarian and the equipments in the office by the Head Clerk. Any maintenance needed is taken care of by these persons concerned. The development committee is responsible for the maintenance of equipment used generally such as computers, printers, photocopiers, water purifiers among others.

4.4.2 Calibration and other precision measures for the equipments/instruments

The concerned departments take the initiative to calibrate the precision instruments for their optimum and assured performance. This exercise is done particularly ahead of every important examination.

4.4.3 The major steps taken for location, upkeep and maintenance of sensitive equipment

The sensitive instruments are protected from voltage fluctuations and power outages through the use of UPS and inverters. There is a central power backup through an eco-friendly generator. The generator takes care that the water pump can work without fail so that the College receives a constant supply of water. The water reservoirs are well maintained so that they conform to the standards of hygiene and safety enforced by the municipal authorities.



5.

Student Support and Progression

Self Study Report (2015) | Brahmananda Keshab Chandra College, Kolkata



5.1 STUDENT MENTORING AND SUPPORT

5.1.1 Prospectus

The Prospectus is updated and published every year prior to the commencement of the new academic session. The Prospectus contains the following information:-

- History of the College and its location.
- Composition of the Governing Body.
- Various Committees functioning in the College.
- IQAC Structure
- Courses of study, subject combinations, rules of admission, examination and attendance
- Academic Calendar
- List of Holidays
- Forms and Applications
- Infrastructure, Hostel facilities
- Scholarships
- Co-curricular Activities
- Library and Laboratory facilities
- Seminars and Symposia
- Faculty members and College staff
- Structure of students' union
- Awards and Prizes
- Fee structure
- College rules and discipline
- Innovative Practices
- Photo gallery

The College ensures that all academic programs and co-curricular activities are conducted as per the Academic Calendar, setting aside time slots for evaluation and internal assessment. The session for first year students begins each year with a General Assembly of students where the Principal and other faculty members interact with the students. On that day the Principal of the College informs the first year students about the College discipline, targets to be fulfilled and also encourages them to be socially



concerned and spiritually oriented. A Freshers' Welcome is organized every year in which all students and members of the staff participate. This programme helps to initiate the first year students into the College. The institution is always aware of its responsibilities and its accountability towards its stakeholders, which is ensured through collection of feedback and Students self-evaluation on attitudinal attributes as also on values and ethics. Areas of improvement are identified and positive action is taken to achieve objectives laid down. Regular parent teacher meetings as well as student counselling is also undertaken.



Principal of the college addressing the students



5.1.2 Institutional Scholarships

Keeping in mind the socio-economic status of the students, financial assistance is provided through the Students Aid Fund, College Fund and other Scholarships from the Government of West Bengal for example, Minority and Backward Class Scholarships and ‘Kanyashree Prakalpa’.

Table: 5.1: Institutional Scholarship

Year	Stream	Total Students	No. of students given Full Free	No. of students given half Free	Student Aid	Total	Percent
2014-15	B.A.	594	24	15	1	40	6.73
	B.Sc.	429	12	5		17	3.96
2013-14	B.A.	626	17	22		39	6.23
	B.Sc.	441	10	7		17	3.85
2012-13	B.A.	638	0	78		78	12.23
	B.Sc.	456	0	19		19	4.17
2011-12	B.A.	640	32	23	24	79	12.34
	B.Sc.	555	9	13	1	23	4.14
2010-11	B.A.	696	32	21	18	71	10.20
	B.Sc.	538	12	13	8	33	6.13

Kanyashree Prakalpa Outlay:

2014 – 2015: 53 Students (including 1st Year & 2nd Year students)

2015 - 2016: 3 Students (only 1st Year students)

5.1.3 Financial assistance for students

- Subject to parents’ income and satisfactory academic record, students are awarded full- free or half-free scholarships from the College fund.(Ref.5.1.2)
- Financial aid is awarded at the end of each academic year from the Students



Aid Fund (Fixed @ Rs. 300/-) to needy students, through a proper selection procedure conducted by the Students Aid Committee, which is a sub-committee of the Governing Body.

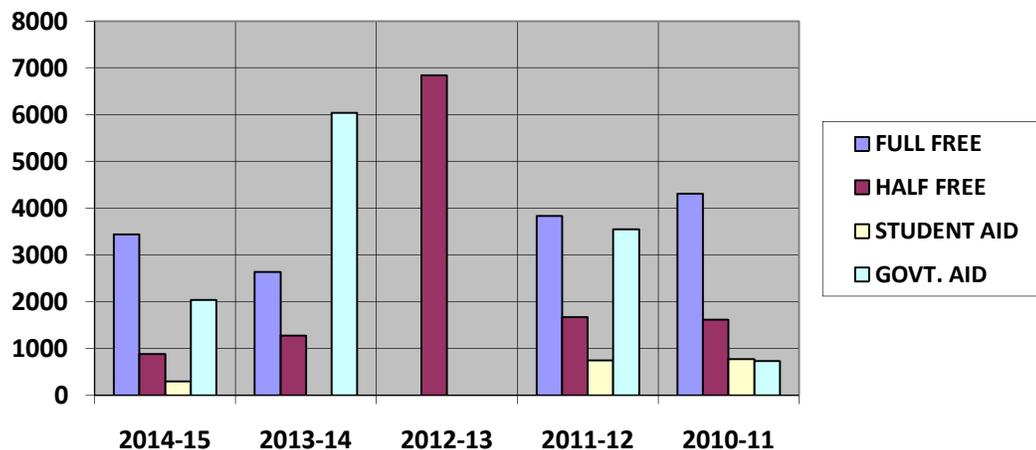
- From Central Government - No scholarships available.
- From State Government - OBC/SC/ST state scholarships from the office of the SDO and 'Kanyashree Prakalpa'.

Table 5.2: Different Categories of Financial Aid received by students of the College

Year	Particulars	Full Free	Half Free	Student Aid	Govt. Scholarship
2014-15	No. of Student	36	20	1	3
	Amount (Rs.)	34,380	8,820	300	20,400
2013-14	No. of Student	27	29	-	15
	Amount (Rs.)	26,400	12,840	-	60,400
2012-13	No. of Student	-	97	-	-
	Amount (Rs.)	-	68,400	-	-
2011-12	No. of Student	41	36	25	8
	Amount (Rs.)	38,400	16,740	7,500	35,500
2010-11	No. of Student	44	34	26	4
	Amount (Rs.)	43,140	16,170	7,800	7,300



Diagram 5.1: Comparing Different Categories of Aid Given to Students



Note: (Scale: 1:10), (Year in x-axis; Rupees in y-axis)

In the year 2012-13 it was decided by the Principal and the Governing Body that all applicants would be given half free scholarship. A comparative study of different financial aid received by the students in the last five years is given above. Financial assistance from Teachers’ Council fund is also available for needy students and staff members. The Alumni Association of the College also takes initiative to provide financial assistance to meritorious students.

5.1.4 Specific support services

The College provides necessary support services to SC,ST, OBC and economically weaker sections. Reservation rules of the State Government are adhered to while taking account of the University criteria during admission.

Economically weaker sections are supported by arranging half-free or full-free, student aid from the Students Aid Committee of Teachers Council. The College has a smooth and structured mechanism of disseminating information regarding scholarships and other financial aid received from the State Government.

Faculty members provide guidance to students on a wide range of academic matters, including assessments and examinations, choice of core and complimentary options and their scholastic difficulties. Students’ Counselling is done on a regular basis. The Counselling programme is designed so as to support and assist in solving various problems. This results in creating a sense of self-confidence, self-esteem and stress-



management abilities among students. The College recognizes that personality development, emotional wellness and success in academic career are closely intertwined. Hence these services are offered to all the students free of cost.

Our Library is a storehouse of knowledge. It is the repository of over 27,000 books and 26 journals. Students get assistance from library staff and the Librarian during college hours. E-books and E-journals are also available through ‘INFLIBNET’ and Net Browsing. Services are available every working day of the week from 10:30am till 5:15pm (Saturday 10:30am to 2:30pm).

Girls’ hostel will be operational from the next academic session.

The College Canteen provides food at subsidized rates. Safe and cold drinking water is available in the College.

The College has an effective structured mechanism to help the students to choose the profession best suited for them. There is an Equal Opportunity Centre in the College and a Career and Counselling Cell. College takes special efforts to help physically challenged students by arranging their classes on the ground floor and by providing wheel chairs for them.

LIST OF STUDENTS WITH SPECIAL NEEDS

Sanchari Chakraborty [Bengali-2011-12—Autistic]

Arunava Sen [Bengali-2010-11—Autistic]

Sanritam Ghosh [History-2015-16—Physically Handicapped]

Subham Mitra [History-2015-16—Visually Challenged and Physically Handicapped]

Kuntal Sikdar[Physics-2015-16—Partially Autistic]

Computer Literacy

Computer Literacy classes are organized for the first year students. They are given certificates by the College on successful completion of the course.

Students with physical disabilities

The College has seat reservations for physically challenged students as per the Government norms. Special care is taken by the teachers of respective departments by allowing the parents to drop off their wards to the classes and arranging parent-teacher



meetings as and when required. Special need-based assistance is also available. Wheelchairs are also available for students when required.

Overseas students

The College welcomes overseas students and has the same criteria for admission for such students.

Students to participate in various competitions/National and International

Students are encouraged to participate in various inter-college and intra-college competitions. (Refer 5.1.6) Students of the College participate in cricket, football and chess competitions which take place every year.

Medical assistance to students: health centre, health insurance etc.

Services of a local Doctor, Dr. Badal Chand Barman, have been arranged for treatment of the students. Financial assistance in case of medical emergencies is given to students from the Teachers' Council fund of the College. First Aid boxes are available on every floor of the college building.

Organizing coaching classes for competitive examinations

Coaching classes are arranged for competitive examinations by the departments of Sanskrit and Industrial Fish and Fishery.

Skill development

Teachers who are proficient in computer skills impart such skills to the students who require them. A Computer Literacy Certificate Course has also been introduced in the College.

Frequent Students' Seminars of the Department of English also help in improving English speaking skills of the students.

Support for "slow learners"

For "slow-learners" teachers take special care by repeating the lectures and organizing remedial learning approaches.

Exposures of students to other institution of higher learning/ corporate/business house etc.

- ABP Private Limited conducted an examination for interview and



workshop on 28th November, 2014.

- Workshop organized by Camellia Educare Services Pvt. Ltd. (2012).
- NIIT organised an examination in September 2015 and selected candidates who would be granted fellowship.

Publication of College Magazine

The College Student Magazine “Lekho Manjori” was last published in 2013. Wall Magazines like “Proyas” and “Pro-Chesta” are also brought out at regular intervals. “Spandan”- another wall magazine is also brought out by the Bengali department. The English department tries to publish the proceedings of their Annual Students’ Seminar every year. Several departments like, Botany and Chemistry, also work at putting up wall magazines. The different themes for the wall magazines reflect the myriad interests and concerns of the students. Students are present in the editorial board of the magazines.



Students working on the Wall magazine

5.1.5 Entrepreneurial skill

Entrepreneurship skills among the students are developed by encouraging them to organize cultural programs, sports, and students’ seminars. Every year students participate in organizing cultural competitions, sports, Saraswati puja, annual social, Rabindra Jayanti, Freshers’ welcome, and many other programmes.

On job training for final year students of department of Industrial Fish and Fishery are organized every year. (Refer 5.1.6)



5.1.6 Participation of students in Co-curricular and Extracurricular Activities

CO CURRICULAR

- Educational excursions, visits to museum and other places of interest are regularly organized by the department of History. The department of Political Science arranges student visits to the West Bengal Legislative Assembly. The departments of History, Bengali and English arrange screening of films. Dramatization of texts by Bengali department is done to making learning interesting.
- Government sponsored annual excursions are organized by the departments of Zoology, Botany and Industrial Fish and Fishery.
- Students' Seminars are organized by almost all departments like, Mathematics, Economics, History, Philosophy, Bengali, Sanskrit, English, Political Science, Zoology, Botany, Physics, Chemistry and Industrial Fish and Fishery.
- On-Job-Training for final year students of Industrial Fish and Fishery (B.Sc. Major) are organized every year in different Universities, Indian Council of Agricultural Research (ICAR), Central Institute of Fresh Water Aquaculture (CIFA), Central Institute of Fisheries Education (CIFE), Integrated Fisheries Project (IFP), Government of India and/or State Government Fish Farms.
- On Job training for students in Fish Processing Technology, Ornamental Fish Breeding and Culture (2014); Management of Soil, Water and Fish Diseases in Aquaculture (2013); Fish Processing and Value added Fish Products (2012) are regularly organized.
- Coaching classes were arranged by Sanskrit department to enable students to appear in competitive examinations with special assistance from "Rashtriya Sanskrit Sansthan" during 2011-2012.
- Special classes and tutorial classes are arranged by all departments.
- Physics Honours students are regularly taken to various OUTREACH PROGRAMMES organized by Saha Institute of Nuclear Physics (SINP), Indian Institute of Science, Education and Research (IISER) among others where they get opportunity to interact with distinguished scientists.
- Students of Botany, Chemistry, English and Physics are encouraged to attend National Seminars held outside the college
- Students of Physics, Botany, and Industrial Fish and Fisheries take part in various competitions and seminars and have also won awards.
Nitish Paul - 3rd year Honours student of Physics received the best model award in the National Level Seminar on 'Physics Behind Electronics/ Opto electronics organized by Sammilani Mahavidyalaya Kolkata

on 01. 12. 2011.

Students of Botany, Rituparna Saha 3rd year general , Arijit Das Gupta 3rd year honours received first and second prizes respectively in slogan competitions at



the Save The Environment Workshop organized by the Madhyamgram Municipality.

Suchismita Chatterjee 3rd year Botany attained second position in NIIT Scholarship Examination 2015 held in the College.

EXTRA CURRICULAR ACTIVITIES

Cultural activities like, Freshers' Welcome, Rabindra Jayanti, Saraswati Puja, Teachers' Day, Netaji's Birthday, Keshab Chandra Sen's Birthday, College Foundation Day are organized by the Students Union of the College with help and guidance from teaching and non-teaching staff of the College. (Ref 5.3.1)

- There are adequate facilities for indoor games and outdoor games.
- A well-equipped Gymnasium Room is available in the College.
- Sports uniforms, conveyance and special dietary requirements are arranged by the College for students who participate in inter-college or inter-University sports competitions.
- Poster Competitions are held as part of Seminars/Symposia.
- Cultural competitions for students are held annually and all teachers and staff function as judges.
- Students and Staff picnics are held every year.
- The College has applied for a NSS unit through proper channel to the University.
- The College has an active Eco club that the Botany Department was instrumental in setting up. The Eco club is presently organizing a Green Audit of the college.

5.1.7 Support and guidance provided to students

Support provided by issuing books from Seminar library as day issue to inculcate the habit of reading and collecting references for acquiring in depth knowledge of the subjects.

Teachers provide guidance to the students to prepare or qualify in the competitive examinations.

Sanskrit Department, as mentioned earlier, did arrange for tutorial classes with special assistance from 'Rashtriya Sanskrit Sansthan'.



5.1.8: Counselling services

The College has a Career Counselling Cell. Counselling is undertaken at the time of admission, during teaching in classes, prior to University exams and for further studies. Faculty members are available to students for consultation and advice. Regular Parent-teacher meetings are also held in the College.

Also workshops are organized by external agencies on counseling of students.

5.1.9 Career guidance

For smooth functioning of Career guidance and Placement of the students of final year, a Career and Counselling Cell has been formed in the College.

Certificate Course in Computer Literacy has commenced and efforts to hone the English speaking skills of students are undertaken by teachers regularly. Aptitude Development is also done on a regular basis. Efforts are being taken by the College to conduct more value added programmes for the benefit of students. Career Counselling offered by the various private agencies has been and will be arranged in the College for the benefit of the students.

5.1.10 Grievance Redressal Cell

A Student Grievance Cell has been formed and is functional. No major grievance have been reported till date.

A Sexual Harassment Cell is active in the College. The College has not witnessed a single case of sexual harassment or ragging during the last 10 years. The Cell actively conducts awareness programmes for the students.

The Women's Cell and the Anti-Ragging Cell are very active and vigilant on all happenings in and around the College premises, so that any small incident, if reported, can be handled efficiently and in a humane manner.

5.1.11 Institutional provisions for resolving issues pertaining to sexual harassment

Issues pertaining to sexual harassment are handled by the Sexual Harassment Redressal Cell and any suspected case of harassment is efficiently handled. (Ref: 5. 1 10).The functions of the cell are the following:

- Conducting sessions on inter-personal relations.
- Group activities to make students self-confident.



- To conduct enquiries on complaints and pursue disciplinary proceedings and suggest action to be taken by the College authorities.

5.1.12 Anti-ragging committee and its functioning

The College has an Anti-Ragging Committee which is fully operational. Till date, no instances of ragging have been reported.

5.1.13 Welfare schemes

The College under the leadership of Principal and the Secretary, Teachers' Council co-ordinates various schemes aimed at the all-round development and welfare of the students. New students are oriented on matters pertaining to programmes and courses, fees and rules and regulations of the College. Counselling services as explained earlier are available on academic and non-academic matters. The College has arranged for free medical check-up by a local doctor. Identifying the blood group and organizing Blood Donation camps are also done with the help of the Students' Union and local Municipal Corporation.

- The College is equipped with a well-stocked library and all students can borrow book with their library cards.
- Food at subsidized rates is available in the College canteen.
- A Girls Hostel has come up on the campus and will be operational from the next academic session.
- Financial assistance to economically backward students is available.

5.1.14 Alumni association

A registered Alumni Association was set up on 6th of February, 2000, with two hundred members. (Registration No. S/22/7714 dt.13.07.2013 under W.B. Govt. Registration Act). The Alumni Association also has a PAN card bearing No. AACAB2612G dated 13.07.2013. The first successful re-union was held in the same year. This Association convenes its meetings at the College campus every year on the second Sunday of January. It is at the initiative of the Alumni Association that a half bust statue of Brahmananda Keshab Chandra Sen was installed at the entrance to the College building in January 2001.

Office Bearers of the Alumni Association

President – Prof Narendra Lal Lahiri
Vice-President – Mr. Kanai Karmakar
Secretary – Mr. Kamal Basu
Assistant Secretary – Mr. Probal Poddar



Treasurer – Mr. Parimal Mukhopadhyay
Magazine Editors- Mr. Kanai Karmakar, Mr. Kamal Basu
Internal Auditor – Mr. Pradyut Kumar Gun
Auditor – Mr. Sudipta Ghosh and Associates
Committee Members – Mr. Tridip Biswas, Mr. Gopal Kr. Das, Mr. Debabrata Roy Chowdhury, Mr. Uttam Bhattacharya, Mr. Sankar Prosad Ghosh.

The Association does a wide range of social work. They organize different types of seminars every year and blood donation camps. Some of the Seminar topics conducted by the Association in the past-

- 27th July, 2008 : ‘Aporadh probonota Sindh Katche Soishab, Koishoreo’ – Speakers: Dr. Malay Ghosal, Dr. Bashabi Chakraborty, Prof. Shubhankar Ghosh.
- 27th July’2009: ‘Swarthoparota Samajik Daaybaddhotake hotya korechhe’ – Speakers: Jiyad Ali, Dr. Jyotirmoy Mukhopadhyay, Sahajad Firdous, Mural Bhai.
- 15th August, 2010: ‘Rabindranather Chetonay Swadesh, amader swadeshikota’ – Speakers: Dr. Pabitra Sarkar, Dr. Biswajiban Majumder.
- 31st July, 2011: ‘ Biswakobi Rabindranath o Swami Viveananda amader jibone o marmoloke chirobhassor’
Speakers: Dr. Pallabi Sengupta, Dr. Chidananda Bhattacharya and Swami Sashi Shikarananda ji.
- 11th August, 2012: ‘Outsourcing, dhanatantrik byabosthake tikiye rakhar anyatamo proyas’ –
Speakers: Prof. Ishita Mukhopadhyay, Prof. Dr. Ratan Khasnabis and Sri Rabindranath Majumder.

Poor and meritorious students are provided aid by the Alumni Association. Students scoring the highest in Humanities and Science Honours courses are awarded prizes by the Association. The Association has also instituted the following prizes–

- Dipsikha Kali Smriti Puroshkar is awarded to the topper in Bengali Honours.
- Dr. Sabita Dutta Mazumder Memorial Award for the topper in Mathematics Honours.
- Prof. Nirmalendu Mukherjee Smriti Puroshkar for the topper in Bengali Honours with first class and highest scorer in Chemistry Honours.
- Dr. Satyajit Kali Smriti Puroshkar for the topper in Zoology Honours.



- Prof. Birendralal Lahiri Smriti Puroshkar for the highest scorer in Science Honours.

The Alumni Association extends monetary assistance to alumni in need. The Association often extend help during natural calamities and for various social causes (for example, collecting donations for Sromojeebi Hospital). The Association is going to form a Trustee Board in the near future.

5.2 STUDENT PROGRESSION

5.2.1 Providing here the percentage of students' progressing to higher education or employment (for the last five batches) according to the available information.

We do not have a official procedure of keeping records of students progressing to higher education or employment. The data given in the following table is collected by the faculties using their personal contacts.



Table 5.3: Students' progression

Department	Year	Student Progression (%)		
		UG to PG	PG to Ph. D	Employed
Physics	14-15	26.68		
	13-14	8.33		8.33
	12-13	58.33	25.00	16.67
	11-12	16.67	8.30	
	10-11	50.00		
Chemistry	14-15			
	13-14	38.00		50.00
	12-13	63.00		25.00
	11-12	55.00		30.00
	10-11	40.00		40.00
Mathematics	14-15	16.00		
	13-14			
	12-13	60.00		
	11-12	40.00		
Botany	14-15	40.00		
	13-14	25.00		
	12-13	66.00		
	11-12	0		
	10-11	40		
Political Science	13-14			28.71
Bengali	12-13	33.33		66.67
	14-15	30.00		
	13-14	35.00		
	12-13	40.00		
	11-12	30.00		
	10-11	40.00		
English	14-15	28.00		
	13-14	27.00		
	12-13	30.00		
	11-12	33.00		70.00
	10-11	28.00		80.00



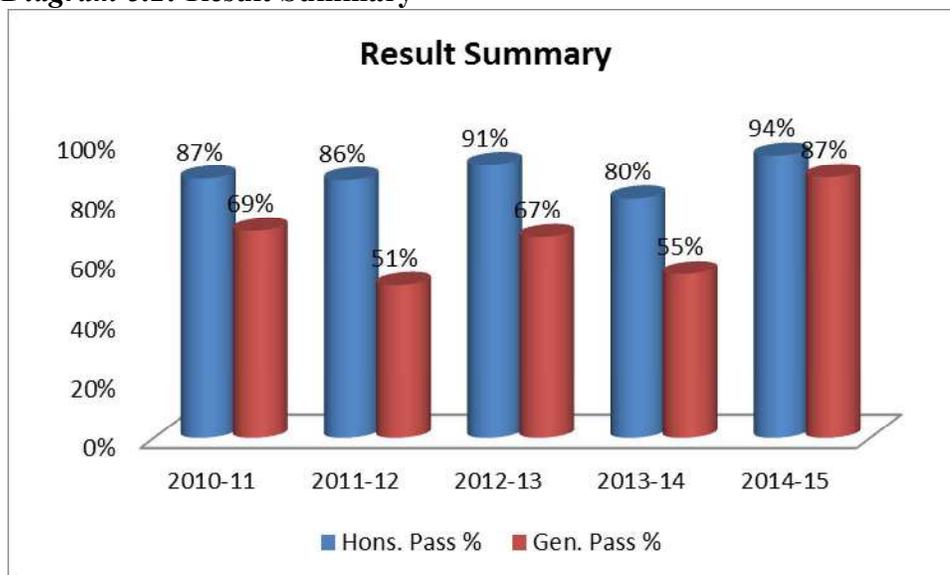
5.2.2. Details of the programme wise pass percentage

Examination Results: IIIrd year

Table: 5.4: Final year results (for last five years)

Departments	2010-11		2011-12		2012-13		2013-14		2014-15	
	Appeared	Pass %	Appeared	Pass %	Appeared	Pass %	Appeared	Pass %	Appeared	Pass %
Bengali (Hons)	39	85%	36	94%	31	84%	28	71%	23	96%
English (Hons)	23	74%	28	89%	10	100%	9	89%	17	100%
History (Hons)	28	89%	13	85%	10	100%	15	53%	11	91%
Philoisophy (Hons)	21	86%	0	0%	4	75%	2	100%	7	100%
Pol. Sc. (Hons)	5	80%	6	83%	3	67%	7	71%	2	100%
Botany (Hons)	5	100%	2	0%	4	75%	6	67%	8	75%
Chemistry (Hons)	9	100%	8	100%	18	100%	6	100%	3	100%
Economics (Hons)	0	0%	0	0%	0	0%	0	0%	0	0%
Zoology (Hons)	30	90%	34	88%	27	96%	21	100%	17	100%
IFF (Major)	4	100%	3	67%	11	100%	6	100%	17	94%
Mathematics (Hons)	9	89%	9	89%	5	100%	13	77%	10	90%
Physics (Hons)	6	83%	12	58%	13	77%	12	83%	8	88%
B. Sc (Gen)	41	83%	45	71%	45	80%	48	85%	42	98%
BA (Gen)	102	64%	118	43%	110	62%	113	42%	113	83%
Total (Hons)	322	79%	314	68%	291	78%	286	66%	278	90%

Diagram 5.2: Result Summary



Since 2008-09 the College has been affiliated to West Bengal State University. Prior to that it was affiliated to the University of Calcutta and so initially during



2010-11 students appeared for final examination according to University of Calcutta Syllabus. From 2011-12 onward students faced challenges due to syllabus revision, changes in question pattern and evaluation. Results during 2011- 2014 reflect a decline in pass percentage because of this. However, after 2014, their results show an improvement as evident from the above diagram.

5.2.3 Institutional Facilitation for Student Progression to Higher Education and/or Employment

Students with greater inclination to academics are encouraged to pursue higher education. Teachers give career advice to students and also provide them with information regarding further studies in various other Universities and institutions. The College has an active Career and Counselling Cell. Experts from different fields are invited to deliver lectures so as to expose students to new areas of thought. Students who wish to move towards employment are also informed about the different job opportunities which may suit them. The Career and Counselling Cell organizes workshops where consultants from the industry enable the students to explore carrier options.

5.2.4 Special Support to Students

Parent-Teacher meetings are held after each exam to minimize dropout rates. Improvement Tests are conducted for weaker students. Students with special needs are taken care of with teachers paying special attention by taken remedial classes for them. The College has seat reservations for physically challenged students as per the Government norms. Special care is taken by the teachers of respective departments by allowing the parents to drop off their wards to the classes.

5.3 STUDENT PARTICIPATION AND ACTIVITIES

5.3.1 Sports, Games, Cultural and Extra Curricular Activities

Blood Donation Camps have been organized in the College. Rabindra Jayanti, Saraswati Puja, Teachers' Day, Netaji's Birthday, Keshab Chandra Sen's Birthday, Independence Day, Republic Day, Foundation Day are all celebrated. A Freshers' Welcome is usually held in the month of October. The College Social is held each year in January. Alumni are felicitated by the Students' Union in the College Social.

Students participate in Chess Championships at the University and Inter-Collegiate level. Active participation is also noticed in Table tennis, Volley ball and Cricket tournaments.



5.3.2 Co-curricular, extra curricular and cultural activities at different levels

Information about such activities has been referred to in 5.3.1

Sports

Table 5.5: List of Students Participated in the inter College level Competitions organized by the University

Year	Name of the Sport	Name of Participant	Result
2012-13	CHESS CHAMPIONSHIPS	Tanna Rudra Mondal B.Sc.G. 3 rd Year. Sabuj Das B.Sc. H.1 st Year. Sanjoy Chouhan.B.Sc G. 1 st Year. Nilabhra Baruri B Sc. 2ndYear.. Mrinmoy Das .B.Sc.G. 2 nd Year.	National Eastern Zone Selection National Eastern Zone Selection National Eastern Zone Selection
2011-12	TABLE TENNIS CHAMPIONSHIPS	Krishanu Biswas B.Sc G.3 rd Year Amit Das B.Sc G.3 rd Year. Chakraborty. B.Sc Sudipta Bose. B.Sc G.2 nd Year. Purna Podder.B.A G.2 nd Year Prolay Ballav .B.Sc.G.2 nd Year.	



2013-14

INDOOR ACTIVITIES (MEN)

TABLE TENNIS: Singles – Winners: Indranil Chakravorty; Runners up: Sudipta Halder

CARROM: Singles – Winners: Sudipta Halder; Runners up: Arnab Sengupta

Doubles – Winners: 1. Sujit Gupta, 2. Abhishek Ghosh Roy

Runners up: 1. Suman Malo 2. Sudipta Halder

CHESS: Winners: Tapash Saha; Runners up: Sabuj Dey

INDOOR ACTIVITIES (WOMEN)

CARROM: Winners – Aliva Ghosh, Runners up – Monalisha Dey

LUDO: Winners – Sumitra Dutta, Runners up – Rinku Dey

CHESS: Winners – Shilpa Dutta, Runners- Tinni Saha

CHINESE CHECKERS: Winners – Shilpa Dutta, Runners – Aliva Ghosh

OUTDOOR ACTIVITIES (MEN)

100Mt. SPRINT: 1. Mantu Sinha 2. Sabuj Dey 3. Dipankar Dutta

HIGH JUMP: 1. Santanu Dey 2. Sudipta Halder 3. Raju Ghosh

400Mt. SPRINT: 1. Dipankar Das 2. Dipankar Dutta 3. Sabuj Dey

200Mt. SPRINT: 1. Mantu Sinha 2. Santu Saha 3. Sabuj Dey

LONG JUMP: 1. Mantu Sinha 2. Dipankar Dutta 3. Sudipta Halder

SHORT PUT: 1. Somenath Das 2. Abhishek Ghosh Roy 3. Surojeet Saha



DISCUSS THROW: 1. Somenath Das 2. Abhishek Ghosh Roy 3. Dipankar Das

2014-15

INDOOR ACTIVITIES (MEN)

TABLE TENNIS: Singles – Winners: Abhishek Ghosh Roy; Runners up: Gaurav Kar

Doubles – Winners: 1. Abhishek Ghosh Roy; 2. Gourav Khan

Runners up: 1. Bidesh Majhi 2. Goutam Ghosh

CARROM: Singles – Winners: Sudipta Halder; Runners up: Rajdip Saha

Doubles – Winners: 1. Sujit Ghosh 2. Abhishek Ghosh Roy

Runners up: 1. Rajdip Saha 2. Sudipta Halder



College sports held in January 2014



5.3.3 Feedback

- The college has a mechanism of collecting feedback on academic administration and faculty.
- Feedback from guardians is also sought.
- Feedback from alumni is obtained in hard copy and also via e-mail.
- In future feedback from the community will also be collected.

5.3.4 College magazine/wall magazine

The College magazine is published after careful selection and editing of articles from students and faculty members. Teachers work hard at the editorial process. Wall magazines like “Proyas,” “Pro Chesta” and “Spandan” are also published occasionally. The English department tries to bring out the proceedings of Annual Student’s Seminar every year. Students are also present in the editorial board of the magazines



College magazine



5.3.5 Students Union

The Students Union is the representative organization of the students. Student representation is present in many committees with the Students' Union General Secretary present as a member in such committees including the Governing Body. They play a constructive role in the general activities of the college. The Students' Union actively participate in organizing all the programs mentioned before in 5.3.1

The Students Union is formed through an Election, after a formal filing of nomination forms and publication of voter list. From the elected members, office bearers of the Students' Union are selected in the first meeting convened by the Principal of the College who is also the President of the Student Union.

The Source of fund for all activities of the Students' Union are 1.Festival Fees. 2. Student Union Fund. 3. Common Room Fees. 4. Game Fees.

5.3.6. Student Representation in Academic and Administrative Bodies of the College

Students are present in the following Committees of the College:

- Governing Body
- Student's Aid Committee
- Admission & Examination Sub-committee
- Development & Building Committee

5.3.7 Institutional Alumni Network

An Alumni Association Committee has been present in the College since 2013, to reconnect with all the alumni and former Faculty Members of the College. A reunion of ex-faculty members are also arranged by this committee in coordination with the Teachers Council of the College. Alumni of the college network through social media as well. Given below is a list of alumni of the College who have distinguished themselves in their field of work.

Table 5.6:List of some alumni of the college

Sl No	Name	Department	Year of Graduation	Present Affiliation	Present Position
1.	Swati Saha	Bengali	2003	Rajkumari School,	Assistant Teacher



Sl No	Name	Department	Year of Graduation	Present Affiliation	Present Position
				Baranagar	
2.	Subhajit Saha	Bengali	2009	Panchasayar Siksha Niketan	Assistant Teacher
3.	Papri Roy Mondal	Bengali	1996	Uttarpara School	Assistant Teacher
4.	Abaria Sengupta	Bengali	1996	Green Valley Academy	Teacher
5.	Sudhesna Mondal	Bengali	2011	Uttardhalhara Maktab School	Primary Teacher
6.	Suparna Poddar	Bengali	2009	Barrackpur Ramakrishna Mission	Assistant Teacher
7.	Susnato Chowdhury	Bengali	2005	Kolkata TV	Journalist, Columnist, Writer
8.	Gadadhar Biswas	Chemistry	1965	Brahmananda Keshab Chandra College	Retired Reader
9.	Prasanta Chattopadhyay	Chemistry	1966	Brahmananda Keshab Chandra College	Retired Reader
10.	Mira Haldar	Economics	1976	Seth Surajmal Jalan College	Associate Professor
11.	Sanjib Talukdar	Economics	2001	Asansol College	Assistant Professor
12.	Sanchari Bhattachariya	Economics	2001	Dumdum Matijheel College	Assistant Professor



Sl No	Name	Department	Year of Graduation	Present Affiliation	Present Position
13.	Dedipya Basak	Economics	2010	Met Technologies Pvt.Ltd.	SEO Analyst
14.	Shibashish Ghosh	Economics	2008	West Bengal Higher Secondary Council	C A toPresident
15.	Sutanwi Sengupta	Economics	2007	Coal India Ltd.	Officer
16.	Sandeep Chakraborty	Economics	2010	Central Statistical Office	Junior Officer
17.	Dipankar Middy	Economics	2008	Tata Consultancy Services	Team Leader
18.	Ratna Chakraborty	Economics	2006	Aliah University	GuestLecturer
19.	Kaushik Mitra	Economics	2006	Atisha Biotech Ltd.	AreaDev.Manager
20.	Arnab Gupta	Economics	2007	Pfizer Company	Product Specialist
21.	Dr Somenath Chattipadhyay	Economics	2001	Monetary Research Project,ICRA	Research Analyst
22.	Samik Biswas	Economics	2002	The Asiatic Society	Publication Assistant
23.	Priyanko Ghosh	Economics	2005	IIM Ahmedabad	Post DocResearch
24.	Nabanita Mukherjee	Economics	2006	Sarva Sikhsha MissionKolkata	Research coordinator



Sl No	Name	Department	Year of Graduation	Present Affiliation	Present Position
25.	Utpal Dutta	Economics	2007	Sanofi Pasteur(MNC)	Scientific Executive
26.	Subhodeep Ghosh	Economics	2010	Pepsico IndiaLtd.	Executive
27.	Tirtha Prasad Mukhopadhyay	English	1991	University of Calcutta	Professor
28.	Shampali Moulik	English	2001	Sanbad Pratidin	Sr. Sub-Editor
29.	Bidisha Chatterjee	English	2001	Sanbad Pratidin	Sr. Sub-Editor
30.	Subhomoy Mondal	English	2008	LIC	Devp. Officer
31.	Sohini Basu	English	2011	Emami Ltd., Kolkata	H R
32.	Pritesh Basu	English	2005	The Statesman Kolkata	Sub-Editor
33.	Basudev Chakraborty	English	1992	Jangipur College	Assistant Professor
34.	Debasish Lahiri	English	1994	Lal Baba College	Assistsnt Professor
35.	Ayan Banerjee	English	1997	The Telegraph	Chief Reporter
36.	Biman Samaddar	History	2000	Santipur College	Assistant Professor
37.	Smriti Kumar Sarkar	History	1971	Burdwan University	Vice Chancellor
38.	Sanjay Ghosal	Mathematics	2004	Kalyani	Assistant



Sl No	Name	Department	Year of Graduation	Present Affiliation	Present Position
				Government Engineering College	Professor
39.	Narendra Lal Lahiri	Mathematics	1960	Brahmananda Keshab Chandra College	Retired Selection Grade Lecturer
40.	Nitai Bhatta charya	Physics	1974	SINP	Scientist
41.	Sauradip Malkhandi	Physics	1995	University of Singapore	Research Fellow
42.	Purusattam Chakraborty	Physics	1972	Saha Institute of Nuclear Physics	Scientist
43.	Bimal Majumdar	Physics	1972	Barasat College	Retired Principal
44.	Mitali Banerjee	Physics	1985	West Bengal Government	Joint Secretary
45.	Pinaki Sett	Physics	1993	Gobardanga Hindu College	Associate Professor
46.	Sourabh Ghosh	Physics	2001	RA Vanderbeit University USA	Scientist
47.	Puja Das	Physics	2012	ISI Kolkata, IIT Msc	Research Fellow
48.	Nitish Paul	Physics	2013	Abacus Institute of Eng. & Manag.	Assistant Professor
49.	Putul Ray	Political Science	1963	Brahmananda Keshab Chandra	Retired Reader



Sl No	Name	Department	Year of Graduation	Present Affiliation	Present Position
				College	
50.	Dhruba Dey	Sanskrit	1996	Sanskrit Sahitya Parishsd.	Teacher



6.

Governance, Leadership and Management

Self Study Report (2015) | Brahmananda Keshab Chandra College, Kolkata



6.1 INSTITUTIONAL VISION AND LEADERSHIP

6.1.1 Vision and Mission

Brahmananda Keshab Chandra College, named after the nineteenth century social reformer, Keshab Chandra Sen, has completed over fifty years of providing quality education to students who usually belong to underprivileged section of society. Popularly known as B.K.C. College, the College was set up with the aim of filling a vacuum in higher education in areas with huge influx of refugee population from East Pakistan and has always striven to achieve excellence in creating capable citizens of India. Education, we believe, does not consist of mere learning, but involves fostering a sense of social responsibility among its students who are the harbingers of social change.

The College uses modern methods of higher education through the aid of technology, delivering education by working towards a partnership between private, public and semi-public organization/Institutions. Boasting of Wi-Fi internet facility, the College has subscribed for NLIST through INFLIBNET for e-journals in our library. Our library has over 27,000 books and 26 journal subscriptions. Apart from academics, encouragement is given to nurture the latent talent of students in co-curricular and extra-curricular activities. The eco-friendly sprawling green campus of the college overlooks the Bonhooghly Lake. The College encourages effective communication and consultation between the stakeholders to ensure everyone that actions are driven by values. The College has setup a benchmark index to achieve a target and the IQAC is working as a team to deliver something truly distinctive. Effective communication and consultation between the stakeholders is encouraged to ensure that actions are driven by values. The College has adopted **SMART** objectives which will enable measurement the effectiveness of actions taken and results achieved.

S-→Specific; **M**→Measurable; **A**→Agreed; **R**→Realistic; **T**→Time Bound

The objectives for future development are given in details in Ref. **6.2.2**.

6.1.2 Role of top management

Brahmananda Keshab Chandra, set up in 1956, is a Government Sponsored degree college and was affiliated to the University of Calcutta and followed the 1st



statute approved by West Bengal State Legislation Act, 1979. Since 2008, the College has been affiliated to the West Bengal State University, Barasat. The statute of the university has been implemented from 2015 and the College is now guided by its rules.

In colleges like ours, ‘management’ refers to **the Governing Body (GB)** constituted of

- 1) President, an elected person among the GB members outside the College
- 2) Principal as Ex-officio Secretary,
- 3) Three University Nominees,
- 4) Three Government Nominees,
- 5) Four elected Teaching Representatives,
- 6) Two elected non-teaching representatives,
- 7) One elected member from the Student Union
- 8) One representative of local self Government.

The Governing Body, which is the supreme authority, is involved only at the policy making level. It delegates the power of implementation of proposals to the Principal, the ex-officio Secretary of the GB.

6.1.3 Involvement of the leadership

The policy statements and action plans for fulfilment of the stated mission

The Principal participates in every policy decision by presiding over the meetings of the various subcommittees. On every policy statement and action plan for the fulfilment of the stated mission suggestions are invited from the Internal Quality Assurance Cell (IQAC). In each IQAC and Teachers Council (TC) committee meeting policy plans are openly discussed and decisions are taken democratically.

Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan

Once the policies are formulated, the sub-committees of the GB under the leadership of the Principal are involved in their execution, for example the Building Sub-committee in matters related to construction; Development Sub-committee in infrastructural development utilizing the resources available from various funding agencies like UGC, MPLAD, MLA fund, State grant, and the Academic Subcommittee in academic affairs of the College.

Interaction with stakeholders

The Principal interacts with the staff, students and the guardians whenever necessary, addresses grievances of the students, through Grievance Redressal Cell after discussion in the students’ forum. Parent-teacher meetings are held in the



departments and the Principal also intervenes where necessary. The Principal also addresses grievances of the staff regarding service related matters.

Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders

The IQAC makes regular as well as surprise visits to the departments, library and offices as a step to ensure excellence and reports to the Principal after formulating the policy planning and improvisation procedures. For instance, the College identified that some students are first generation learners and cannot follow the latest technology and introduction of a Computer literacy Programme for the new admissions was felt necessary.

Reinforcing the culture of excellence

Apart from academics, encouragement is given to the students to nurture their latent talent. Importance is given to promote teaching-learning through project work, field and lab visit, dramatization, survey work, exhibitions, students seminars, among others.

Champion organizational change

1. A New NSS unit has been established in the College (awaiting formal approval) where activities like Clean Bengal, Eco Club, Health awareness campaign, Tree Plantation, e-waste management are being done regularly.
2. Automation of the library using customised KOHA software is an on-going process.
3. Office automation through LAN and internet connection.
4. Wifi and broadband connections.
5. Collaborative arrangements with the colleges of the vicinity for teacher exchange and student enrichment.

6.1.4 Mechanism for monitoring and evaluation of institutional policies

- Self-Appraisal of Teachers
- Student Feedback form

6.1.5 Academic leadership provided to the faculty by the top management

- Rotational Headship for a period of two years
- All the head of the departments and coordinators are included in the Academic and Development sub-committee of the GB to disseminate their ideas in the policy making of the College.



6.1.6 Grooming leadership

- Teachers are the conveners of different administrative and academic sub-committees.
- When the Principal/Teacher in charge is on leave a senior teacher is entrusted with the Principal's office.

6.1.7 Operational autonomy to the departments

The departmental activities are monitored by individual teachers in consultation with the heads of the department. Meetings are organized at regular intervals and the Principal is informed about the resolutions taken as and when needed.

6.1.8 Participative management

The College fosters a culture of participative management in all key aspects. The various sub-committees of the College like Academic, Admission, Culture, sports, Magazine have representation from students, faculty and non-teaching staff with the Principal as the coordinator.

6.2 STRATEGY DEVELOPMENT AND DEPLOYMENT

6.2.1 Quality Policy of the institution

The perspective plan for development in the different spheres like academic, administrative, infrastructure is taken up by the different committees of the governing body of the College right from its inception. Decisions regarding the introduction of different honours subjects were taken in the Academic Committee meetings and subsequently ratified in the GB. As required by the UGC a Planning board comprising senior teachers of the College was set up in 2014 and it formulated a future plan for the overall development of the College. The **Development Sub-committee** of the GB comprising of all the Head of the Departments and other key members of the teaching and non-teaching staff constantly monitors the fund distribution of UGC grants and State grants received by the College. The **Building Sub-committee** comprising of GB members, Teachers' Council Secretary and other teaching and non-teaching staff and a PWD engineer takes decisions regarding proposals for constructions of



new buildings. The **Finance Sub-committee** monitors the financial position and the expenditure to be incurred under different heads.

6.2.2 Perspective Plan for development

1. To set up a fully interactive website for effective communication among our stakeholders.(www.bkccollege.org;email:bkccollegebonhooghly@gmail.com)
2. To set up a student's page in the website for online Students Profile Mapping.
3. To commence an online feedback system from the Alumni, Guardian and the Community.
4. To start vocational and skill development courses for entrepreneurship development.
5. To promote teaching – learning through project work, Field and Laboratory visits, dramatization, survey work, exhibitions, students seminars, among others.
6. To start a General course in Women's Studies and Honours Courses in Sanskrit, Journalism and Mass Communication and Computer Science.
7. To commence Post Graduate Courses in Botany, Mathematics, Physics, History and Bengali.
8. To set up a Placement Cell.
9. To establish Consultancy services through our expert faculty and to generate resources.
10. To establish a 'Biodiversity Park' with Herbal Garden in the College campus.
11. To spread awareness on conservation of Bonhooghly lake and adjoining water bodies among local residents.
12. Establishing solar panel for renewable energy resource utilization.

6.2.3 Internal organizational structure

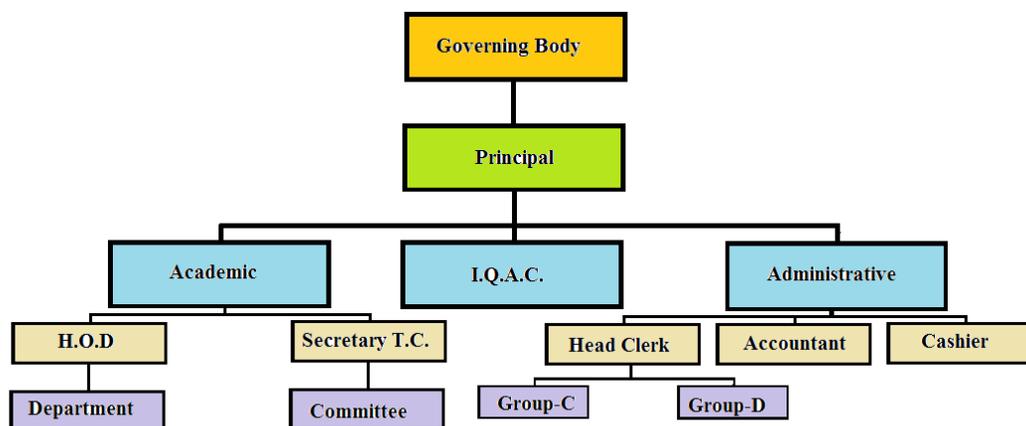
The GB is the final decision making body of the college. However, policies framed by the GB are implemented by the Principal as the executing authority. Within the college, the Principal takes the final decision after consultation with the various subcommittees of the GB, the head clerk and the Secretary of the Teachers' Council depending on specific requirements. Financial decisions are placed in the Finance Subcommittee before being finalized. Similarly, Academic decisions are placed in the Academic Subcommittee for ratification. The Academic and Finance Subcommittees are statutory bodies and all decision taken



in these committees require to be ratified by the Governing Body. After the formation of the IQAC in 2013 the IQAC coordinator also plays an important role in the internal matters of the college.

Since the College works in a participatory, collaborative model, the various sub-committees and Cells of the College are involved and their suggestions are invited by the Principal with regard to issues that are under purview. The decisions taken in the Teachers’ Council and non-Teaching Staff Association meetings are conveyed to the Principal and GB. Since departments function in a decentralized mode, departmental meetings are held in a regular basis and important decisions are communicated to the Principal.

Diagram 6.1: Internal organisational structure



6.2.4 Quality improvement strategy

To improve the overall quality of the College following steps have been taken over the last five years:

a) Teaching and Learning

- Undergraduate general courses in Education and Journalism and Mass Communications have begun from the 2015-16 academic session
- Proposals for commencement of Postgraduate Courses in Botany and Mathematics have received a positive response from the West Bengal



State Higher Education Council. Proper infrastructure is being developed so that the courses can be started from the 2016-17 academic year.

- During the period March 2014 to July 2015, eighteen teachers have been recruited in different subjects on the recommendation of the College Service Commission.
- Scientific Equipment are purchased from UGC and State grants on a regular basis.
- New books are purchased every year in the College Library. Journals on different subject are also subscribed to.
- Prior to the appointment of new teachers, the College recruited guest lecturers in various departments as per requirements. The new subjects of Education and Journalism and Mass communications are now being taught by Guest Lecturers. Computer Science is also being taught by a Contractual Lecturer.
- A computer literacy course for all first year students has started from the 2015-16 academic session.
- Technology enabled teaching-learning is promoted.
- Measures are being taken for the introduction of INFLIBNET in the central library

b) Research and Development

- The College has a Research Monitoring Cell which goes through the proposals before submission of the research projects.
- Grants are released timely.
- Infrastructural facilities are available.
- Faculty is encouraged to carry on their research work and to present papers in various national and international conferences.
- Distinguished academicians are invited by different departments to deliver lectures.
- Students are encouraged to be involved in research activities through presentations, seminars and projects.
- E-journals are being made available to both the students and teacher through INFLIBNET.



c) Community Engagement

- Organizing awareness programmes on social and environment issues
- Local schools and other organizations are given access to the College playground
- Organization of blood donation camps
- Centres of different public examinations

d) Human Resource Management

Faculty in substantive posts are recruited according to the recommendations received from the College Service Commission (CSC). The administration is prompt in submitting requisitions to the CSC as and when required. As the College does not have any Part Time Teacher and Contractual Whole Time Teachers, all teaching posts are to be filled by CSC recommendations. In 2010 ten posts were filled up in different subjects and in 2014-15 eighteen appointments were made. In all these cases appointments had been made maintaining the reserve category as per the Register of Appointments. For the five remaining vacancies requisitions have been sent to the CSC in time (vide GB resolution No 10 dated 8.5.15).

Sanctioned non-teaching posts are filled up as per existing Government rules. The process involves invitation of applications through advertisement in leading newspapers and through the employment exchange, and their screening (through a test and interview) by a Selection Committee framed by the GB. Candidates are short-listed and the Governing Body authorizes the Principal to appoint. Additional requirement for non-teaching posts are met through appointments of staff on contractual and casual / daily basis. The College bears the financial liability of these staff.

e) Industry interaction

The College has a Career and Counseling cell which organizes different career oriented programs with the help of various organisations like NIIT, Anandabazar Patrika. Final year students of the department of Industrial Fish and Fisheries (Major) undertake on-job training at different Central and State Government departments and institutes such as Indian Council of Agricultural Research (ICAR), Krishi Vigyan Kendra (KVK).

We have a plan to start a Placement Cell in future which will increase our interaction with industry.

6.2.5 Review of the activities of the institution

The Principal interacts with the stakeholders, i.e. the students, teachers, non-teaching and teaching staff, and guardians to acquire information regarding the



quality of teaching and support services. The representatives of various sub-committees and cells give their observations to the Principal. This information is shared and reviewed at the highest policy making body, GB and decisions are taken to improve affairs. The decisions are then communicated to the various stakeholders by their corresponding representatives and Principal.

6.2.6 Involvement of the staff in improving the effectiveness and efficiency of the institutional processes

The College authority ensures the involvement of its staff in all its activities. As mentioned in Section 6.1.8 representation of the staff is observed in all committees of the GB and the College where administrative, academic and financial decisions are taken. Active participation of both the teaching and the non-teaching staff in the extra-curricular activities like College social, sports, cultural competitions contributes to their success.

6.2.7 Resolutions made by the Governing Body

Governing Body meetings are held at regular intervals to take decisions on administrative and financial matters. The resolutions taken in the last year are tabulated below with the status of implementations of such decisions.

Table 6.1: Resolutions taken by the Governing Body in the last year (2014-2015)

Date	Resolutions Taken	Present Status	Remarks
14.07.2014	Application for Non-refundable loan from PF from two non-teaching staff	Sanctioned	Resolution By circulation
07.08.2014	1. Joining approval of six teachers 2. Career advancement of Salil Niyogi, Laboratory Attendant , Chemistry 3. Leave encashment of Dr. S.K.Choudhury, Associate Prof, Physics	Completed Completed Completed	
12.12.2014	1. Proposal for Advertisement for Recruitment of N.T.Staff (7 posts) 2. Career advancement (CAS) Swapan Mondal, Assistant Professor Grade I to Grade II, in Botany	Completed Completed	



Date	Resolutions Taken	Present Status	Remarks
20-12-2014	DSC (Digital Signature Certificates) for e-tender for procurement of instruments for WBDBT,BOOST 2014-2019	Completed	
03-02-2015	1. Introduction of Biometric Attendance System for all staff. 2.Immediate utilization of the State Grant of 5 lakhs received for the benefit of the students by the process of tender notice through purchase Committee	Process initiated Construction of Digital Classrooms with projectors completed	
09.02.2015	Regarding D.D.O change	Completed	
25.02.2015	Approval and Appointment of T.I.C & D.D.O Dr. Papia Chakraborti	Completed	Emergency meeting
25.02.2015	Introduction of Post Graduate Courses in Botany and Mathematics.	Affiliated by WB State Council of Higher Education ref. Aff(WBSU)/M S/213/SCHE/2015 dt. 11-06-15 to commence from 2016-2017.	Emergency meeting
27.03.2015	1. Appointment of 5 new teachers (through W.B.C.S.C). etc. 2. Proposal for publication of open access peer-reviewed journal in Humanities and Sciences 3. Proposal for Boundary wall renovation to be sent to UGC 4. Finalization of Non-teaching recruitment procedure	Completed Yet to commence Proposal submitted Completed	
08.05.2015	1. Appointment of 3 new teachers (through W.B.C.S.C).	Completed	



Date	Resolutions Taken	Present Status	Remarks
	2. Ratification for Building Committee decision for renovation of student's common room, canteen and gymnasium. 3. Formation of On-line Admission Committee. 4. Proposal for Wi Fi enabled campus for the students. 5. Proposal for increase of intake capacity for new session. 6. Revision of Fee structure and introduction of Computer Literacy Course 7. Requisition to be sent to WBCSC for 5 teaching vacant posts.	Completed Completed Completed Completed Completed	
26.05.2015	Appointment of new Principal Dr. Papia Chakraborti as per recommendation of WBCSC	Completed	
23.06.2015	1. Release and lien of 3 teaching staff who applied for joining as Principal. 2. Proposal to be sent for state grant 2015.	Released on lien for one year. Proposal sent	
03.07.2015	Change of D.D.O for Joining of new Principal	Completed	Emergency meeting
05.08.2015	1. Library up gradation through automation and digitization using KOHA software. 2. Finalization of the NTS recruitment of Gp C (nos.3) and Gp D (nos.4) categories. 3. Refundable loan against P.F for S. Bhattacharya, Lab attendant, Zoology.	Ongoing Process completed Loan sanctioned	



Date	Resolutions Taken	Present Status	Remarks
27.08.2015	Power of attorney to advocate (for W.P. 21398 W 2015)	Under sub-judice	
12.09.2015	To consider report of Advocate	Under sub-judice	Emergency meeting
05.12.2015	Analysis of Self Study Report for NAAC.	Approved	Emergency meeting

Resolutions taken by the Finance Committee

Date	Subject	Status
07.04.15	Online Admission	For 1 st year from 2015-2016
	Digital Classroom	Projectors installed in 6 classrooms
	Biometric attendance	Started
	Grill cover for 1 st floor and 2 nd floor	Completed
	Heavy duty water purifier	Installed
	Renovation of common room which is subsequently used as gymnasium	Completed
	Equipment for gymnasium	Purchased and gymnasium functional
	Glow sign board and display board	Signboard installed
3.10.15	Renovation of fishery lab	Completed
	Carpentry work at chemistry lab	Completed
	Renovation of office and class rooms in the ground floor	Ongoing
	Purchase of customized KOHA software for the library	Purchased
	Book binding of damaged books	Started



6.2.8 Status of Autonomy

The University has the provision for granting autonomy for Postgraduate courses, if any, conducted by the college. The College has received affiliation for starting Postgraduate courses in Botany and Mathematics from the academic year 2016-17. Application for autonomy of the PG Courses is on the anvil once the courses have begun.

6.2.9 How grievances are attended

The College has a Grievance Redressal Cell, Anti-Ragging Cell and Sexual Harassment Redressal Cell which takes measures to redress complaints.

- Departmental problems faced by students or staff are resolved in departmental meetings under the supervision of the Head of the Department.
- Students can also approach the Cell for their grievances related to academic, financial, health matters and other services.
- The Cell addresses the problems promptly. After analyzing the nature of the grievances remedial measures are taken by the College.
- There is a drop-box to submit grievances / complaints
- The Sexual Harassment Redressal Cell and the Anti-Ragging Committee had been formed by the TC with ratification from the GB to look into related issues
- Cordial teacher-student relationship exists in all departments.

6.2.10 Court cases

1. Writ petition (W.P No 9485 (W)) of 2014 filed by the non-teaching staff Smt. Swapna Das, Lady Attendant against the College. Status- Sub-judice
2. Writ petition filed by casual staff, Shri Prabir Pal (W.P. 21398 W) of 2015 against the GB of College. Status- Sub-judice

6.2.11 Student feedback

For the students of the 1st year ‘Students Profile Mapping’ has begun to ascertain the ideology of a student and test his moral values and ethics. Accordingly the teachers will produce a report for each student and assess the new entrants. The third year students fill up two types of student feedback form:



1) Feedback about the general standard of the service rendered by the various departments of the College like library, office, canteen and other infrastructural facilities provided

2) Student feedback, assessing individual teachers.

As the process of filling up of the feedback form is in the initial stage, the review work has not yet begun. However, in future the authority will make an assessment of all feedback received and inform faculty members and other staff of the outcome.

6.3 FACULTY EMPOWERMENT STRATEGIES

6.3.1 Professional development of staff

The College takes various steps to encourage and enhance the professional development of the staff :

- Teachers are encouraged to carry out Refresher and Orientation programmes
- A numbers of teachers had completed their doctoral work after joining this college and many young teachers are presently pursuing their doctoral degrees (Refer **Table 3.6**).
- Departments are encouraged to organize seminars and workshops.
- On duty leave is granted to faculty for presenting papers at seminars and symposiums within the country and abroad.
- Duty leave was sanctioned to Dr Nishi Pulugurtha, Associate Professor of English for carrying out research work at Indian Institute of Advanced Studies, Shimla in June 2009 and October 2010.
- The College organize programmes on social and health issues to spread awareness among the staff and students (Refer **Table 3.12**)
- The Bursar and accounts personnel attend several training programs, organized out by the Government of West Bengal, for the successful use of the Integrated Financial Management System (IFMS) portal
- The Accountant and the Head Clerk had attended training programmes on COSA in 2012 and training for the e-pradan module of the Government in 2015.
- The Head Clerk attended a training program on online admission procedure arranged by the University during 2015.
- The Principal and the Bursar attended the training program on “e-mudra” organized by the Government of West Bengal

6.3.2 Strategies adopted by the institution for faculty empowerment

The College sanctions duty leave to the teaching staff to attend Orientation Programs, Refresher Courses and other career development programs. For details refer to Table 2.4.3 and section 6.3.1



6.3.3 Performance Appraisal system of the staff

- Every teacher submits a self-appraisal report for each academic session (Refer **Annexure 3.3.3**)
- Teachers submit a self-assessment report at the time of promotion to the higher academic grade pay. After the formation of the IQAC it is a major task of IQAC to scrutinize these reports and to help the Principal to form the Screening/Selection Committee for placement and promotion.
- The authority is planning to introduce a self appraisal format for the non-teaching staff also

6.3.4 Review of the performance appraisal reports

The performance appraisal reports are being reviewed by the authority with the help of the IQAC (Refer **Annexure 3.3.4**).

6.3.5 Welfare schemes for Faculty and Staff

i) Staff Quarter accommodation is available for the non-teaching and teaching staff. There are two buildings each with four flats. One of the buildings is in a very dilapidated condition and the authority has future plans to renovate it. At present four quarters are being occupied by staff.

ii) B.K.C. College Staff cooperative credit society was established on 15.03.1995. It has sixty one members. The maximum amount of loan that can be sanctioned to each member is Rs 2,00,000/- with interest 10% per annum calculated on reducing balance. The annual turnover for the last financial year, 2014-15 is Rs 34,00,000/-.

Table 6.2: Loan Facility provided by the cooperative society

Year	Total no of members	No of members who took loan	% of Beneficiaries	Amount of loan (Rs)
2010-11	68	18	26.47	17,30,000
2011-12	66	18	27.27	17,06,000
2012-13	63	21	33.33	26,52,600



2013-14	63	14	22.22	17,95,000
2014-15	57	15	26.31	27,50,000

- iii) Ad-hoc payment of salary of Rs. 37,000/- to the teachers and full salary to the non-teaching staff during the months of non receipt of pay packet.
- iv) Canteen, recreation and Gymnasium facilities.
- v) Festival advance payment to nonteaching staff during festival like Durga puja.
- vi) Festival bonus to Management appointed non-teaching staff during Durga puja.
- vii) Purified and cold drinking water.
- viii) Loan from college fund without any interest to staff for medical treatment and marriage ceremonies of their wards, if required.
- ix) First Aid facilities are available.
- x) Group Insurance facility(GIC) for staff.
- xi) Annual Sports and cultural programmes are organized for all staff and students

6.3.6 Measures for attracting and retaining faculty

The authority gives ample scope to teachers for pursuing research work.

6.4 FINANCIAL MANAGEMENT AND RESOURCE MOBILIZATION

6.4.1 Effective and efficient use of financial resources

The Principal's responsible for monitoring and controlling the financial procedures. The Drawing and Disbursing Officer (DDO), the Principal is assisted by the Bursar and Accountant in the preparation of financial reports. UGC accounts are also handled by the Principal and prepared with the assistance of the office staff and the Accountant. It may be mentioned that the financial distribution of the UGC and State grants are made in the Development sub-committee of the GB. Accounts related to departments are handled by the concerned departmental heads. The Cashier handles monetary transactions.

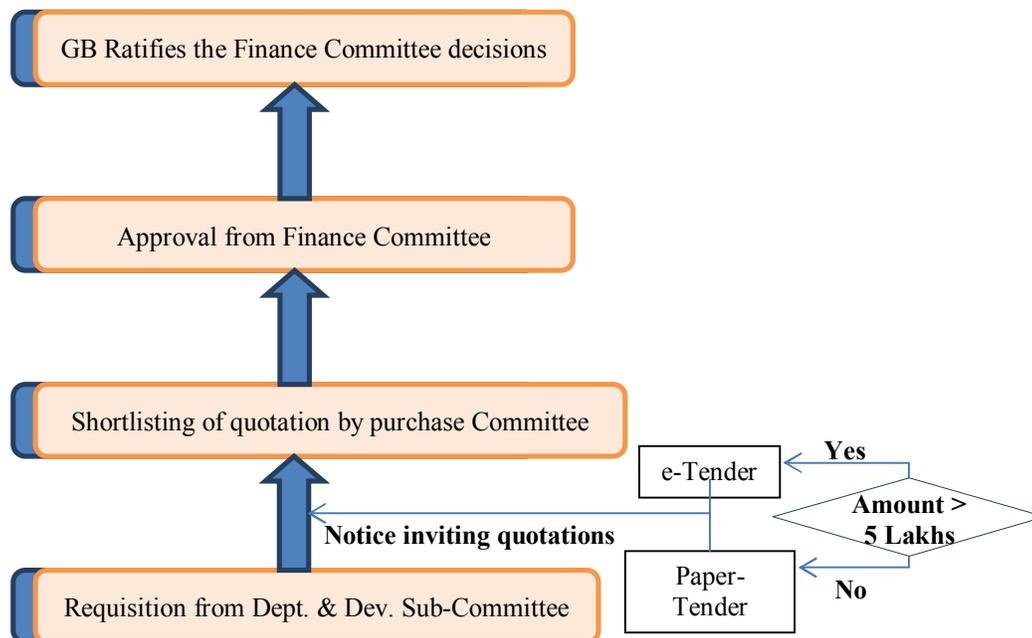
The following norms are maintained in order to make effective use of resources:

- Except in cases of small purchases, payments are made in the form of Cheque or Demand Draft.
- Tender is invited for any purchase above Rs 1 lakh and e-tender is floated for purchase of more than five lakhs.



- Proper procedure for purchases is adopted through Purchase Committee and the Finance Sub Committee
- Payment is made only on production of proper bills and vouchers
- Payments are made only if authorized by the Principal
-

Diagram 6.2: Flowchart of Financial management



6.4.2 Internal and external audit

The external audit of the college is done by a Government appointed auditor. The audit upto 2013-14 has been completed and that of 2014-15 is currently under process. The audit report of 2013-14 is given in Annexure 6.1.

6.4.3 Income and expenditure statement

The major sources of Institutional receipts are

- (i) Admission and Tuition fees of the students
- (ii) Development grant from State Government
- (iii) UGC grants
- (iv) DBT grants.



- (v) MLA/MP grant
- (vi) Apart from these, the college receives grant from the Government of West Bengal for payment of salaries to its staff.

The following table shows the income and expenditure of the college (only Fees collected from the students) according to the audit report. The external audit for the year 2014-15 is under process.

Table 6.3: Income and Expenditure of the College during last five years

Year	Income	Expenditure	Excess income over expenditure
2014-15	28,51,027	21,65,191	6,85,836
2013-14	23,16,885	21,65,144	1,51,741
2012-13	23,14,865	16,41,221	6,73,644
2011-12	3241370	36,85,472	-4,44,102
2010-11	31,42,017	26,84,251	4,57,766

6.4.4 Efforts made by the institution for additional funding

Plans and proposals for building, equipment, books and journals and for general development of the College are regularly submitted to different funding agencies viz. UGC, State government, MP and MLA for financial assistance. The following is the list of financial assistance received from these external agencies over the last five years.

Table 6.4: Grants from sources other than student income

Grant	Memo no.	Purpose	Amount
State Grant	1) 1164-C dated:- 17.11.14	For implementation of COSA & Online Admission Process Scheme	Rs. 150000/-
	2) 925(S)/EH/P/CS dated:-4.3.14	General Grant	Rs. 500000/-



Grant	Memo no.	Purpose	Amount
	3) 509-(Sanc)/EH/N/CS/I G-79/2013 dated:- 3.12.13	Procuring Equipment book & furniture	Rs.1400000/-
WB-DBT	BOOST-I No 337/WBBDC?IP-2/2013 dated 3.9.14	Instruments& Consumables	Rs 2000000/-
MP/MLA	MP LAD:- D-13013/2/2013-DPLO/820/0 dated:- 31.7.13	Construction of a building with three storied foundation in the premises of the College	Rs.1500000/-
UGC	1) AGW-611/11-12(ERO) dated:- 30.03.13	Additional Grant Equipment	Rs. 1190000/-
	2) AGW-193/10-11 (ERO) dated:- 9.02.15	Additional Grant Equipment	Rs.1690200/-
	3) IQAC-W-351/13-14 dated:- 19.3.14	IQAC	Rs.300000/-
	4) WBS-014/12-13 (ERO) dated:- 28.03.14	College Development	Rs.1369890/-
	5) WBS-014 dated:- 4.3.14	Women's Hostel	Rs. 1.8 Crores (all total)
	6) WBS-014 dated:- 4.3.14	College Development	Rs.165000/-
	7) WC2-027/07-08(ERO) WBS-014 dated:20.04.15	Building Grant	Rs.630000/-
	8) MSWS-014/09-10	Building Grant	Rs.810000/-
	9) MSWBS-014/12-13 dated:-26.12.12	Merged Scheme XII Plan	Rs. 68,750/-



6.5 INTERNAL QUALITY ASSURANCE SYSTEM

6.5.1 Internal Quality Assurance Cell (IQAC)

a) Establishment of IQAC

The **Internal Quality Assurance Cell (IQAC)** of our college was established in May 2013 by the GB resolution no 6 dated 07.05.2013. The members of the first IQAC were the following:

- 1) Dr Soma Sen, Teacher-in-charge, Chairman
- 2) Dr Papia Chakraborti, Coordinator
- 3) President, GB, Government Nominee
- 4) Dr Ramanuj Ganguly, University Nominee
- 5) Dr Asis Chakraborty, ISI
- 6) Secretary, Teachers' council
- 7) Dr Sukla Mukhopadhyay
- 8) Dr Alope Kumar Chattopadhyay
- 9) Prof. Nayna Guha Majumder
- 10) Head Clerk
- 11) Sri Salil Neogy, NT Representative, GB

Since its inception the IQAC has been operative and is working to meet the needs of the College with a view to improve available facilities for its stakeholders.

Some of the achievements with regards to quality assurance are as follows:

- 1) An educational innovation, the procurement of a grant of 20 lakhs from WBDBT for BOOST program to set up a Biotechnology Laboratory which will hold workshops and training program in future for the students. This will also be the CIC (Central Instrumentation Facility) for all the required faculties.
- 2) Regular guidance to the junior faculty for improving their API (Academic Performance Indicator) in order to achieve their future goals as well to provide quality education to the main stakeholders of the College, the students.
- 3) Has developed a students' feedback system for evaluation of the teaching learning process.
- 4) Has increased the infrastructural resources by establishment of Digital classrooms for effective teaching learning process.
- 5) Introduction of Add-on course like the Computer literacy program for beginners.
- 6) Office Automation through LAN.
- 7) Network Resource Centre with Wi-Fi and Broadband.



- 8) Well-equipped Library with the unlimited broadband connection
- 9) Establishment of an Eco Club for preparing the Biodiversity Register, to spread environmental awareness
- 10) Has taken initiative to establish solar panels and submitted requisition to the Ministry of Environment, Government of West Bengal and Pollution Control Board, to promote use of renewable energy resources within the College premises.
- 11) Has taken initiative to establish Rain-water Harvesting processes within the College premises.

The second term of IQAC saw the appointment of Dr Aparajita Nag, Associate Professor of Physics, as the coordinator.

From its inception, the main focus of the IQAC was to provide leadership so that the College could be accredited by NAAC accreditation. With this end in aim, the following steps were taken:

- The IQAC held regular meetings with the coordinators of the SSR teams and the heads of departments.
- Data acquisition process was begun centrally. Teachers worked in groups to collect data related to student strength, result, students receiving aids, among others from the office with the help of office staff. Various programmes and seminars organised by the College were also
- programmes listed.
- IQAC visited all departments of the College including office and library except Zoology and Computer Science. Observations and suggestions of the visiting team were given to the departments.
- IQAC coordinator met faculty, non-teaching staff and office bearers of the students union in a meeting held on 17.9.15 and discussed the steps leading to NAAC peer team visit.
- A letter was sent to the Principal suggesting repair and renovation in the College.
- Promotion papers of Dr Kartik Kumar Nandi scrutinized and placed before the selection committee.
- IQAC took part in the selection process of Guest Lecturers in Journalism and Mass Communication and Education, the two new subjects which have been introduced from the 2015-16 academic year. Coordinator, IQAC was a member of the selection committee.
- IQAC team together with Dr Biswarupa Ghosh, coordinator of the SSR Criterion VII took initiative to arrange awareness on Diabetes, E-waste management and anti drug.



b) Implementation of the decisions of IQAC

IQAC gave important suggestions regarding the improvement of the infrastructure of the College.

c) External members of IQAC :

The IQAC has external members in its committee. The President of the Governing body, Prof Dwijesh Dutta Majumdar, an highly acclaimed academician, Professor Emeritus, Indian Statistical Institute and Prof Pankaj Mondal, Assistant Professor of History, Rastraguru Surendranath College are the Government and the University nominee respectively. Prof Asis Kumar Chakraborty, Indian Statistical Institute is the external member. Dr Chakraborty gave suggestions for digitized library and also helped in the feedback analysis.

d) Student and Alumni Participation :

To promote the spirit of collaborative and participative leadership, and to ensure free and effective voice of the student community in the affairs of the institution, the General Secretary of the Students Union has been included in the IQAC. The representation acknowledges the students as key stakeholders in the quality of education. Students union representatives maintain a regular interaction with the IQAC coordinator and Principal and prepare the proposals regarding students' requirements for the development and tables them before the IQAC.

The Secretary of the Alumni association of the College has been included in the IQAC. The alumni provide useful feedback which serve as inputs for the planning and developmental activities of the College.

e) Communication of IQAC with different members of the institution

The Principal and Coordinator IQAC liaison between the IQAC and the departments. The coordinator uses the service of SMS and e-mails to communicate with the heads of the departments and also conducts periodic meetings with them. The coordinator and other members constantly keep in touch with the non-teaching staff of the College.



IQAC Members visiting English department

6.5.2 Integrated framework for quality assurance

- Selection Test prior to the University examination each year
- Periodical class tests
- Tutorials classes conducted by the faculty
- College is strict about the attendance of the students.
- After the selection tests parent-teacher meetings are arranged
- Formulation of teaching plans within the purview of the academic calendar
- Automation of College office
- Introduction of INFLIBNET in the Library
- The Principal conducts regular formal and informal meetings with administrative personnel to ensure that all guidelines are strictly adhered to and matters are disposed off speedily and efficiently.

6.5.3 Training for implementation of Quality assurance



The College makes provisions for the participation of the IQAC Coordinator and Members to attend workshops and seminars on quality enhancement. The idea is to learn the quality benchmark index, disseminate and showcase the achievements of the college especially its Best Practices.

- i) Dr Papiya Chakraborti and Dr Aparajita Nag attended workshop on NAAC organized by West Bengal State Council of Higher Education on 7th January, 2012.
- ii) Dr Papiya Chakraborti (Principal), Dr Aparajita Nag (IQAC Coordinator), IQAC members – Dr Sangita (Basu) Gangopadhyay and Prof Saral Dutta attended the workshop on “NAAC Assessment and Accreditation: Implementation at the institution Level” organized by the IQAC cell of Ramakrishna Mission Vidyamandira on July-13-14,2015.
- iii) The Principal and the IQAC coordinator attended a workshop to create awareness for NAAC accreditation organised jointly by West Bengal State Council of Higher Education and West Bengal State University on 8th September 2015.

6.5.4 Academic Audit

Academic Audit is carried out in the following manner:

1. The Governing Body of the College includes Government Nominee and University nominee. In the GB meetings deliberations on new courses, advanced learning, students progression are conducted leading to policy framing and necessary modifications at IQAC level.
2. The record of classes allotted and actually taken by individual teachers is compiled by the Institutional Head from the self appraisal forms submitted by the faculty members. These are tabled before the Selection/Screening Committee after being analysed by the IQAC team and are forwarded to the Director of Public Instructions, Higher Education Directorate of Government of West Bengal for his perusal during the Career Advancement of individual faculty members.

6.5.5 Alignment of internal quality assurance mechanisms with the requirements of the relevant external quality assurance agencies/regulatory authorities

Brahmananda Keshab Chandra College, Kolkata is a Government Sponsored degree college affiliated to the West Bengal State University since 2008 (previously affiliated with University of Calcutta since inception). These bodies



define the parameters for academic and related quality factors as has been stated in the statute (WBSU statute effective from May, 2015) to which the internal quality assurance mechanism refer for determining the parameters.

- i. The Internal quality assurance mechanism not only includes IQAC but also the teachers as a community and the administrative staff of the College.
- ii. Responding to the policy outlines of the Regulatory Bodies the College pursues a system of
 - (a) Transparent online admission process.
 - (b) Inclusive education, extending facilities to challenged section of community, strictly adhering to the rules framed by the Government on reservation policies.
- iii. A healthy environment is ensured by all units of internal quality mechanism,
- iv. Notices from the University Grant Commission are posted at strategic locations and circulated among the internal stakeholders.
- v. IQAC and Career Counselling Cell works to create opportunities to arrange grooming of students by external agencies.

6.5.6 Institutional mechanisms to continuously review the teaching-learning process

- 1) Departmental meetings and Teachers' Council meetings are regularly conducted with specific agenda to review the academic scenario of the College.
- 2) Internal assessments like class tests, monthly tests, oral presentations on selected topics from the syllabi are in practice.
- 3) Tutorials are conducted for weaker students.
- 4) Students' seminars and poster presentations to showcase student -level research are one of our best practices.
- 5) Student feedback forms on academics and teachers' evaluation also aid in assessment of the teaching learning process.

6.5.7 Communication with internal and external stake holders

a) For the Administration

All **Notices** are circulated widely on the College notice board as well as on the College website (www.bkccollege.org).

Notices on the website have been classified accordingly:



1. **Generic** –All general notices regarding admissions, examinations, holidays.
2. **Tender** - All notice inviting quotations for new infrastructure.
3. **Recruitment** - Various job related notices, for example, JRF for projects, Non-teaching Staff recruitment, recruitment of Part-time/Guest lecturers, among others.

b) For the Students

1. During the commencement of a new Academic session, the **Students Assembly** is conducted by the Principal and all staff members of the College, wherein they are oriented towards a new environment
2. Distribution of the college **Prospectus** is mandatory to the newly admitted students wherein details of the College with the facilities available in campus and the future mission and vision of the college is clearly stated.
3. Distribution of the college **Routine** to the 1st year students is done on the first day of the new Academic Session.
4. **Students Profile Mapping** through distribution of Self–evaluation forms with a questionnaire on **Values and Ethics** has been introduced in 2015-16 session to identify and help in the development of the students enrolled in the College for higher studies.
5. **Students Feedback Analysis** on Academics, Administration, Faculty are in progress to improve the infrastructure and administration of the college and also empower the Faculty.

c) For the Faculty and Staff

All quality policies are suggested and framed by the IQAC, discussed at the meeting of the **Teachers’ Council**, with further deliberations at the **Academic Sub-committee/Development Sub-committee** meeting of the Governing Body and finally ratified in the highest management that is, the **Governing Body** in concurrence with the **Finance committee**, if required.

The faculty adheres to the time frame of the Academic Calendar.

d) For the Guardians

After every quarter of the Academic session, guardians are notified about their wards progress and thereafter called for a meeting with the respective faculty to discuss about the difficulties faced in the teaching learning process.

Feedback from Guardians is also sought for the betterment of the college.



e) **For the Alumni**

The College has a registered Alumni Association which holds regular meetings in the college during holidays or Sundays with prior permission of the Principal. The Alumni association motivates students with prizes and medals. The Alumni also gives feedback on the present scenario of the college and suggests improvement whenever necessary.

f) **Awareness Programmes for all stakeholders**

The College has organized Seminars on Biodiversity Conservation in a man-made ecosystem, Water Conservation, Gender sensitization, Health awareness program like Diabetes, Dangers of Drug addiction and Alcohol and e-Waste management to spread awareness among all stakeholders of the society. The College has participated actively in the awareness programme of Tree Plantation organized by local Municipality and helped in distribution of saplings in the neighbourhood (Refer **Table 3.11 and 3.12**).



7.

Innovations and Best Practices





7.1 ENVIRONMENT CONSCIOUSNESS

7.1.1 Green Audit of the College Campus

Green Audit, essentially a corporate or industrial responsibility is applicable to such institutions which are likely to contribute adversely to the surrounding environment. Bramhananda Keshab Chandra College is fortunate to have a rich biodiversity in its campus and the surrounding area. The green campus provides a healthy environment for the students and staff by reducing the negative impacts of high carbon dioxide emissions prevalent in metro cities.

The high biodiversity of the campus is complemented by the close proximity of the large Bon Hoogly Lake on one side and the undisturbed wetland of Small Industries Service Institute (SISI) on the other side (*see Picture 7.1*). These ecosystems maintain the food chain of various vertebrates and invertebrates that form part of the pollinator population of the plant species in the College campus and its vicinity.

The College has not hired any external consultancy for its green audit. As a part of Green Auditing the college takes into account its green cover and eco-friendly activities towards environment consciousness that has been carried out so far. An assessment for Environment Consciousness has been done in various areas on a scale of 1-3 (one being least and 3 being maximum) and is given below (*refer Table 7.1*)

- **Green area of the campus:**

The total area of the College is 24281 sq. metres of which only 2712 sq. metres ground area is covered by College buildings. Hence, 88% (21569 sq. metres) of the College area has a green cover; 11% of which is under wild vegetation and the rest is occupied by the playground.

The green playground not only promotes biodiversity conservation and reduces dust pollution but also contributes to the physical and psychological well-being of its students. The playground also provides service to the local community who use the field for various sports activities regularly. The Colleges' determination to avoid horizontal expansion of concrete structures into its playground is commendable in today's era of reckless construction activity that degrades the environment. The future infrastructural needs of the institution will be met through vertical expansions of existing/new structures.



- **Flora of the College:**

The documentation of the flora in the College premises shows a wide variety of trees, shrubs, herbs and climbers. The plant species recorded range from Leguminosae, Asteraceae, Euphorbiaceae, others in dicots and Graminae, Palmae.others in monocots.

Picture No. 7.1. The rich biodiversity of BrahmanandaKeshab Chandra College and its surrounding.



The campus with its buildings and playground.



The biodiversity rich rear end of the College.



The biodiversity rich marshy area of adjoining SISI campus (view from the Library).



The rich aquatic biodiversity of the adjoining BonHoogly lake.



The biodiversity surrounding the College playground.



The thick vegetation of the College campus visible at the entrance.

A wide variety of medicinal plants such as *Ecliptaalba* (keshut), *Tinosporacordifolia* (guduchi), *Andrographispaniculata* (kalmegh), *Asteracanthuslongifolia* (kulikhera), *Terminaliaarjuna* (arjun), *Azadiracthaindica* (neem) and others are found in the wild vegetation and few members of Graminae (grasses) in the playground of the College campus.

A total of 70 plant species have been documented so far in various lifeforms; 32 tree species, 05 shrub species, 26 herb species and 07 climber species. In 2013, the documentation of the flora was carried out by members of the Eco Club of the College with the students of IIIrd year Botany General as part of their project work. In 2015, the members of the Eco Club along with students of various other Departments were actively involved in the documentation of the flora within the College campus. In this endeavour the students of various departments got to learn interesting facts about various plants and the environment under the guidance of the teachers of Botany. The Department of Botany has also taken the initiative to put up signs on few large trees stating their taxonomic position and medicinal uses.

- **Herbal Garden:**

The College is highly committed to conserve the rich biodiversity of the College campus and the surrounding area. In this regard the College proposes to utilize about one hectare (10000sq. metres) of its existing unoccupied land for developing a *HERBAL GARDEN*, following the objectives of AYUSH, Government of India initiative. The proposed herbal garden titled *Ethno-Herbal Garden- at the core of medicinal plant conservation, knowledge dissemination and community participation for a healthy life* has been



submitted by the Department of Botany to the State Medicinal Plant Board (SMPB), Kolkata.

This project aims at a paradigm shift in the use and conservation of medicinal plants with the involvement of the College population, their families and the surrounding community. The project will enable the fulfilment of dual goals by creating student-plant partnership projects for academic development and campus development by laying out a garden of medicinal plants along with campus beautification. In its pledge to biodiversity conservation, the College conserves wild plant species on its premises by declaring few spots as reserved pools or sacred spots.

- **Faculty projects aimed at improving Environmental Consciousness.**

Dr. Kartik Kumar Nandi, Department of Chemistry has been awarded the UGC-Minor Research Projects titled- *Green Reagent/methodologies for Organic Chemistry Laboratory (2015-17)* and *One- Pot Green, Polynuclear, Aromatics, Ferrocenyls and Heterocycles (2010-12)*. These projects are engaged in providing alternate solutions to chemical pollution. Dr. Nandi also guides West Bengal State University students' summer project in the area of Green Chemistry.

Dr. Papia Chakraborti, Department of Botany has been awarded with a UGC-Major project titled- *Phyco-diversity of the Bon-Hooghly Lake and adjoining water bodies in Kolkata- status and potential applications* that aims at the conservation of algal biodiversity of the region. She also promotes students interest in the area during aquatic sample collection.

- **Field-Excursions by various Departments (2010-2015):**

Field excursion is an effective means of taking students from the laboratory to the field for first-hand experience in the related subjects. The short distance field excursion of the department of Botany to Botanical Survey of India (BSI), Howrah, Medicinal Plant Gardens and Eco-Parks every year and long distance excursions to Panchalingeshwar in Orissa, and Ravangla in Sikkim brings the students closer to understanding Plant Taxonomy, Ecology and the importance of Biodiversity Conservation. Likewise, the visit to Zoological Parks and long distance visits to Waltair seacoast in Andhra Pradesh, Digha in West Bengal by the department of Zoology improves the students understanding of the faunal diversity and their ecology.

The department of Industrial Fish and Fishery conducts field trips to Regional Research Centre-Rahara at Khardaha in Kolkata. The department of History visits various archaeologically important sites that have both historical and ecological importance focussed on the *Man and Environment* relationship.



- **Environmental activities of the students:**

Members of the EcoClub are involved in various activities for Biodiversity Conservation through World Environment Day celebration on 5th June, Conservation of BonHoogly Lake and Eco Wall magazine. The students of the Eco Club maintain a small medicinal plant terrace garden in the College. The members take turn to water and weed the potted collection.

In 2015, the students of various Departments participated in the District Youth Science Fair organised by the Government of West Bengal. The students participated in the model making competition on the theme of ‘Community Health and Environment’. This opportunity broadened their outlook towards biodiversity conservation and its benefits (*see Picture 7.2*).

In 2014, the Students’ Union under the guidance of the Cultural Committee organised Rabindra Jayanti Celebrations on the Theme – ‘Rabindranath Tagore and the Environment’ where Tagore’s work on environment was discussed through songs, recitations, extracts and essays by the faculty, students and staff of the College.

Picture No. 7.2. Green activities of Brahmananda Keshab Chandra College (2010-2015).



Green Audit Team documenting College Flora.



Celebrating World forestry Month, 2015



College and the nearby schools join hands in plantation drive.



Eco-Club celebrating World Environment Day, 2014



Eco-Club maintaining terrace medicinal plant garden.

7.1.2 Initiatives taken by the College to make an eco-friendly campus

- **Eco-friendly Campus:**

The College maintains a green campus that provides a healthy atmosphere for its stakeholders. The College campus is a no smoking zone.

The College takes proactive steps to warn the young minds against drugs through seminars as delivered by the MUKTI Foundation in 2015 on 'Health is Wealth, Say No to Drugs'.

The students mostly use public transport to travel to the College as it is well connected by bus, train and metro services. Others use bicycle that are parked under lock and key in specific parking zone in the College premises. Only 3-4



cars are parked within the College campus, rest are parked outside the College campus.

- **Energy Conservation:**

Energy conservation is an economical, and more importantly, an ecological need of the day. The College cultivates the practise of switching-off its electrical appliances before students and staffs leave any room. Stickers of *Save energy, Save trees* are pasted all over the College premises. The points at which long duration of illumination is required are fitted with Carbon Fluorescent Lamps (CFL) to conserve electrical energy.

The College strongly promotes paper recycling in all the Departments and offices. Paper recycling boxes are present in all the Departments. Papers are used on both sides before putting into the recycling boxes. The recycled papers are either sold or donated to College staff. The spare pages of past pupil's note books are given to some staff members for their children's school rough work. All the computers are set in *Sleep Mode*. Printing in economic mode, small font, both sides, hand written posters by Student Union members, emailing of official interactions are very much in practice to improve resource and energy conservation.

- **Use of Renewable Energy:**

In the face of global warming and its adverse impact on the environment it is advisable to reduce the use of thermal energy and thermal pollution. The College has the need for illumination in 17 General classrooms, separate departments of Physics, Chemistry, Botany and Zoology, Molecular Biology and Industrial Fish and Fishery. Separate Teachers Staff room, Library, Administrative Office, Girls hostel, Staff quarter, seven separate gendered Bathrooms, Canteen, Gymnasium, Playroom, gendered Students' Common room that are present in the College campus. Other than illumination, electricity is also required in the operation of various electrical appliances such as computers, instruments, electrical pump-motor, audio-visual teaching-learning units. To supplement its large electrical requirement the College is eager to use solar power as an alternative.

A proactive step towards using Green Energy has been initiated by the college through submission of a proposal to the University Grants Commission (UGC) for funding the installation of Solar Photovoltaic Power Plant on the College roof-top, comprising an available area of about 1424 sq. metres. The proposal for Solar Power Plant was first submitted to WBREDA (West Bengal Renewable Energy Development Authority) who carried out the necessary measurements and mapping. However, due to the paucity of funds



at WBREDA, the College had to approach UGC for the financial-aid required in setting up the Solar Plant in the College premises.

- **Rain Water Harvesting:**

The water crisis in West Bengal stems from its short monsoon with torrential rains, much of which is lost as run-off. To conserve the rich biodiversity of the College and its surrounding area the water table of the area needs to be maintained. The College proposes to practise rain water harvesting from its roof top and had submitted a proposal in this regard to the Institute of Environmental Studies and Wetland Management, Kolkata. Unfortunately, the unavailability of funds from the State Government has stalled the process of installing a water harvesting scheme in the College premises as a model for water conservation. The College is trying to raise the fund for the purpose from other sources.

- **Waste Management:**

The College uses the resources of the local municipality for maintaining the waste disposal of the College. The Students Union regularly initiates dialogue with the Chairman of the Municipality for cleaning the unoccupied space of the College campus and the adjoining area. The College has a dumping pit in its backyard and dustbins are provided on every floor for disposal of solid waste.

Wall posters on plastic recycling and plastic pollution had been displayed on World Environment Day, 2015 by the Eco-Club for creating awareness among the students. Solid wastes such as broken furniture, non-functioning instruments, empty chemical bottles, papers from various departments are disposed through auctions and the revenue generated is added to the College fund. The chemical waste of the department of chemistry is disposed safely and care is taken to see that harmful chemicals are not flushed into the common drain.

- **e-Waste management:**

The negative impact of e-wastes ranging from Health hazards to Environmental Pollution has been clearly imprinted in the mind of the students, teachers, staff and parents during the e-waste awareness seminar in the College premises delivered by the NGO, DISHA (Direct Initiative

Picture No- 7.3 Activities for environment consciousness initiated by the college.



Poster for awareness of E-waste disposal.



Awareness seminar on E-waste disposal



Student's participation in District Youth Science Fair 2015.



Science model on Community Health and the Environment at the District Youth Sc. Fair 2015.



Botanical excursion to Ravangla Sikkim 2015



Zoological Study during field excursion to Chadipur, 2014



for Social and Health Actions), Kolkata on 6th October, 2015 (*see Picture 7.3*). Junk is regularly auctioned through proper channel. E-waste, such as desktops, CPU, UPS, floppy's, pen-drives, CD's that are used by the various Departments, office, library and students are deposited in special bins placed in the College premises. This waste is then collected by the DISHA for environment friendly means of waste disposal.

- **Plantation:**

The College undertakes plantation drives during World Environment Day and World Forestry Month celebrating 'Banmahotvasa' (*see Picture 7.2*). The rainy season of June and July, provide the right timing for planting several ornamental, fruit and medicinal plants which are kept in special fencing for at least two years. The students and faculty of the College are encouraged to regularly maintain these plants and develop a passion for biodiversity conservation. Passionate nature lovers of various Departments (faculty/staff and students) regularly bring plants of their choice for planting in the College campus.

- **Seminars/presentations for Environment Consciousness and Sustainable Development:**

The College organises various seminars for spreading environmental consciousness among students and staff. Seminars that have contributed to the overall understanding of the students and faculty regarding the importance of biodiversity conservation and its threats that could affect us directly or indirectly are "*Biodiversity Conservation in Man-Made Ecosystems*" organised by the Department of Botany in 2013, and "*Water Crisis in West Bengal*" organised by the College in 2014. To foster an eco-friendly attitude among the College students and staff the members of the Eco-Club gave presentations on "*Ecology and Sustainable Development*" in 2014 and "*Household Pollutants and its impact on Biodiversity Loss*" in 2015, as part of the World Environment Day celebrations in the College.

- **Impact Assessment on Environment Consciousness:**

The maximum mark attainable under the Impact Assessment of Environment Consciousness in various activities of the College is 45; 15 activities x maximum marks attainable, that is 3 (*refer Table 7.1*). The activities considered have been discussed earlier in details. The students' feedback form included a section on their assessment of being environment conscious themselves and the college's initiative regarding environment consciousness. It is noteworthy that 80% activities of the College have positive impact on



Environment Consciousness. Activities which have scored least are already in the process of improvement.

Table 7.1: Impact Assessment on Environment Consciousness based various activities in the College (2010-15).

No.	Assessment Criterion	Marks Attained on a scale of 1-3 (min-max)
1.	Green area of the campus	3
2.	Floral diversity of the College	3
3.	Herbal Garden (in process)	1
4.	Field-Excursions by various Departments	3
5.	Eco-Club and other students' Activities	3
6.	Projects aimed at improving Environmental Consciousness	3
7.	Eco-friendly Campus	3
8.	Energy Conservation	2
9.	Use of Renewable Energy (in process)	1
10.	Rain Water Harvesting (in process)	1
11.	Waste Management	2
12.	e-Waste management	3
13.	Plantation	3
14.	Seminars/presentations for Environment Consciousness and Sustainable Development:	3
15.	Environmental Consciousness through students feedback form	2
Total		36
Percent Positive Environment Consciousness		80%

7.2 INNOVATIONS

7.2.1 Details of innovations introduced during the last five years which created a positive impact on the functioning of the College.

I. Innovation in Curriculum Aspects

- Students' seminars/projects:



The students in most departments are encouraged to prepare seminars/projects on various topics from the syllabus and outside the syllabus. Students also present their paper in departmental seminars (*refer Table 7.3 and Table 7.4*).

- **Smart and Audio-Visual classrooms:**

Most classrooms are provided with an audio-visual teaching aid that makes teaching and learning both resourceful and interesting. The use of Information and Communication Technologies (ICT) is developing impetus as teaching methodology among all the departments due to the presence of digitised classrooms. In class rooms that do not have such facility, teachers use laptop and desk-top computer, palm-top or table-top projectors for making classroom teaching more interesting. This allows teachers to include relevant photographs, processes and structures to improve the student's learning process.

The department of English utilises the facility of Audio-Visual systems installed in the classrooms to screen movies for better learning of syllabus oriented topics. The department of Botany uses a palm-top projector to screen educational movies on science and environment during its long distance field excursions.

- **DBT-BOOST-I, 2014:**

The College has availed the DBT (Department of Biotechnology) facility of BOOST (Biotechnology Opportunities Offered for Science and Technology Program) that will provide a platform for students to explore and experiment with the tools of biotechnology. This will work to provide a wide scope for improving the students' aptitude towards life science, research and development and future job opportunities.

The BOOST facility would be instrumental in ensuring biodiversity conservation of endangered plants as proposed in the future research plans of the department of Botany through the Plant Rescue Centre.

- **Teaching Aids:**

All departments are equipped with teaching tools such as bottle specimens, permanent slides, charts, maps, and films.

Science departments are specially equipped with various sophisticated instruments such as digital microscope for improving the learning quality.

- **Teaching plan and syllabus distribution:**

Every department works at syllabus distribution among the faculty members at the beginning of every academic session.



- **Class Tests:**

All departments conduct various types of class test (multiple choice questions, short questions, open book and others) throughout the year to hone the learning skills of the students.

- **Parent-Teacher Meetings:**

Most departments conduct parent-teacher meetings at the beginning of the academic session or after the test results to ensure proper development of the students and to prepare them for the final examinations.

- **Extra-Classes:**

Almost every department provides extra classes for the benefit of the students. The science departments conduct extra practical classes for the UG students prior to the university examinations.

- **Students paper presentations in National /State Level Seminars:**

Students are encouraged to present papers/posters/models in national and state level seminars, workshop and environment fairs. Such exposure develops their research and scientific aptitude (*refer Table 7.2*).

Table 7.2: List of students paper/poster/model presentations in National/State seminars outside the College.

No.	Student's Name/Session/ Type of presentation	Presentations	Funding Agency	National/ State	Department
1.	Nitish Paul (2010-11) -Model	Physics behind Electronics/Optoelectronics and their Applications? Organised by Sammilani Mahavidyalaya, Kolkata 1 st Dec, 2011.	UGC	State level seminar	Physics



No.	Student's Name/Session/ Type of presentation	Presentations	Funding Agency	National/ State	Department
2.	Arojit Sen (2012-13) -Paper	Prospects of Indian Ginseng- Ashwagandha (<i>Withaniasomnifera</i>) in West Bengal at MiranliniDattaMahavi dyapith and WBSU from 29 th - 30 th September, 2013.	UGC	National Conference	Botany
3.	Arijit Das Gupta &Lokenath Chowdhury (2013-14) -Paper	'Biofuel (GM)- The Future Source of Renewable Energy' at Environment, Resources & Development ,in the seminar on Botanical Products in Human Welfare at Ramakrisna Mission Vivekananda Centenary College (RKM-VC), Rahara on 11 th Jan, 2013.	UGC	National seminar	Botany
4.	Matrina Chatterjee &AyanKoley (2013-14) -paper	'Roundup ready Herbicide tolerant GM crops' in UGC sponsored National seminar at RKM-VC College, Rahara on 11 th Jan, 2013.	UGC	National seminar	Botany
5.	Lokenath Chowdhury	'Biofuel (GM) - The Future Source of Renewable Energy'	UGC	National seminar	Botany



No.	Student's Name/Session/ Type of presentation	Presentations	Funding Agency	National/ State	Department
	(2013-14) -Paper	Environment, Resources & Development at Lalbaba College, CU, from 4 th -5 th March, 2013.			
6.	Matrina Chatterjee & Ayan Koley (2013-14) -poster	'Roundup ready Herbicide tolerant GM crops and their Environmental Aspects' CU, from 25 th -26 th Feb, 2013.	UGC	State level seminar	Botany

II. Innovation in Students Support and Progression

- **ID cards:**

The College provides photo identity cards for all its students.

- **Anti-ragging Cell:**

The College has zero tolerance towards ragging.

- **Career Counselling Cell:**

Selected faculty of the College provide career guidance and are empathetic to any other needs of the students. Various private companies come for on-campus publicity and recruitments.

- **Sexual Harassment Cell and Grievance Cell:**

The College advocates gender equality. In 2012, a UGC seminar in this regard was organised in the College for gender sensitization along with students' poster presentation through slogans and paintings.

It looks into any social or academic grievances of the students and staff.

- **Equal Opportunities and Minorities Cell:**

It encourages girls to take up State Government initiative -*Kanyashree* scholarship for promoting higher education of girls belonging to economically weaker sections. The College waives full or half fee of financially backward students.



- **Gymnasium and Games Room**

The College has a well-equipped gymnasium for staff and students physical well-being. Separate girls/boys games room are equipped with Table Tennis, Carom board and Chess board and provide recreation to the students and staff.

- **Students' Union Room:**

The members of the Students Union are provided with separate rooms.

- **Canteen:**

The College has a canteen that provides food to the students and staff at subsidized rates. The canteen also caters to examiners during University practical Examinations held in the College.

- **Library access:**

Students can access the Central Library of the College throughout the year with cards that allow issue of two books each time. They also enjoy the access to Departmental Seminar Libraries.

- **Basic Amenities:**

The College takes care of the basic amenities that are required for maintaining students' health and hygiene. Every floor of the College is provided with water purifiers. A water cooler is present in the College. The College has separate male and female wash rooms (lavatories) on every floor. There are separate boys and girls common rooms in the College.

- **Prospectus:**

The College regularly upgrades the College prospectus with full details of the faculty and facilities of every department for the benefit of the students.

- **Students Scholarships:**

The College has scholarships for meritorious, female as well as under-privileged students.

- **On-Line Admission and Counselling:**

The College provides total transparency in the process of admission through an online admission process. The counselling session during admission in first year of UG aims at proper orientation of the fresher's according to their aptitude. Banners depicting courses offered and facilities are put up at strategic points.



- **Departmental Clubs:**

The department of Chemistry has a Chem Club for its students. In 2010, the Chem Club celebrated the 150th Birth Anniversary of the noted chemist, educator and entrepreneur of Bengal, Shri Prafulla Chandra Roy. In 2011, the Club celebrated the International Year of Chemistry to inculcate a spirit of inquiry among the students in the field of chemical sciences. Students of the College are active members of the Eco Club.

- **National Service Scheme:**

Application for National Service Scheme (NSS) unit in the College has been sent to the NSS Regional Office through the NSS co-ordinator of West Bengal State University.

III. Innovations by the Students Union (SU)

- **SU's Corporate Responsibility for important Days celebrations:**

The Students Union celebrates all important occasions in the College such as the College Foundation Day, Teachers Day, College Fresher's and Social, Swaraswati Puja, Republic Day, Keshab Chandra Sen's birthday and Rabindra Jayanti in the College (*see Picture 7.4*). Such opportunities create the platform for preparing the students as responsible citizens.

- **Annual Sports and Cultural Competition:**

The Cultural Committee of the College along with the Students Union organizes cultural competitions in which students showcase their talents. Staff members judge such events. The cultural legacy of the College is evident in its alumni such as Ms. Bristhi Lekha Nandani of the department of Chemistry, an upcoming singer from Sa, Re, Ga, Ma, Pa a reality TV singing competition. The Students Union along with the Sports Committee organizes the Annual Sports. The college gives awards and certificates to students who participate in the sports and cultural competitions.

- **College Magazine:**

The creativity of students is channelled through the annual College magazine, *Lekho Manjari*. Wall magazines provide a platform for students to express themselves on various topics.

- **Community Service**

In 2012, the Students Union organised a Blood Donation Camp. Books from the book bank was distributed among the needy students.



VI. Innovation in Governance, Leadership and Management

- Biometric attendance of faculty and non-teaching staff
- Wi-Fi enabled premises
- On- line admission for students
- Work distribution through various sub-committees
- Active participation of Teachers Council in the administrative and social responsibilities of the College.
- The Co-operative Society of the College including all teaching and non-teaching staff provides a financial safety-net to its members
- Filling up of vacancies
- Open tenders for availing any services
- Library automation
- Office automation
- Corporate salary account with the bank
- Rotational headships in every Department for capacity building and training of the faculty.

Picture No - 7.4. Students' Union (SU) organized events and other activities in the college (2010-2015).



SU members working for Prochesta magazine and hand-made Posters.



Cultural evening organised by SU for Fresher's Social.



SU members organise and participate with Teaching Faculty during RabindraJayanti celebration.



SU members offering their salute to motherland on Republic day.



Students Union organised Swaraswati Puja and Painting Exhibition in the College.



Teachers' Day Celebration with a talk on Dr. Radhakrishnan.

7.3BEST PRACTICES

7.3.1 Give details of any two best practices which have contributed better academic and administration functioning of the College.

BEST PRACTICE –I

1. Title of the Practice :

STUDENTS' SEMINAR AND PROJECTS



2. Objectives:

The students' Departmental Seminar, Classroom Seminar and Projects is a continuous effort from all the Departments to upgrade and prepare the intellectual faculty of the students. Such seminars and projects aim at providing an in-depth knowledge of various complex writings of noted academicians, understanding of scientific phenomena and assessing the current global, social and economic scenario.

3. Context:

A persistent issue that is always faced by the teachers is to capture the students' attention and interest in a subject as they often get bored with regular class room teaching. A topic when discussed as an interactive session through seminars and movie screening or given as a project work excites the student's intellect and makes learning a more fun-filled activity.

4. Practice:

The students engaged in seminars/projects from syllabus oriented topics are guided on the content and mode of presentation. They are provided with internet and seminar library facility of the Departments for preparing their seminars. They are further trained to work on *Microsoft Office* for the projects and presentations. The students preparing posters for presentations in National and State level seminars are further trained to use *Publisher* to prepare and design their own posters. The students carrying out original research work are taught data collection, questionnaire preparation and market survey in related area of research.

5. Outcomes:

In the last five years many departments have organised departmental students' seminar where students presented papers on diverse topics. Classroom seminars have also been organized.

Theseseminars range from topics such as *KathasahityeSaratchandra: Punorbichar O Mulyayan* of Bengali department, Milton's *Paradise Lost* by the students of the English department, "Revisiting the Indus valley Civilization" by History department and unravelling the reproductive structures of the extinct plant-*Archaeopteris* by Botany Department(refer Table 7.3.).



Table 7.3: List of Students' Seminar conducted by the various Departments of the College (2010-2015).

Name of the Department	Topic of Departmental Students Seminar
2014-15	
Bengali	Kathasahitye Saratchandra: Punorbichar OMulyayan
English	Milton's <i>Paradise lost</i>
History	Revisiting Indus Civilization
Botany	Power point presentations of topics from syllabus Such as <i>Acrhaeopteris</i> -an extinct fossil plant and others
2013-2014	
English	Bicentennial of <i>Pride and Prejudice</i>
Physics	1)PAMP and its Applications. 2) Solving quantum mechanical problems using Linear algebra and complex numbers
Chemistry	1)Ferrocene, 2>Welcome to Universe 3)Anti Cancer Drugs.
Botany	Power point presentations on topics from the syllabus such as <i>Zimmermanns' Telome theory</i> , Role of Bryophytes in succession and others.
2012-13	
English	300 years of <i>the Rape of the Lock</i>
History	Ishwar, Sanyasi O Samrat: PrachinBharot



Economics	Structural Change in Indian Economy: An Overview of Service Led Growth
Mathematics	Mathematical Modelling in Pharmacology
	2011-12
English	Elizabethan and Jacobean drama.
	2010-11
Bengali	Sardho-SatobarsherAloy Rabindranath
English	The English Novel
History	Papers presented by students on various topics
Mathematics	Mathematical Bioscience
Chemistry	a)Fundamentals of Physical Chemistry. b)1)Stereochemistry and Chirality 2)SHAB Theory 3)Carnot Cycle 4) Dipole- Moment 5)Green Chemistry

Students' project based on topics from the syllabus has been introduced by the department of Botany for UG honours. Final year Botany general students have also worked on projects that are beyond their syllabus. In these projects a percentage of the practical internal assessment score is credited for project submission. These projects not only depend on literature survey but also collect first hand field/market/peoples' data. Students are trained to develop questionnaires, rapport building, data collection, data analysis and data presentation using the various computer skills.



The various projects that have been completed by the students in the last five years range from ecological and economic status of medicinal plants in West Bengal, waste management, biodiversity conservation of BonHoogly Lake and others (*refer Table 7.4*).

Table 7.4. Lists of Students' project conducted by the Department of Botany(2011-2015).

Year	Theme Areas	Total No. of students guided
2014-15	<ol style="list-style-type: none"> 1. People's Biodiversity Register (PBR) of BonHoogly Lake, Kolkata. 2. Survey of crude drugs in various areas of Kolkata. 	18
2013-14	<ol style="list-style-type: none"> 1. PBR of BonHoogly Lake. 2. Socio-Economics of medicinal plants of West Bengal. 3. Waste management and recycling in BonHoogly. 4. Pharmacognosy and its importance. 	29
2012-13	<ol style="list-style-type: none"> 1. PBR of BonHoogly Lake. 2. Socio-Economics of medicinal plants of West Bengal. 3. Waste management and recycling in BonHoogly. 	27



2011-12	1. Biodiversity survey of BonHoogly Lake. 2.Livelihood options from medicinal plants sold in markets of West Bengal. 3.Edible flowers of West Bengal. 4.Economic Botany.	28
---------	---	----

***In-house projects are not in the University curriculum. However, it is an innovation in Teaching-Learning for improving students learning and their future prospect.**

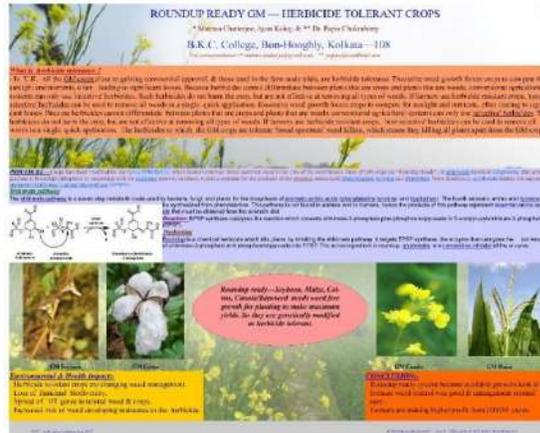
PictureNo 7.5: Students seminars and poster presentations (2010-2015).



Students seminar by English Department by English Department



Students' poster presentation at Environment Fair, 2012.



Students Poster presented at the seminar on Biodiversity Conservation in Man-Made Ecosystem, 2013.



Botany students receiving certificate for poster presentation at Environment Fair, 2012.



Students' interaction in the seminar on Biodiversity conservation, 2013.



Table 7.5.: List of few students' posters presented at Madhyamgram Environment Fair in 2012, 2013 and Departmental Seminar on Biodiversity in 2013.

No.	Title of posters	Name of Student
1.	Neem (<i>Azadiracthaindica</i>) it uses and livelihood options in West Bengal.	Ashima Das
2.	Rudraksha (<i>Elaeocarpussphaericus</i>), the sacred medicine of meditation in Indian tradition.	Baishakhi Saha
3.	Lichen as Bioindicator.	Pranab Saha, Anupama Bairagya, Sumana Hazra Choudhury
4.	Save plants, plants have life-a tribute to Sir Jagadish Chandra Bose.	Ayan Kolay, Arijit Das Gupta, Lokenath Choudhury, Matrina Chatterjee
5.	A survey of Crude Drugs micro-market of West Bengal.	Arjan Munshi, Biswajit Paria, Gargi Ghosh, Arin Adhikari, Tania Ghosh, Proloy Ballav, Swarnali Naskar
6.	Role of Bryophytes in plant succession.	Priyanka Sikdar
7.	Algae as source of Food.	Suschimita Chatterjee
8.	Round-up Ready GM-Herbicide Tolerant Crops.	Matrina Chatterjee, Ayan Kolay
9.	Bio-Fuel (GM) -Future Source of Renewable Energy.	Arijit Das Gupta, Lokenath Choudhury
10.	Quinine and its importance in human life and biodiversity.	Rajkumar Dutta
11.	Resin in human life and biodiversity.	Rituparna Nandi



No.	Title of posters	Name of Student
12.	Sources of Phytosterols and their Effects & Benefits.	Aditya Singha
13.	The queen of herbs-Tulsi.	Tapabrata Mondal
14.	Medicinal plant <i>Eclipta alba</i> (Keshut) in West Bengal.	Pritha Bose
15.	<i>Ocimum sanctum</i> -A Livelihood source in West Bengal	Shreya Ghosh
16.	Economic Prospects of <i>Aloe vera</i> in West Bengal.	Reshmi Nag
17.	Uses of Cinnamon/Dalchini.	Arnab Roy
18.	<i>Cinnamomum tamala</i> (Tejpatta) In West Bengal.	Chayanika Roy, Indrajit Bhowmick
19.	The medicinal uses of <i>Madhucal longifolia</i> .	Priyanka Jana
20.	Citrus varieties of West Bengal.	Tanaya Roy
21.	Medicinal plant- <i>Andropogon paniculata</i> (Kalmegh) in West Bengal.	Rakesh Adhikari
22.	Indian ginseng-Ashwagandha (<i>Withania somnifera</i>) in West Bengal.	Arojit Sen

The students of the department of Botany in collaboration with the NGO Madhyagram Green March have presented the result of many of the assigned projects as posters in the State Government organised Environment Fair in 2012 and 2013 (refer Table 7.5). Many of these projects have original research information based on the students data on livelihood opportunity and uses of medicinal plants collected from the market and public. Students have been trained to present few of these projects and other topics in National Seminars (refer Table 7.2). However, the class projects and seminars from the syllabus are oriented towards improving the students learning skills, research aptitude,



computer skills and confidence. Alumni with such research background have provided consultancy services along with the College in the PBR of Sonamukhi Village (2014) in Bankura District, West Bengal and Village Botanist Manual of West Bengal (2014).

6. Challenges:

It is a challenge to motivate the students to give 100% efforts in their preparation for seminars and projects as there are no marks allotted by the University for such activities in UG programmes of Colleges. Also, this practise requires a lot of extra effort from the guiding teachers to ensure the students complete their designated work on schedule, answer the continuous chain of students query and solve their problems related to the task. In the students' projects on medicinal plants as source of livelihood and crude drugs micro-market in Kolkata, the students face a lot of resistance at the beginning during data collection from the market. The process of rapport building is established by regular revisits to the markets and buying few medicinal plant parts as customer from the vendors.

7. Recommendations:

The University should provide the scope for adding a certain percent of marks from the students' project/seminar presentation to the final result of University Examinations in all the Departments that have no scope for internal assessment.

BEST PRACTICE –II

1. Title of practice:

SIR JAGADISH CHANDRA BOSE ECO-CLUB:

2. Objectives:

The Eco-Club of the College aspires for the all-round development of the students. It aims at encouraging the students to develop scientific aptitude, social empathy and cultural fervour. The Club's ultimate goal is to prepare the students to take responsibility for community development and biodiversity conservation.

3. Context:

The Eco-Club was initiated by the Department of Botany in the year 2013. Initially, the Club was constituted with the students of Botany and its teachers. However, considering the students enthusiasm the Club extended its



membership to the students of Zoology, Chemistry, Molecular Biology and many other Departments of the College.

4. Practice:

The Club has a written Constitution for its smooth functioning. The activities were laid down at the inception of the Club that can be modified according to the need for students' development. All activities of the Club are managed by the students themselves under the supervision of the Teacher-In-Charge with permission from the Head of the Department. The following activities are carried out by the Eco-Club members (*see Picture 7.4*).

- Celebration of World Environment Day with plantation and seminar
- Plantation drive
- Eco-Wall magazine
- Social and Cultural activities
- Maintain the Departmental Medicinal Plant collection
- Cleaning drive
- Conservation of Bon-Hooghly Lake

The Eco-Club students with exceptional talents are given *Certificate of Excellence* and all Eco-Club members are given *Certificate of Membership* at the end of their Final Year.

5. Outcomes:

The Eco-Club members initiated the celebration of the World Environment Day on 5th June every year in the College. The students are regularly encouraged to write on various topics from the syllabus as well as beyond the syllabus for the Eco-Wall Journal that would improve their writing and learning faculty. As mentioned earlier the Club members take keen interest in plantation drives, cultural activities and cleaning drives in the College.

The Eco-Club members of BonHoogly Conservation Group of 2013-14, have done a commendable task of completing the People's Biodiversity Register of the Bon-Hooghly Lake under the supervision of the Teacher-In-charge, Dr. Biswarupa Ghosh. The flora around the lake shows a wide range of Taxonomic families. It provides a scope for study of plants for taxonomic and medicinal importance. Near about 60 to 70 plant species were recorded in and around the lake. A wide variety of vertebrates and invertebrates were also recorded. The West Bengal State bird, the white-breasted Kingfisher (*Halcyon smyrnensis*) was a common observation in the study. The study assessed the age structure, literacy and educational profile as well as employment status of the people around the lake. The study assessed the use of the lake by the community for



various purposes. It was recorded that the lake provides a source of water for various daily activities such as bathing, fishing, washing clothes, washing cars and various religious activities. It was observed that the lake also forms an integral part of their daily social life. The study also assessed the use of the flora for food, medicine, religious activities among others.

In rainy seasons the flooding of the lake with dirty water from nearby drains pollutes the lake and negatively impacts its biodiversity.



Picture No- 7.6.Sir Jagadish Chandra Bose Eco-Club activities for all round development of the students.

CONTRIBUTIONS OF ACHARYA JAGADISH CHANDRA BOSE TO BOTANY

Introduction: Acharya Jagadish Chandra Bose (1858-1937) was professor of physics at Presidency College, Calcutta and retired as senior Professor in 1915. He founded the **Bose Institute** in 1917 to continue his plant physiological investigations. The **Acharya Jagadish Chandra Bose Indian Botanic Garden** situated in Shibpur, Howrah under the Botanical Survey of India (BSI).

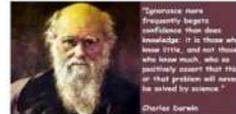


J.C. Boses views on Biological Rhythms or Diurnal (Circadian) Rhythms in plants

J.C. Bose's landmark publications on plant physiology movements and tropisms of plants and diurnal rhythms attracted the attention of contemporary Indians. He was the first to recognize the ubiquitous importance of electrical signalling between plant cells in co-ordinating responses to the environment.

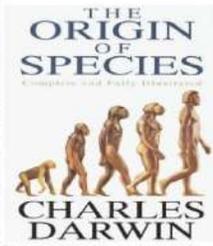
Though the phenomenon of sleep movements, of leaves was established by J. Mairan, J.C.Bose observed that the diurnal movements of leaves "were not restricted to the sunset or to the open air, it is only a little less marked when one maintains the plants continually enclosed in a dark place." as was the interior of a cave. J.C.Bose was also the first scientist to report the

The Mystery of "The Origin of Species" by Charles Darwin



The Origin of Species is an extended argument for the belief that the present living organisms were not created independently by God, but evolved from other, past species through the process of natural selection.

The book discusses how plants and animals exhibit variations in physical traits and behavior when kept domestically and how breeders use these variations to improve their stock. The purpose of this book is to provide an analogy to how nature gradually changes and improves forms of life living in the wild. Now, all forms of life are engaged in an endless struggle for existence with one another. This is the result of two facts: all organisms reproduce very rapidly and there are far too few resources to support all of them.



Therefore, only the strongest organisms that are best adapted to the circumstances in which they live will be able to survive and reproduce. This also implies that when an organism is born with a variation that gives it some advantage that it will have a greater chance of surviving, reproducing, and passing on that trait to the next generation.

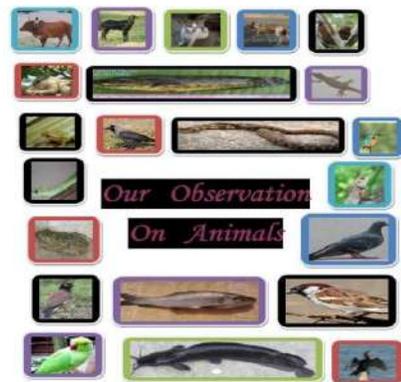
This is known as the process of **NATURAL SELECTION** whereby helpful variations are gradually accumulated. Over time, natural selection can greatly modify organisms to such a point that they no longer belong to the same species rather become a new species, and this is how all species came

By: Arjjoy and Pratuna (BSc. I-II): Index-1.1.2014

Papers presented by Eco-Club members in the Eco-Wall Magazine of the College



Eco-Club members participating in cleaning drive and Cultural Program in



Eco-Club Bon-Hooghly Biodiversity Conservation Group and their observations.



The regular immersion of idols in the lake water results in siltation and introduction of toxic chemicals in the water posing threat to its aquatic biodiversity. The Eco-Club members have tried to create door-to-door awareness among the lake inhabitants regarding the misuse of the lake and the negative impact on its aquatic and terrestrial biodiversity. The Botany Department has started monitoring the algal population of the lake since 2014 and availed a UGC-Major project for Algal Biodiversity Conservation of the area that is marked with many pockets of small and large water bodies for a duration of 3years (2015-2017).

The growth of the Eco-Club is evident in its taking corporate responsibilities for conducting the Green Audit of the College where students and teachers of various Departments joined hands to complete the task. The Club members also maintain the Departmental Herbarium arranged according to the *Bentham and Hookers Natural System of Classification* comprising students' and teachers' collection from local and long distance field excursions. The Club-members also participate in College seminars as volunteers for organising, maintaining decorum, filling up attendance sheets and providing potted plants from their collection for beautification. The effort for formal registration of the Club with funding bodies (Central/State/NGO's) has also been initiated by the College.

6. Challenges:

The challenge faced in carrying out the above stated activities is mainly the time constraint given the huge load of the University Syllabus for three years of the UG programme. On the other hand the students' interest is maintained through voluntary participation that requires a huge deal of constant motivation for the students as well as the Teachers.

7. Recommendations:

The Eco-Club has the potential for developing the all round personality of the students. It also contributes to responsibility sharing of the Department and the College. The ultimate goal of the Eco-Club is to create responsible global citizens of tomorrow that maybe met if the activities of the Club are included in the College curriculum.

The College has included the celebration of World Environment Day in its academic calendar for 2015-16. It would be extremely motivating if some mechanism for providing incentives to the students in terms of grace marks in their University Examination would be available.

The study on PBR of Bon-Hooghly Lake brings to light the need for awareness among the people regarding Biodiversity Conservation and proper utilization



of the lake. At present the Siddha Construction Group is doing a marvellous job of beautifying the surrounding of the lake. The beautification process involves removal of the native vegetation and replacing it with alien species such as *Lantana camera*. *L. camara* is an exotic and invasive species that can dominate the local floral biodiversity. It would be advisable to landscape the area with native species or maintain few patches of wild species around the lake to conserve its rich biodiversity. The area could be developed as a medicinal plant park. Unfortunately, the Department of Environment could not register the Eco-Club for official status and financial support. This support is lacking due to absence of central funding for Eco-Club in West Bengal as is available in other States. The State government should take initiative in this regard for creation of more Eco-Clubs in schools and colleges.

8. Contact Details

Dr. PapiaChakraborti
Principal
BrahmanadaKeshab Chandra College
111/2 B. T. Road
BonHoogly
Kolkata-700108

Telephone:(Off) 033-2577-5878
Email: bkccollegeBonHoogly@gmail.com
Website: www.bkccollege.org

Evaluative Report Of the Departments





Evaluative Report of the Department of Bengali

1. **Name of the Department:** Bengali
2. **Year of Establishment:** 1956
3. **Names of Programmes/ Courses offered (UG,PG,M.Phil.,Ph.D., Integrated Masters; Integrated Ph.D.,etc.):** UG
 - i) B.A. Bengali Honours (1970 onwards)
 - ii) General Courses (1956 onwards)
4. **Names of Interdisciplinary courses and the departments/units involved:**

Students taking up Bengali honours are required to take up two other subjects referred to as General papers. Bengali honours students are offered History along with Philosophy/Elective English/Sanskrit/ Education/ Journalism and Mass Communication.
5. **Annual/ semester/ choice based credit system (programme wise):**

Annual

Students are required to take three examinations conducted by the University, one at the end of each year – Part I, Part II and Part III
6. **Participation of the department in the courses offered by other departments:** Bengali is offered as a general subject with English honours and in B.A. general course.
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses/ programmes discontinued (if any) with reasons:** Nil



9. Number of Teaching posts

Academic Session	Faculty	Sanctioned	Filled
2014 – 2015	Professors	NA	NA
	Associate Professors	CAS	3
	Assistant Professors	4	1
2013 – 2014	Professors	NA	NA
	Associate Professors	CAS	3
	Assistant Professors	4	0
2012 – 2013	Professors	NA	NA
	Associate Professors	CAS	3
	Assistant Professors	4	0
2011 – 2012	Professors	NA	NA
	Associate Professors	CAS	2
	Assistant Professors	4	1
2010 – 2011	Professors	NA	NA
	Associate Professors	CAS	2
	Assistant Professors	4	1

*At the entry level, only Assistant Professor posts are available. They are promoted to the post of Associate Professor through Career Advancement Scheme.

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./Ph.D./M.Phil. etc.,) from 2010 onwards

Name	Qualification	Designation	Specialization	Years of Experience	Ph.D.Students guided for the last 4 years
------	---------------	-------------	----------------	---------------------	---



Name	Qualification	Designation	Specialization	Years of Experience	Ph.D.Students guided for the last 4 years
Smritikana Chakraborty	Ph.D.	Associate Professor	Medieval Bengali Literature	22	Nil
Shampa Bhattacharya	Ph.D.	Associate Professor	Bengali Drama	22	Nil
Songlap Sarkar	Ph.D.	Associate professor	Bengali Novel and Short Story	16	Nil
Sampa Mitra	Ph.D.	Assistant Professor	Bengali Drama	18 (1 year in this college)	Nil

11. List of senior visiting faculty: Not Applicable

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

Academic Session	Name of the guest faculty	Percentage of classes taken
2014-15	NIL	
2013-14	NIL	
2012-13	Prosenjit Mohapatra	7%
2011-12	Abira Sengupta	7%
2010-11	Satabdi Chattopadhyaya	7%



13. Student-Teacher Ratio (programme wise)

Academic Session	No. of honours students	Student: Teacher	No. of general students	Sudent : Teacher
2014-15	59	14.75	306	76.5
2013-14	87	32.33	210	70

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: Not Applicable

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.:
Among present faculties Ph.D : 4

16. Number of faculty with ongoing projects from

a) **National:** One

b) **International funding agencies and grants received:** Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received

#	Title of the Project	Principal Investigator	Time Period	Funding agency	Sanctioned Amount (Rs)
1	Bangla Chotogalpe Prabin Nagarik	Dr. Songlap Sarkar	2013-ongoing	UGC, MRP	1,22,000/-
2	Star Theatre	Dr. Shampa Bhattacharya	2004-06	UGC, MRP	70,000/-



#	Title of the Project	Principal Investigator	Time Period	Funding agency	Sanctioned Amount (Rs)
3	Bangla Sahitye Buddhadev o Bouddhadharmer Pravab	Dr.Shampa Bhattacharya	2009-11	UGC, MRP	1,23,000/-
4	Prachin o Madhyajuger Bangla Sahitye Nimnabarger Abasthan	Dr Smritikana Chakraborty	2004-06	UGC, MRP	80,000/-
5	Sater Dashake Bangla Rangamanche Pratibadi Kanthaswar	Dr. Sampa Mitra	2005-07	UGC, MRP	80,000/-

18. Research Centre/ facility recognized by the University: Nil

19. Publications:

(a) Publication Per faculty: 4.25 (present faculty members are considered)

List of publications of faculty members after joining this college

Faculty	Paper Details	No
Dr.Smritikana Chakraborty	Papers with ISSN/ISBN numbers	4
	Papers without ISSN/ISBN numbers	26
	Books with ISSN/ISBN numbers	2
	Books Edited	1
	Chapter in Books	6
Dr. Shampa Bhattacharya	Papers with ISSN/ISBN numbers	7
	Papers without ISSN/ISBN numbers	4
	Books with ISSN/ISBN numbers	3
	Books Edited	NIL



Faculty	Paper Details	No
	Chapter in Books	NIL
Dr. Songlap Sarkar	Papers with ISSN/ISBN numbers	NIL
	Papers without ISSN/ISBN numbers	11
	Books with ISSN/ISBN numbers	NIL
	Books Edited	NIL
	Chapter in books	1
Dr. Sampa Mitra	Papers with ISSN/ISBN numbers	6
	Papers without ISSN/ISBN numbers	54
	Books with ISSN/ISBN numbers	2
	Books Edited	1
	Chapter in Books	NIL

**See annexure - Bengali.*

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

a) National committees:

- 1) Smritikana Chakraborty: Bangiya Sahitya Parisat (Life Member), Federation Hall Society
- 2) Shampa Bhattacharya: Bangiya Sahitya Parisat (Life Member)
- 3) Sampa Mitra: Natya Shodh Sansthan (Life Member)

b) International Committees: None

c) Editorial Boards:None



22. Student projects

- a) **Percentage of students who have done in-house projects including interdepartmental/ programme:** None
- b) **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/ Industry/ other agencies:** None

23. Awards/ Recognitions received by faculty and students: None

24. List of eminent academicians and scientists/ visitors to the department: 1) Sri Ramkumar Mukhopadhyay 2) Srimati Mallika Sengupta

25. Seminars/ Conferences/ Workshops organized & the source of funding

- a) **National:** UGC sponsored National Conference held in February, 2012
- Thurst Area: Rewriting Cultural, Re-telling Narrative: Gender and the Politics of Representation.
- b) **International:** Nil
- c) **Students' Seminars held in 2010 and 2015.**
- 2010 – Sardho – Satobarsher Aloy Rabindranath
 - 2015 – Kathasahitye Saratchandra : Punorbichar O Mulyayan



26. Student profile programme/ course wise:

(a) Student Admission in Bengali Honours Course

Session	Applications received for 1 st year admission	Admitted 1 st year			Admitted 2 nd year			Admitted 3 rd year		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
2014-15	21	6	9	15	3	19	22	6	16	22
2013-14	48	6	31	37	6	17	23	12	15	27
2012-13	65	7	28	35	16	16	32	9	21	30
2011-12	73	20	24	44	12	19	31	10	26	36
2010-11	73	14	29	43	12	34	46	9	33	42

(b) Student Performance in the Part III examination

Session	Students appeared in Part - III	Pass percentage	First Class
2014-15	23	96	1
2013-14	28	71	1
2012-13	31	84	0
2011-12	36	94	0
2010-11	39	85	1

27. Diversity of Students:

All the students are from West Bengal. There are few students whose original homeland is in some other state but they reside in West Bengal from childhood.

28. How many students have cleared national and state competitive examinations such as NET,SLET,GATE, Civil services, Defense services etc.?



- As this is an undergraduate College, students do not appear in the National level competitions just after leaving the College. But many students are doing research work after completing their Post Graduation studies.
- A large no of students also join school service as teachers after clearing competitive examinations.

29. Student progression (only Honours students):

Student progression Academic Year →	Against % enrolled				
	2014-15	2013-	2012-	2011-12	2010-
UG to PG	30	35	40	30	40
PG to M.Phil.					
PG to Ph.D.					
Ph.D. to Post-Doctoral					
Employed - Campus selection - Other than campus recruitment					
Entrepreneurship/ Self-employment*					

Note: Many of the students who pass out in the general course get employed in different sectors but we do not have the data.

30. Details of Infrastructural facilities:

- Library:** Seminar Library
- Internet facilities for Staff & Students:** Internet facilities available
- Class rooms with ICT facility:** Room no. 15



d) Laboratories: NA

31. Number of students receiving financial assistance from college, university, Government or other agencies

Academic Session	Students receiving financial assistance from college			Students Receiving aids from Government
	Full free	Half Free	Stipend	
2014-15	5	5		A few students received financial assistance over the years from State Govt. office of SDO under different schemes.
2013-14	7	2		
2012-13		21		
2011-12	13	9	4	
2010-11	9	5	4	

32. Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts:

Students' seminars being held with papers presented by student.

33. Teaching methods adopted to improve student learning

- Chalk and Black board are used in day to day learning.
- Charts, maps, and computer aided teaching methods are often used.
- Interactive discussions are being encouraged.
- Students are taught to be methodical in their learning process.
- Proper study materials are given.
- Home assignments and regular class tests.
- Parent – Teacher Meetings are regularly held.
- Special care is being taken for the weaker students.
- Teachers often provide copies of personal books to meet the need of the student.



34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Students of the department actively participated in an awareness programme on “Higher Education for Persons with Special Needs” and “Positive Discrimination” held in the College. Students of the department actively participate in awareness programmes organized regularly by the College.

Extra –Curricular Activities of the students

Students of the Bengali Department are very much enthusiastic in arranging and participating in cultural activities like Freshers’ Welcome, College Social, Rabindra Jayanti , Teacher’s Day Celebration, Cultural Competition, College Sports etc.

35. SWOC analysis of the department and Future plans

Strength

- A laptop and hard drive have been added to the department’s assets and are used in classroom teaching and seminars.
- Students- Teacher interaction beyond the classroom is our strength.
- Student participation in all events of the department and College is imminently noticed.
- Students Seminars organized where students present papers on a theme they decide on.
- Departmental Wall Magazine ‘Spandan’ published in 2010.

Weakness

- Computers/ Laptops to be used more intensively.
- Departmental Library should have sufficient books for the students’ benefit apart from Central Library.

Opportunities

- We hope to set up an interesting collection of DVDs of movies based on



- literary texts.
- Plan to create a Departmental Facebook Account to connect with the departmental alumni.
 - The Department has a plan to start PG classes in the near future, provided the college authority provides proper infrastructural needs.

Challenges

Though our students come from heterogeneous social and economic background yet a large section of our students are from below poverty level and are mostly first generation learners. They are hence unaware of the rich cultural and literary heritage of Bengal. We, the teachers of the Department face a real challenge every year to enhance their interest towards the subject and inculcate a literary sensibility in them.

Future plans

- Audio-Visual room
- Development of departmental library
- Revival of departmental wall magazine ('Spandan')



Annexure - Bengali

Dr. Smritikana Chakraborty

Published Papers in Journal

- 1) Bangla natoke manchosaajar ekti satok, Lekhomanjari, 2013
1. Kobi Nirendranath o tanr CBI er daftar, Korak, prak sharod sankhya, 2013
2. Bhogini Nibedita o BharoterJatityatabadi andolan, Milemishe, 2011
3. Raktakarobi : Kaler pate chirokaler chhobi, Tobu ekoloby, 2010
4. Choturango : Pathak o Darshak moner Dwandosamase, Silhouette, Vol. VIII, 2010
5. Ulkar naam Najrul, Korak, Book- fair issue, 2010
6. Ashapurnar Godya Soili: ek chirayato nirman, Korak, Ashapurna Devi Issue, 2009
7. Punya tirtha Adyapith, Sharadiya Kalabou, 2008
8. Rabindra-Dwijendra samparko : ekti fatoler kahini, Korak, Sharod Sankhya, 2007
9. Janoni : Shuchona lagnei parinato fasol, Korak, Manik Bandopadhyay sankhya, Bookfair issue, 2007
10. Corridor prem, Sharadiya Kalabou, 2007
11. Mongal kavyer bhasha porikroma : rup theke rupantore, Gronthi, Kobita Sonkhya, 2006
12. Dheu, Sharodiya Kalabou, 2006
13. Chena mukh achene Manush, Bangla sahityaPatrika, vol-xiv, Calcutta University, 2005
14. Bangla Rasasahityer dui pothik, Dashodishi, Nababarsho sankhya, 2005
15. Birangana Kavya : Asomayer Porinato fasol, Korak, Chithipatro sankhya, Puja Number, 2004
16. Bangali prodhanato porishrom bimukh –sakkhatkar bhittikanulikhon, Shukhi Grihikon, Annual number, 2004
17. Ebhabei itihash toiri hoy, Nandan, March Issue, 2004
18. Parashuramer galper antarlin bastobata, Pohilo, Boishakh (April) sankhya, 2003
19. Pupurdapur, Parak, Bookfair issue, 2003
20. Lekhak to kal nirapeksho nan, Nandan, May issue, 2003
21. Gangajale ganga pujo, Nandan, August issue, 2003



22. Je lodai nijer shangeo, Nandan, November issue, 2003
23. Nibedita theke Teresa : Ek Abichchhinno Itihas, Turni, Bookfair issue, 1998
24. Charlots Ville 1984, Kalodhwani, 1998
25. Chokher Aloy, Sahitya Rangberang, 1995

Articles/Chapters Published in Books:

1. Kabikangkan Chandi: Nari Manostatwer asamanyor upokriti, pg 317-333, Kabikangkan Mukunder Chandimongal Biksha o samiksha , Edited by Dr. Biswanath Roy, 2014, ISBN 978-93-81170-97-7. Publisher Ebong Mushayra.
2. Swami Vivekananda o Bangla Sahitya, pg. 311-322, Swami Vivekananda sardhosatobarsher aloy. Edited by Rajatshubhra Majumder, 2013, 978-81-295-1793-7. Pub: Dey's Publishing.
3. Alochona: Rabindranather Proti ---Buddhadeb Bose, pg. 84-92, Kobita Adhunikata o Adhunik Bangla Kobita, Edited by Dr. Smritikana Chakraborty, 2012, ISBN 978-81-920392-3-7. Publisher: Vidya.
4. Alochona :Tumishudhuponchisheboishakh, pg- 340-346, Bishnu Deyr Kobita : Nibirh Path, Edited by Dhruvakumar Mukhopadhyay & Rishi Ghosh, 2011, ISBN 978-81-920392-5 -1. Publisher Vidya.
5. Bajari songbadpatre sahitya sankat: ekti bastab prekshapat pg.204-208,Ganomadhyam o Bangla Sahitya, Edited by Dr. Chhanda Roy & Dr. Sanat K Naskar, 2005, University of Calcutta.
6. Unish Shatoker Songbad samoyik patre banglar samaj chitro, pg-1611-1624, Probondho Sanchayan, Edited by Dr. Satyabati Giri& Dr. Samaresh Majumder, 2nd Edition, 2005, Ratnabali.

Books published as single author/editor:

1. Kobita Adhunikata o Adhunik Bangla Kobita, Edited by Dr. Smritikana Chakraborty,2012, ISBN 978-81-920392-3-7. No. of co-author: 27
2. Mangalkavya :Puchchho-grahita o Moulikata pg.1-468., 2011, ISBN 978-81-920392-4-4.Publisher: Vidya Publication



Papers presented/Accepted in Conferences, Seminars, Workshops, Symphosia:

Ekobingsher alloy moddhyo juger mongal kavyer nari–mukh, Evolution of Women’s consciousness, as reflected in Sanskrit & Bengali Literature : A Sociological Analysis, **Departments of Sanskrit, Bengali & Sociology, Jogamaya Devi College, U.G.C sponsored National Seminar, 2011.**

Dr. Shampa Bhattacharya

List of Publications:

- 1) **Guest Editor ;Asamayer natya bhavna Mahendra Gupta Issue, Saratchandra Issue 2013,2014 ISSN2320-9488.**
- 2) Probondho- Shambhu Mitra Galpe O Gaddye ,Sonali Dukkho ,Oct-Dec 2014
- 3) Jatiyatabadi Dwijendralal, 54 Parabas,2014.
- 4) Bratya Basur Sampratik Natak Ek Sadharan Darshaker Nirabharan Abhibyakti, 58 Parabas,2014.
- 5) Nayko Shudhu Halka Hasi Nayko Shudhu Maja, 59,Parabas,2015.
- 6) Tomay Natun Kare Pabo Bale, 60,Parabas,2015.

Book: Bratya Basu Natak theke Nattye; Dip Prakashan [ISBN NO 978-93-84561]

International Seminars with paper

- 1) Porihaasprio Rabindranath; Rabindra Charcha, R.B.U.
- 2) Prosongo swang---Assam University 6,7,8 March 2014
- 3) Unish Shataker Dampatya Bhabna, Tokyo University of Foreign Studies,Japan,December,2015

National Seminars with paper

1. Chaitanya o bangali sanskriti –KalyaniUniversity 27;28 Sept.2012
2. Unish Sataker dampattyabhavna -R.B.U 10.10.2012



3. Thakurbarir Abhinaye Meyera- Dhaka University, Bangladesh, 2009
4. Prihasrasik Rabindranath- Dhaka University, Bangladesh, 2011

Resource person

- 1) Manabividyā Charchar Pariprekshite Mahila Natya Parichalakder Bhumika, Jadavpur University, 2015.
- 2) Ora Kajer Lok, Assam University, September-October, 2015.
- 3) Bangla Thiyetare Sharatsahitya, Mahatma Gandhi College, Puruliya, 2014.
- 4) Mahila Natya Parichalakder Samasya , Women Studies- Jadavpur. University, December, 2014

Dr. Songlap Sarkar

PUBLICATIONS: (Articles, Essays, and Reviews) [without ISSN or ISBN]:

1. Oupanyasik Shyamal Gangopadhyay, Galpa Sarani, 2009.
2. Manabi abhimukh: Manik galpe, Jugasandhikhane Manik bhabna, 2008.
3. Ihar cheye hotem Jodi, Krandasi, 2007.
4. Abhijit Tarafdar, Ebong mushayera, 2006.
5. Bristi namar par, Ebong mushayera, 2006.
6. Agrasi nagar: upadruta lok, Loksanskriti o banglar kathasahitya: Jadavpur University, 2005.
7. Bimal Karer chhotogalpa, Parak, 2004.
8. Lal gane nil sur, Pahil, 2003.
9. Chena jibon ochena protiphalon, Ebong mushayera, 2003.
10. Bangla chhotogalpe samajtantrik bastabata, Ebong eisomoy, 2003.
11. Amrapali banchte chaye, Pahil, 2003.
12. Bipanna chhelebel, Ebong eisomoy, 2002.

Articles/ Chapters Published in Books



1. Samajtantrik bastabata: bastabatar annya ek udvas, Paschyatya sahittatatta o sahityabhabna/ ratnabali, 2014.

Dr. SampaMitra

PUBLICATIONS: (Articles, Essays, and Reviews) [without ISSN or ISBN]:

1. Mrityudanda O Manabadhikar : KholoJanla, Vol-2, Oct, 1996
2. Haita Ba Andhakare Sristir Antima Katha, kalodhvani, Vol-vii, No- 2, Jan;1997.
3. Sabuj Ghasher Niche Rakter Ghran: Kalodhvani, Vol-vii, no-2, jan;1997
4. Bharate Baktigata Aaine Narir Abasthan: Manabadhikar, bull-1, feb-1998.
5. Rajneetir Abamanabayan: Kalodhvani, Vol-vii, no-3-4, Jan1999.
6. Jadi Nadi Bale : Kalodhvani, Vol- xii.No-3-4, 2000.
7. Chalachitra Bastabtar Fantasy: Prativa, Oct;2003
8. Aabar Eseche Ekushe :Prativa, Feb;2004
9. Je Aandhar Aalor Adhik: Dainadin, Oct;2005.
10. Antajartik Aain Laghaner Akti Dristanta: Kalodhvani, Vol-xii No-4, Jan;2005.
11. Bibhutibhushaner galpe teen nari: Seminar Brochure, Bibhutibhushaner Sahitya : Paribesh, Artho-Samajik Prekkhite, Mar;2006.
12. Setubandhan : Prakiti, oct,2006
13. Antaranga Theatre o Teenti Chhoto Natak : Ananayudh, Aug,2006
14. Natya Sodher Pachish Bachhar : Ananayudh, Aug 2006
15. Khamatar Alinde Jhar: Prativa, sep 2006
16. Shohan natyotsab: Ananayudh, nov 2006
17. Nandikar jatiya natyamela: Natya Mukhopatra, Dec 2006
18. Nandikar jatiya natymelay furut: Ananayudh, Jan 2007
19. Nandikarer Jatiya natyomela: wayarha, Ananayudh, jan 2007
20. Nandikarer natun natak :Jaha Chai, Ananayudh, May 2007
21. Dristi o Darshan :Chhaya Dey Jake, Ananayudh, june 2007
22. Shilpi Jakhan garad bhanga :Ananayudh, Jan 2007
23. Natak Theke Natyo ----- Nirmankala Hoye Otha : 9th yr, Sharad Sankhya, Prativa, 2007
24. Tiner Talowar :Etihas Sutro, Tiner Talowar: Ispater Talowar, Ed by Apurbo De, Bangiyo Sahitya Sansad, barodin, 2007



25. Pratibader Uttaradhikar, Prakiti, 21st Feb Sankhya, 2008
26. Headmaster, Galpocharcha Ed by Ujjalkumar Majumder, Bangiyo Sahitya sansad, Prajatantra Dibas, 2008
27. Tumidak Diyechho: Uhini, Ananayudh, Apr'2008
29. Bhagaban Ja Karen ta: Ananayudh, May 2008
30. 2007 er Saassankalan, Ananayudh, May 2008
31. Anyadesher Haripada Samachar, Ananayudh, Sep 2008
32. Bahupeer Birjyoshulka, Ananayudh Jan 2009
33. Dibaratir Kabyo: Rupak o BastaberUbhatan, Ananayudh Aug'2009
34. Kabipatro Shabder Akashe Uran, Little Magazine Katha 2009
35. Saas: Natak o Natyakathay Bharpur, Ananayudh, May'2009
36. Chaturanger Chalachitrayan: Idea theke bastabe, Ananayudh, Feb'2009
37. Sudraker Natak Patrika: 1416, AnanayudhFeb'2010
38. Shabdo Patrikay Utpal Dattaer Barnamay Satta: Ananayudh, May'2010
39. Chokher Ardhekakash, Ananayudh, Sep'2010
40. Paschimbanga sansodhonagarer- Balmiki Prativa, Ananayudh, Oct'2010
41. Prativa Agrawal- kimbadanti nari, Ananayudh, Nov'2010
42. Paschimbanga Natya Academyr – Yogayog, Ananayudh, Mar'2011
43. Chitrarekhadore, Shailpik, Mar'2011
44. Byaktigato ichhe anichhe, khola janala, Sep'2011
45. aamar janyo kendo na—Khola Janala, june 2012
46. mrityu dando o Manabidhikar, Khola Janala, oct'2012
47. narijounata o judhhastra, Khola janala, apr'2013
48. Amina Tylar- sahasi bidrohi bitarkito, Khola janala, Oct'2013
49. Spandaner Rape Particle, Ananayudh, 30 Jul'2013
50. Katha Sahityer Natyorupayan, Bongaon Local Sarat, 1420
51. Caligula- Prachyadaler Abisanbadito Safalyo, Ananayudh, 15 jan'2014
52. Bangla Natak Aitihjyo o Adhunikata, Ananayudh, 30 May'2014
53. Mefisto---Itihaser Arshite Samakaler Rupayan, Ananayudh, 15Sep'2014
54. Sayaker Natak Damini He, Ananayudh, 15 nov'2014

SEMINAR ATTENDED:

1. The Understanding of Sorrow/ U.G.C/ Dinabandhu Mahavidyalaya, 22 to 23 Feb 2001.



2. Environmental crisis in West Bengal / U.G.C / Sree Chaitanya College, Habra, 22.2.2002
3. Problems and Prospects Assimilation in Polythetic Cultures/ U.G.C / Dum Dum Motijheel College, 20-21-.02.2003
4. Agri-Busines in West Bengal: Challenge and Path Ahead/ U.G.C/ Sree Chaitanya College, Habra, 25-09-2004.
5. War- A Threat To Civilisation and Human Progress/ U.G.C./Basirhat College, 14-12-2004.
6. Distance Education- A New Horizon in the Field of Higher Education/ U.G.C/ Gobardanga Hindu College, 25-26-02-2005.
7. The Newly Proposed Examination System of Calcutta University/ WBCUTA/ Sarojini Naidu College, 4-12-2005.
8. Trade Related Intellectual Property Rights (TRIPS): The Interests of the developing nations/ U.G.C/ 28-03-2006.



Evaluative Report of the Department of English

1. **Name of the department:** English
2. **Year of Establishment:** 1956
3. **Names of Programmes/ Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG
 - i) English Honours (started in the academic year 1961-62)
 - ii) English General (started from the beginning, i.e 1956)
4. **Names of Inter disciplinary courses and the departments/units involved:**
Students taking up English honours are required to take up two other subjects referred to as General papers. English honours students are offered History along with Political Science/Elective Bengali/Economics/ Education/ Journalism and Mass Communication.
5. **Annual/semester/choice based credit system (programme wise):** Annual
Students are required to take three examinations conducted by the University, one at the end of each year – Part I, Part II and Part III
6. **Participation of the department in the courses offered by other departments:**
English honours students are offered History along with Political Science/Elective Bengali/Economics/ Education/ Journalism and Mass Communication.
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** None
8. **Details of courses/programmes discontinued (if any) with reasons:** NA



9. Number of Teaching posts

Academic Session	Faculty	Sanctioned	Filled
2014 – 2015	Professors	NA	NA
	Associate Professors	CAS	3
	Assistant Professors	1	1
2013 – 2014	Professors	NA	NA
	Associate Professors	CAS	3
	Assistant Professors	1	-
2012 – 2013	Professors	NA	NA
	Associate Professors	CAS	3
	Assistant Professors	1	-
2011 – 2012	Professors	NA	NA
	Associate Professors	CAS	3
	Assistant Professors	1	-
2010 – 2011	Professors	NA	NA
	Associate Professors	CAS	2
	Assistant Professors	2	1

*At the entry level, only Assistant Professor posts are available. They are promoted to the post of Associate Professor through Career Advancement Scheme.

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil.etc.,)

Name	Qualification	Designation	Specialization	Years of Experience	Ph.D.Students guided for the last 4 years
Suchira Sarkar	M.A.	Head and Associate Professor	Classical Drama in Translation and Adaptation	22	Nil
Nishi Pulugurtha	Ph.D	Associate Professor	British Romantic Literature, Indian Writing in English, Literature	16	Nil



Name	Qualification	Designation	Specialization	Years of Experience	Ph.D.Students guided for the last 4 years
			of the Diaspora, Postcolonial Literature, Film		
Lisa Chatterjee	M.Phil	Associate Professor	British Romantic Poetry	25	Nil
AmbikaB arua	M.A.	Assistant Professor	Critical theory	6 months (5 years in school)	Nil

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

Academic Session	Name of the guest faculty	Percentage of classes taken
2012-13	Rajashree Goswami Amanda Choudhury	7%
2011-12	Rajashree Goswami	11.36%

13. Student-Teacher Ratio (programmewise)

Academic Session	No of Honours students	Student: Teacher	No of General students	Student : Teacher
2014-15	65	22:1	48	16:1
2013-14	84	28:1	34	11:1



14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: One

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.:

PhD. – One

M.Phil– One

P.G - Two

**16. Number of faculty with ongoing projects from a)National
b)International funding agencies and grants received**

Sl. No.	Name of the PI	Title	Funding Agency	Period	Amount
1	Nishi Pulugurtha	Telugu Cinema and the Diaspora: Understading Transnational Cultural Practices	UGC	2015 Ongoing	Rs. 2,00,000/-
2	Nishi Pulugurtha	Diasporic Imagination and Female Subjectivity: A Study of the Poetry of Chitra Banerjee Divakaruni, Meena Alexander, Uma Parameswaran and Sujata Bhatt	UGC	2009-2011	Rs. 1,16,000/-
3	Nishi Pulugurtha	The Influence of British Romantic Literature on Indian Poetry Written in English in Nineteenth Century Bengal	UGC	2004-2006	Rs. 53,000/-



17. **Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:** None

18. **Research Centre/facility recognized by the University:** Nil

19. **Publications:**

a) **Publication per faculty - 30**

- **Number of papers published in peer reviewed journals (national/ international) by faculty and students*:**
- **Number of publications listed in International Database** (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.):
- **Monographs*** - 1
- **Chapter in Books*** - 5
- **Books Edited***
- **Books with ISBN/ISSN numbers with details of publishers***
- **Citation Index***
- **SNIP***
- **SJR***
- **Impact factor***
- **h-index***

**see annexure- English*

20. **Areas of consultancy and income generated:** NA

21. **Faculty as members in**

a) **National committees:** Nil

b) **International Committees:** Nil

c) **Editorial Boards...** Dr. Nishi Pulugurtha is the Editor of the Indian Poetry in English section of the online Literary Encyclopaedia (International), <https://www.litencyc.com>



22. Student projects

- a) **Percentage of students who have done in-house projects including inter departmental/programme: NIL**
- b) **Percentage of student splaced for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies: NIL**

23. Awards/Recognitions received by faculty and students

- UGC Travel Grant awarded by Dr. Nishi Pulugurtha for attending international and peer reviewed conference to present paper titled “Reworking Shakespeare in Telugu Cinema” organized by the University of Georgia (UGA), Athens, Georgia, USA, 12th to 14th November 2015
- UGC Travel Grant awarded by Dr. Nishi Pulugurtha for attending international conference to present paper titled “Coleridge, Poetry, Additions and Revisions” at the 12th Coleridge Summer Conference, organized by Friends of Coleridge, Cannington, Somerset, England, 21st July – 28th July 2010
- Associateship awarded to Dr. Nishi Pulugurtha by the Indian Institute of Advanced Study, Shimla.
- UGC Travel Grant awarded by Dr. Nishi Pulugurtha for attending international conference to present paper titled “Refugees, Settlers and *The Hungry Tide*,” at the Annual Conference of the Association for the New Literatures in English (ASNEL), Friedrich Schiller University, Jena, Germany, May, 2007.

24. List of eminent academicians and scientists/visitors to the department: Professor Amitava Roy and Professor Salil Biswas

25. Seminars/Conferences/Workshops organized & the source of funding

- a) **National** – UGC sponsored National Conference held in February 2012. “Re-Writing Culture, Re-Telling



Narratives; Gender and the Politics of Representation” 9-10February 2012. Organized by the departments of English, Bengali, history and Philosophy in collaboration with Linguistic Research Unit, Indian Statistical Institute, Kolkata. Dr Nishi Pulugurtha was the Convenor of the conference.

b) Students’ Seminars held annually

- 2014 – Milton’s *Paradise lost*
- 2013 – bicentennial of *Pride and Prejudice*
- 2012 – 300 years of *the Rape of the Lock*
- 2011 – Elizabethan and Jacobean drama
- 2010 – The English Novel

c) International: NIL

26. Student profile programme/ coursewise:

Session	Applications received for 1 st year admission	Admitted 1 st year			Admitted 2 nd year			Admitted 3 rd year		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
2014-15	60	15	20	35	2	8	10	8	10	18
2013-14	91	9	27	36	10	15	25	6	3	9
2012-13	145	28	27	55	12	5	17	5	5	10
2011-12	153	31	20	51	4	11	15	16	7	23
2010-11	147	29	28	57	21	17	38	11	13	24

**(b) Student Performance in the Part III examination**

Session	Students appeared in Part - III	Pass percentage	First Class
2014-15	23	74	0
2013-14	28	89	0
2012-13	10	100	0
2011-12	9	89	0
2010-11	17	100	0

**The result is of those students who appeared in the final examination with honours in academic year 2010-11 and so on.*

#Students who have cleared honours but failed in general subject in that year is reflected here.

27. Diversity of Students:

All the students are from West Bengal. There are few students whose original homeland is in some other state but they reside in West Bengal from childhood.

- **28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.:** As this is an undergraduate college, students do not appear in the national level competitions just after leaving the college. But many students are doing research work after completing their Post Graduation studies.

29. Student progression

Student progression	Against % enrolled				
	2014-15	2013-14	2012-13	2011-12	2010-11
Academic Year →					
UG to PG	28	27	30	33	28
PG to M.Phil.					



Student progression	Against % enrolled				
	2014-15	2013-14	2012-13	2011-12	2010-11
Academic Year →					
PG to Ph.D.					
Ph.D to Post-Doctoral					
Employed • Campus selection • Other than campus recruitment				70	80
Entrepreneurship/ Self-employment				5	10

30. Details of Infrastructural facilities

- a) **Library:** Seminar Library
- b) **Internet facilities for Staff & Students:** Internet facilities available
- c) **Class rooms with ICT facility:** Room no 15
- d) **Laboratories:** NA

31. Number of students receiving financial assistance from college, university, Government or other agencies:

Academic Session	Students receiving financial assistance from college			Students Receiving aids from Government
	Full free	Half Free	Stipend	
2014-15	0	0		0
2013-14	1	1		0
2012-13	0	4		0
2011-12	1	0		1
2010-11	1	1		0

32. Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts: Lectures have been delivered by Professor Amitava Roy and Professor Salil Biswas.



33. Teaching methods adopted to improve student learning:

Audio Visual aids are used to improve student learning. Movies adapted from literary texts prescribed in the syllabus are shown regularly to students. Students are encouraged to use internet resources. The department has a Facebook group page which has been functional for over 5 years now.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Students of the department actively participated in an awareness programme on “Higher Education for Persons with Special Needs” and “Positive Discrimination” held in the college. Students of the department actively participate in awareness programmes organized regularly by the college.

35. SWOC analysis of the department and Future plans:

Strength

- The department has an interesting collection of CDs/DVDs of movies based on/adapted from literary texts.
- A laptop and hard drive have been added to the department’s assets and are used in classroom teaching and seminars.
- Faculty interaction is highly commendable
- Student participation in all events of the department and college is imminently noticeable.
- An active Facebook group where alumni and the students of the department interact
- Students are encouraged to use internet resources as study aids
- Annual Students Seminars organized every year where students of the second year present papers on a theme they decide on.

Weakness



- Absence of a departmental magazine/journal
- Adequate Computers/ Laptops

Opportunities

- We hope to be able to use the facilities of the Network resource Centre for the benefit of our Students.
- Plans for a students' magazine has been on the anvil.

Challenges

- Teaching students from the vernacular background poses difficulties.
- Cultural and linguistic differences are often difficult to surmount.

Future Plans

- The department is working towards increasing collections in its departmental library.
- A departmental journal is on the anvil.
- The department hopes to have an audio-visual room.



Annexure - English

- **Nishi Pulugurtha**

PUBLICATIONS

Academic

Journals

International

1. “Translocating Identity in Sino-Indian Diasporic Literature: Kwai-Yun Li’s *The Last Dragon Dance*” in *Asiatic*, Volume 6, Number 1, June 2012, pp. 63-72.
2. “Community, Domestic Space and the Self in Coleridge’s Conversation Poems,” *Coleridge Bulletin*, 34(NS) Winter 2009, pp. 49-55

National

1. “*Bastuhara*, the Dispossessed,” *Refugee Watch*, Vol 41, June 2013, pp. 47-53.
2. “The Telugu Short Story: A Brief Overview,” *Pegasus*, June 2010, pp. 82-86.
3. “British Imperialism and Romantic Imagination: English Poetry in Nineteenth Century Bengal,” *Summerhill, IAS Review* vol. XV, No. 1, Summer 2009, pp. 40-47.
4. “Romanticism: Key Ideas and Concepts” *Journal of the Department of English*, University of Calcutta, Vol. xxxv, Nos 1&2, 2008-2009, pp. 63-72.
5. “Henry Louis Vivian Derozio”(1809-1831), *Pegasus* Special Issue: Indian Writing in English, April 2006, pp. 72-76.
6. “A Critique of the Six Versions of Coleridge’s *Dejection: An Ode*”, *Essays and Studies*, Jadavpur University, XVIII, 2004, pp. 41- 52.
7. “Dancing to the moonlight roundelay: *Kubla Khan*”, *Journal of the Department of English*, University of Calcutta, vol. xxx, nos. 1&2, 2002-2003, pp. 27-34.

Conference Proceedings

International

1. “Refugees, Settlers and Amitav Ghosh’s *The Hungry Tide*” in *Local Natures, Global Responsibilities. Ecocritical Perspectives on the New English Literatures*.



Volkman, Laurenz, Nancy Grimm, Ines Detmers, and Katrin Thomson (Eds.) Amsterdam/New York, NY, 2010, XVII, pp. 81- 90. ASNEL Papers 15.

National

1. “Teaching Jacobean Prose in the Indian Undergraduate Classroom” *Prose Writings of the Seventeenth Century*. ed. Suparna Bhattacharya. Levant Book, Kolkata. 2014, pp. 79-88.
2. “The Problematics of Translation: *Kanyasulkam*,” *Literature in Translation* ed. Ketaki Dutta, Avenal Press, Kolkata, 2013. pp. 92-95.
3. “A Space of Their Own: A Reading OfDivakaruni’s*Arranged Marriage* and *The Unknown Errors of Our Lives*.” *Literary Transactions in a Globalized Context: Multi-Ethnicity, Gender and the Market Place*. Ed. HimadriLahiri and DebasishLahiri. New Delhi: Worldview, 2010, pp. 99 -108.
4. “The Poetry of the Dutts”, in *The Indian ImagiNation: Colonial and Postcolonial Literature and Culture*, ed. Somdatta Mandal, Creative Books, New Delhi, 2007, pp. 185- 192.

Articles in Books

1. “Home, Diasporic Space and Identity in Sunetra Gupta’s *Memories of Rain*” in SahityaAkademi Award-winning English Collections: Critical Overviews and Insights ed. Ketaki Datta. Authorspress, New Delhi, 2014. pp. 257-265.
2. "The Poetry of Toru Dutt", *Ethics and Identity in Contemporary Indo-English Poetry* eds. Nawale, Jha and Chatterjee, Authorspress, New Delhi, 2012.
3. "Memory and the Transformation of Identity in Meena Alexander’s *Fault Lines*" in *Changing Worlds/Changing Nations: The Concept of Nation in the Transnational Era*, eds. Joel Kuortti and Om Dwivedi, Rawat Publications, Jaipur, 2012.
4. “Dreams, Nightmares and *The Ancient Mariner*” in *New Perspectives on British Literature*, Vol. 1, Ed. Sunita Sinha. Atlantic Publishers and Distributors, New Delhi, 2010.
5. “Memory and Nostalgia: The Diasporic Subject in *The Inheritance of Loss*” in *Critical Responses to Kiran Desai*, Ed. Sunita Sinha and Bryan Reynolds. Atlantic Publishers and Distributors, New Delhi, 2009. pp. 189-197.



6. Dislocation and Identity in *The Inheritance of Loss*, “ Indian Booker Prize Winners, Ed. Sunita Sinha. Atlantic Publishers and Distributors, New Delhi, 2009. pp. 97-105.

Monograph

Derozio, Pegasus Press, Kolkata, 2010.

Book Review

1. Review of *Narrative, Identity, and the Map of Cultural Policy: Once Upon a Time in a Globalized World* by Constance DeVereaux and Martin Griffin, *Transnational Literature*, Vol 6, No.2, May 2014.
2. Review of *After the Celebration: Australian Fiction 1989-2007* by Ken Gelder and Paul Salzman. *Transnational Literature*, Vol 5, No.1, November 2012.
3. Review of *Postcolonial Travel Writing: Critical Explorations*, Edited by Justin D. Edwards and Rune Graulund. *Postcolonial Text*, Vol. 6, No.2, 2011.

Encyclopaedic Entries

1. “Meena Alexander”. The Literary Encyclopaedia. <http://www.litencyc.com/php/speople.php?rec=true&UID=69>, 2011.
2. “This Lime Tree Bower My Prison”. *The Companion to Literary Romanticism*. Ed. Andrew Maunder. New York: Facts on File, 2010.
3. “Fears in Solitude”. *The Companion to Literary Romanticism*. Ed. Andrew Maunder. New York: Facts on File, 2010.
4. “Dejection: An Ode”. *The Companion to Literary Romanticism*. Ed. Andrew Maunder. New York: Facts on File, 2010.
5. *Biographia Literaria*. *The Companion to Literary Romanticism*. Ed. Andrew Maunder. New York: Facts on File, 2010.
6. Arun Kolatkar.” *The Literary Encyclopedia*. 15 April 2009. <http://www.litencyc.com/php/speople.php?rec=true&UID=2553>
7. “Nissim Ezekiel”. *The Literary Encyclopedia*. 11 February 2009. <http://www.litencyc.com/php/speople.php?rec=true&UID=1467>.
8. “Kamala Das.” *The Literary Encyclopedia*. 10 October 2007. <http://www.litencyc.com/php/speople.php?rec=true&UID=1141>



9. “Manmohan Ghose.” *The Literary Encyclopedia*. 30 August 2007.
<http://www.litencyc.com/php/speople.php?rec=true&UID=1722>
10. “Sarojini Naidu.” *The Literary Encyclopedia*. 11 Jul. 2007. The Literary Dictionary Company. 14 July 2007.
<http://www.litencyc.com/php/speople.php?rec=true&UID=3285>
11. “Henry Derozio”. *The Literary Encyclopedia*, 10 May. 2007. The Literary Dictionary Company.
<http://www.litencyc.com/php/speople.php?rec=true&UID=1234>.
12. “Toru Dutt” *The Literary Encyclopedia*, The Literary Dictionary Company. 6 March 2007, <http://www.litencyc.com/php/speople.php?rec=true&UID=1364>.

Newspaper Articles

1. “An Insistence on Morality,” *The Statesman*, 18 August 2013
2. “The Dynamics of Romantic Friendship,” *The Statesman*, 5 February 2012
3. “Moral Misgivings,” *The Statesman*, 14 August 2011
4. “An Ignored Writer,” *The Statesman*, 1 August 2011
5. “Dorothy the Diarist,” *The Statesman*, 26 June 2011.
6. “Romantic Radical,” *The Statesman*, 12 June 2011.
7. “Secluded Nook,” *The Statesman*, 8 May 2011.
8. “Samuel’s Fourth Child,” *The Statesman*, 24 April 2011.

Travel Writing

1. “Where Tranquility Reigns Supreme,” *The Statesman*, 23 August 2015, Kolkata
2. “Sounds of Silence,” *The Statesman*, 29 September 2013, Kolkata
3. “Breathless in Binsar,” *The Statesman*, 15 September 2012, Kolkata
4. “Power of Red,” *The Statesman*, 11 August 2012, Kolkata.
5. “Holy Gateway”, *The Statesman*, 13 July 2011, Kolkata
6. “Ocean of Nectar”, *The Statesman*, 21 June 2009, Kolkata
7. “Gateway to the Himalayas: Rishikesh”, *Muse India*, Issue 25, May-June 2009,
<http://www.museindia.com/showfeature14.asp?id=1286>
8. “Kaleidoscopic Land,” *The Statesman*, 14 December 2008, Kolkata
9. “Historical Marvel,” *The Statesman*, 18 May 2008, Kolkata



10. "On an enduring journey," *The Statesman*, 3 November 2007, Siliguri
11. "Where the dawn is beautiful," *The Statesman*, 15 September 2007, Siliguri
12. "Glorious Land," *The Statesman*, 1 July, 2007, Kolkata.
13. "Spellbound in Murshidabad," *The Statesman*, 27 May, 2007, Kolkata.
14. "Tapestry of Life," *The Statesman*, 25 March, 2007, Kolkata.
15. "Holiday in the Himalayas," Boloji.com, <http://www.boloji.com/travels/052.htm>.
16. "Temples Galore," *The Statesman*, 12 November 2006, Kolkata
17. "Weekend Wonder," *The Statesman*, 30 July 2006, Kolkata
18. "Where legends live on," *The Statesman*, 1 January 2003, Kolkata.
19. "Many vistas, many moods," *The Statesman*, 6 November 2002, Kolkata.
20. "Where the heart is," *The Statesman*, 26 June 2002, Kolkata
21. "Harvesting history," *The Statesman*, 12 June 2002, Kolkata.
22. "Small wonder," *The Statesman*, 13 February 2002, Kolkata.
23. "Heart of the hills" with Aishika Chakraborty, *The Statesman*, 3 October 2001, Kolkata



Evaluative Report of the Department of Sanskrit

1. **Name of the department:** Sanskrit
2. **Year of Establishment:** 1956
3. **Names of Programmes/ Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG
Sanskrit General (from 1956)
4. **Names of Interdisciplinary courses and the departments/units involved:** NA
5. **Annual/semester/choice based credit system (programme wise):**
Annual

Students are required to take three examinations conducted by the University, one at the end of each year – Part I, Part II and Part III
6. **Participation of the department in the courses offered by other departments:**
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** None
8. **Details of courses/ programmes discontinued (if any) with reasons:**
NA
9. **Number of teaching posts**

Academic Session	Faculty	Sanctioned	Filled
2014 – 2015	Professors	NA	NA
	Associate Professors		
	Assistant Professors	2	2
2013 – 2014	Professors	NA	NA
	Associate Professors		
	Assistant Professors	2	0
2012 – 2013	Professors	NA	NA
	Associate Professors		
	Assistant Professors	2	0
2011 – 2012	Professors	NA	NA



Academic Session	Faculty	Sanctioned	Filled
2010 – 2011	Associate Professors		
	Assistant Professors	2	0
	Professors	NA	NA
	Associate Professors		
	Assistant Professors	2	0

*At the entry level, only Assistant Professor posts are available. They are promoted to the post of Associate Professor through Career Advancement Scheme.

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D./ M.Phil. etc.)

Name	Qualification	Designation	Specialization	Years of Experience
Swatilekha Poddar	M.A., Registered for Ph.D. programme	Head and Assistant Professor	Veda	1 year and 3 months
Saswati Chowdhury	M.A., B.Ed	Assistant Professor	Dharmaśāstra, Arthaśāstra and Epigraphy	1 year and 3 months (previous experience in teaching is of 9 years in school)

11. List of senior visiting faculty: None



12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

Academic Session	Temporary Faculty	Percentage of lectures by temporary faculty
2013 – 2014	Ganga Rani Sahoo Jayashree Saha	100%
2012 – 2013	Ganga Rani Sahoo Jayashree Saha (from February,2012) Kajal De (up to February,2012)	100%
2011 – 2012	Ganga Rani Sahoo Kajal De	100%
2010 – 2011	Ganga Rani Sahoo Kajal De	100%

13. Student-Teacher Ratio (programme wise)

Academic Session	No of general students	Student : Teacher
2014-15	86	43:1
2013-14	66	33:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: NA

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/ PG:

P.G – Two

16. Number of faculty with ongoing projects from a)National b)International funding agencies and grants received: None



17. **Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:** None
18. **Research Centre/facility recognized by the University:** None
19. **Publications:** None
20. **Areas of consultancy and income generated:** None
21. **Faculty as members in**
 - a) National committees b) International Committees c) Editorial Boards: None
22. **Student projects:** None
23. **Awards/ Recognitions received by faculty and students:** None
24. **List of eminent academicians and scientists/visitors to the department:** None
25. **Seminars/ Conferences/ Workshops organized & the source of funding:** None
26. **Student profile programme/course wise:** Not applicable as the department is a general department.
27. **Diversity of Students:** All the students are from West Bengal. There are few students whose original homeland is in some other state but they reside in West Bengal from childhood.
28. **How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?** Not known
29. **Student progression:**

Due to lack of information, we are unable to produce student progression report.
30. **Details of Infrastructural facilities:**
 - a) Library: Central Library.
 - b) Internet facilities for Staff & Students: Central facility for staff; Students can avail the facility dedicated for them at central library.



31. **Number of students receiving financial assistance from college, university, Government or other agencies:** Subject wise data is not available for general students.

32. **Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts:** None

33. **Teaching methods adopted to improve student learning:**

- Use of chalk and blackboard.
- Use of script-charts.
- Interactive way of learning-teaching.
- Regular class tests.
- Students are encouraged to use internet resources.

34. **Participation in Institutional Social Responsibility (ISR) and Extension activities:**

Students of the department actively participate in awareness programmes organized regularly by the college.

35. **SWOC analysis of the department and Future plans**

Strength

- All the faculty positions are filled up.
- Faculty interaction with students is highly commendable.
- Student participation in all events of the college is imminently noticeable.

Weakness:

- Absence of a departmental magazine/journal.
- Absence of departmental Computers/ Laptop.
- Absence of seminar library.

Opportunities:

Learning Sanskrit offers a good career prospects from teaching to translation. There is an escalating demand of Sanskrit teachers.

The relevance and importance of Sanskrit is not just restricted to culture and academics. Introduction of concepts such as Vedas, Vaastu Shastra, Astrology, Ayurveda, Drama and many more shows that it is not just about learning the language or literature but also about tracing and studying the connection between various areas and Sanskrit. Thus there



are plenty of opportunities for the department to engage in interdisciplinary seminars.

Challenges:

The main challenge in teaching Sanskrit is that it is not communicative as English, Hindi or Bengali. The level of familiarity is limited to what is acquired in class. So, it requires more effort from teachers and students. And also teaching students from the vernacular background poses difficulties.

Future Plans:

- Introduction of Honours course.
- Student seminar on regular basis.



Evaluative Report of the Department of History

1. **Name of the department:** History
2. **Year of Establishment:** 1956
3. **Names of Programmes/ Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG
 - i) History Honours (started in the academic year 1965-66)
 - ii) History General (started from the beginning, i.e 1956)
4. **Names of Interdisciplinary courses and the departments/ units involved:**

The students of the department attend the classes of Environmental Science. Further some of the topics of Political Science and International Relations are a part of the syllabus of History.

Students taking up History honours are required to take up two other subjects referred to as General papers. History honours students are offered with Philosophy/Elective English/Economics/Political Science/ Education/ Journalism and Mass Communication.
5. **Annual/semester/choice based credit system (programme-wise):** Annual
Students are required to take three examinations conducted by the University, one at the end of each year – Part I, Part II and Part III
6. **Participation of the department in the courses offered by other departments:**
 1. History as general subject with honours in Bengali, English, Philosophy, political science .
 2. History as compulsory general subject for B.A General.
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** None
8. **Details of courses/ programmes discontinued (if any) with reasons:** NA



9. Number of Teaching posts

Academic Session	Faculty	Sanctioned	Filled
2014 – 2015	Professors	NA	NA
	Associate Professors	CAS	1
	Assistant Professors	4	2
2013 – 2014	Professors	NA	NA
	Associate Professors	CAS	1
	Assistant Professors	4	1
2012 – 2013	Professors	NA	NA
	Associate Professors	CAS	2
	Assistant Professors	4	1
2011 – 2012	Professors	NA	NA
	Associate Professors	CAS	2
	Assistant Professors	4	1
2010 – 2011	Professors	NA	NA
	Associate Professors	CAS	NA
	Assistant Professors	4	3

*At the entry level, only Assistant Professor posts are available. They are promoted to the post of Associate Professor through Career Advancement Scheme.

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D./ M.Phil.etc.)

Name	Qualification	Designation	Specialization	Years of Experience	Ph.D. Students guided for the last 4years
Dr. Alope Kr. Chattopadhyay	M. A, Ph. D	Associate Professor	Late Medieval India	32 years	Nil
Dr. Aishika Chakrabarty (21.11.1996-29.04.2013)	M.A. M.Phil. Ph.D.	Associate Professor	Women Studies	16Years 4 months	Nil



Name	Qualification	Designation	Specialization	Years of Experience	Ph.D. Students guided for the last 4years
Dr. Indranil Chattopadhyay	M. A, Ph. D	Assistant. Professor	Political History India	13 years	Nil
Md. Mainul Islam	M.A , B.ED	Assistant Professor	Modern Europe	1 year 5 months (11 years 7months in school)	Nil

11. List of senior visiting faculty:

- a) Dr Aishika Chakroborty, Associate. Professor, Women Studies, Jadavpur University
- b) Sri Swapan Kumar Mondal, Associate. Professor, Dinabandhu Mahavidhalaya, Bongaon.
- c) Dr Tapati Bhattacharyya, APC College
- d) Dr Ritu Mathur, Mrinalini Dutta Mahavidyapith
- e) Dr Sukanya Sarkar, Sarojini Naidu College for Women

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

Academic Session	Temporary Faculty	Percentage of lectures by temporary faculty
2013 – 2014	Manasi Guria	20%
	Aparajita Chatterjee	20%
2012 – 2013	Amrita Ganguly	20%
2011 – 2012	Anirban Dhar	20%
2010 -2011	Anirban Dhar	25%

13. Student-Teacher Ratio (programme wise)



Academic Session	No of honours students	Student: Teacher	No of general students	Sudent : Teacher
2014-15	36	12:1	450	90:1
2013-14	45	11:1	422	106:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: NA
15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/ PG.:
Ph.D.: 2, PG: 1
16. Number of faculty with ongoing projects from a)National
b)International funding agencies and grants received: NIL
17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc.
and total grants received: NA
18. Research Centre/ facility recognized by the University: NIL
19. Publications*:

Faculty	Paper Details	No
Dr. Alope Kumar Chattopadhyay	Papers with ISSN/ISBN numbers	NIL
	Papers without ISSN/ISBN numbers	NIL
	Books with ISSN/ISBN numbers	NIL
	Books without ISSN/ISBN numbers	NIL
	Books Edited	NIL
	Chapter in Books	NIL
Dr. Indranil Chattopadhyay	Papers with ISSN/ISBN numbers	10
	Papers without ISSN/ISBN numbers	2



Faculty	Paper Details	No
	Books with ISSN/ISBN numbers	1
	Books Edited	NIL
	Chapter in Books	1
	Papers published in peer reviewed journals	4
	Publications listed in international database	4
Md. Mainul Islam	Papers with ISSN/ISBN numbers	NIL
	Papers without ISSN/ISBN numbers	NIL
	Books with ISSN/ISBN numbers	1
	Books Edited	1
	Chapter in books	NIL

* See annexure - History

20. Areas of consultancy and income generated: NIL

21. Faculty as members in:

a) National committees:

- 1) Indranil Chattopadhyay: Paschimbanga Itihas Samsad (Life member)
- 2) Alope Kumar Chattopadhyay: Paschimbanga Itihas Samsad (Life member)
- 3) Md. Mainul Islam: Paschimbanga Itihas Samsad (Life member)

b) International Committees:

- 1) Indranil Chattopadhyay: Bangladesh Itihas Parisad

c) Editorial Boards: None

22. Student projects: NA

23. Awards/ Recognitions received by faculty and students:

Dr Indranil Chattopadhyay-----Goutam Chttapadhyay Memorial Prize for best article in “Paschim Banga Itihas Sansad 2011”



24. List of eminent academicians and scientists/ visitors to the department:

- a) Dr Aishika Chakroborty, Associate. Professor, Women Studies, Jadavpur University
- b) Sri Swapan Kumar Mondal, Associate. Professor, Dinabandhu Mahavidhalaya, Bongaon,
- c) Dr Tapati Bhattacharyya, APC College
- d) Dr Ritu Mathur, Mrinalini Dutta Mahavidyapith.
- e) Dr Sukanya Sarkar, Sarojini Naidu College for Women

25. Seminars/ Conferences/ Workshops organized & the source of funding:

National: one, **International:** None

- a) Departmental Seminar on ‘1857: Mahabidroho’ held on 07.09.2007.
- b) Educational tour of Department to Victoria Memorial on 12.03.2008.
- c) Departmental Seminar of Students on 10.02.2010..
- d) Departmental Seminar of Students on 03.12.2011.
- e) Organized National seminar on 09-10.02.2011 with Department of Bengali & English in collaboration with ISI Baranager, sponsored by UGC, titled **“Re-writing culture, re-telling Narrative: Gender and the Politics of Representation”**
- f) Departmental Seminar of Students on 10.10.2012, Topic--- **Ishwar, Sanyasi o Samrat: Prachin Bharot**
- g) Educational tour of Department to Indian Museum on 20.12.2012.
- h) Special lecture by Dr Aishika Chakroborty on 19.12.2013.
- i) One day seminar on Revisiting Indus Civilization, speaker Sri Swapan Kumar Mondal, Dinabandhu Mahavidhalaya, Bongaon, Date:14.01.14
- j) One day ‘Foundation Course’ for 1st Year students on Monday, September 07, 2015, collaborated by A.P.C. College, Bhairab Ganguly College, Mrinalini Dutta Mahavidyapith, Sarojini



Naidu College for Women.

Speakers- Tapati Bhattacharyya, Ritu Mathur, Sukanya Sarkar and teachers of the department of History, Brahmananda Keshab Chandra College.

26. Student profile programme/ course wise:

Session	Applications received for 1 st year admission	Admitted 1 st year			Admitted 2 nd year			Admitted 3 rd year		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
2014-15	20	7	7	14	5	3	8	11	3	14
2013-14	24	9	5	14	19	3	22	11	5	16
2012-13	56	25	7	32	12	5	17	4	6	10
2011-12	57	20	7	27	6	7	13	8	7	15
2010-11	32	12	11	23	11	11	22	14	13	27

(b) Student Performance in the Part III examination

Session	Students appeared in Part - III	Pass percentage	First Class
2014-15	11	90.90%	0
2013-14	15	53.33%	0
2012-13	10	100%	0
2011-12	13	84.61%	0
2010-11	28	89.28%	0

*The result is of those students who appeared in the final examination with honours in academic year 2010-11 and so on.

#Students who have cleared honours but failed in general subject in that year is reflected here.



27. Diversity of Students: All the students are from West Bengal. There are few students whose original homeland is in some other state but they reside in West Bengal from childhood.

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?: No Data found

29. Student progression:

Student progression	Against %enrolled				
	2014-15	2013-14	2012-13	2012-11	2011-10
Academic Year →					
UG to PG	4				
PG to M.Phil.					
PG to Ph.D.	1				
Ph.D. to Post-Doctoral					
Employed • Campus selection • Other than campus recruitment					
Entrepreneurship/ Self-employment					

30) Details of Infrastructural facilities

a) Library: Central library and the depart has its own seminar library which is quite rich in collection of books .

b) Internet facilities for Staff & Students: The college has internet facility for staff members and students .

c) Class rooms with ICT facility: Room No 15 is equipped with ICT facility

d) Laboratories: NA



31. Number of students receiving financial assistance from college, university, Government or other agencies

Academic Session	Students receiving financial assistance from college			Students Receiving aids from Government
	Full free	Half Free	Stipend	
2014-15	10	2	0	A few students received financial assistance over the years from State Govt. office of SDO under different schemes.
2013-14	4	10	0	
2012-13	0	15	0	
2011-12	5	0	1	
2010-11	7	6	2	

32. Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts:

- a) Departmental Seminar on ‘1857’ held on 07.09.2007.
- b) Educational tour of Department to Victoria Memorial on 12.03.2008.
- c) Departmental Students’ Seminar on ‘Madhyajuger Bharater Samaj, Arthaniti o Rajniti’ on 10.02.2010.
- d) Organized National seminar on 09.02.2011 with Department of Bengali & English in collaboration with ISI Baranagar, sponsored by UGC.
- e) Departmental Seminar of Students on 03.12.2011.
- f) Departmental Seminar of Students on 10.10.2012, Topic Ishwar, Sanyasi o Samrat: Prachin Bharot
- g) Educational tour of Department to Indian Museum on 20.12.2012.
- h) Special lecture by Aishika Chakroborty on 19.12.2013.
- i) One day seminar on Revisiting Indus Civilization, speaker Swapan Kumar Mondal, Dinabandhu Mahavidhalaya, Bongaon, Date:14.01.14
- j) One day ‘Foundation Course’ for 1st Year students on Monday, September 07, 2015, collaborated by A.P.C. College, Bhairab



Ganguly College, Mrinalini Dutta Mahavidyapith, Sarojini Naidu College for Women. Speakers- Tapati Bhattacharyya, Ritu Mathur, Sukanya Sarkar and teachers of the department of History, Brahmananda Keshab Chandra College.

33. Teaching methods adopted to improve student learning:

- Black Board and Chalk (Traditional tools) are used for teaching.
- Power point presentation is used as a modern teaching aid.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

All of faculty members and students of the department participated in centrally organized activities of the college.

35. SWOC analysis of the department and Future plans

Strength

The Department since its inception in 1956 has a well furnished library. The Central Library of the College is well equipped with varieties of history books consisting of both the texts and references. Many of the books are useful for research purposes. The College grants funds for purchasing books almost regularly. The Department has a Seminar Library of its own which furnishes books for the Honours students.

The Department has been nurtured by learned teachers since 1956. At present, the Department has three teachers with academic potential and dynamic outlook. Two permanent Professors have obtained doctoral degrees while the other is on the way of completion of his doctoral research. The Professors have a research orientation and are pursuing their research works. The Department is fortunate to have a strong student enrolment. Students take admission both in Honours and General courses. The Honours students join P.G. Courses in History in different universities of West Bengal for obtaining Master degree. Others strive for employment in Primary and Secondary schools or in private sectors.

The Department almost resembles a school i.e. regular classes are held in the Department both at Honours and General level. Besides this, the Department arranges for tutorials, remedial coaching, and other interactive programmes to encourage students in the learning process. Students are often taken to



libraries outside the college premises so as to acquaint them with different kinds of books and journals.

The students are very active and take a keen interest in cultural and extracurricular activities.

Weakness

The department requires more space for expansion. A bigger room with furniture, projector, almirahs and Computer facilities will be more beneficial for classroom interaction and communication with the students. Travel and Historical tour is not included in the syllabus of the Department. The college also has no allotment of adequate funds for the above purpose. So, it would have been encouraging as well as educative if historical travelling is incorporated in the syllabus.

Project on History by the students is not included in the curriculum. So the subject becomes much more theoretical rather than practical based.

Most of the students continue their studies in Bengali version. Many books and journals which are written in English therefore cannot be read by them. Often communication and exchange of ideas become difficult due to language constraint. This also acts as a hindrance for the students in competitive exams and higher studies.

The students of the department mostly come from insolvent families. Although they are diligent industrious and inquisitive, but they often fail to complete their studies due to families' monetary problems and parents eagerness to get their daughters married prior to the completion of honours courses. So some of the students remain incapable in completing their honours course. Further many of them are first generation learners. So they are deprived of educational support from the family side. Often they take up part time jobs for meeting the family needs. So their whole time cannot be concentrated for academic purposes. Many of them are compelled to shift from Honours to general studies due to lack of attendance in Honours Class and the inability to cope up with the pressure of Honours studies.

Opportunities

The department is willing to open up the post graduation course in History in



the college campus for benefitting the students and enriching the department.

The department will attempt to bring out a journal of its own. The teachers, research scholars and the students will contribute articles on different challenging social problems in the historical journal. It would be an important medium to develop students' writing skills and teachers' research potential.

Challenges

The department is interested in launching a Historical Club along with the other History departments of the neighboring colleges. This would help in group discussions, exchange of ideas, debate, elocution among the teachers and the students. The department will be endeavoring to arrange more seminars on topics from social sciences. If the department receives financial support from the college the teachers are willing to take the honours students for excursion to historical places which might be equated with project work. More eminent personalities from different faculty will be invited for delivering lectures to the students.

The teachers of the department nurture an ambition to excel the department in academic field and also train up the girls to become self dependent and a better human being of the future.

Future Plans

The department has a future plan to organize a departmental club in collaboration with the ex-students of the department for training and equipping the students for their future advancement and entry in service sectors after completion of their honours and masters in History.



Annexure - History

Academic profile of Dr. Alope Kumar Chattopadhyay

List of Publications (Articles):

1. “Aitihāsik Prekshapate Uttarbānger Bāngarh”, *Palligram*, Calcutta, 1397 BS.
2. “Itihās Aloy Bāngarh”, *Smaranika* (proceedings of the first annual dist. Conference of the WB Head masters’ association), West Dinajpur, 1993.
3. “Eto Rokto Keno?”, *Akapat*, Dakshin Dinajpur, 1400 BS.
4. “Subhashchandra o Bartaman Prajanma”, *Pura Pathik*, Calcutta, 1997.
5. “Subhaschandra: Sada Bitorker Kendrabindu”, *Turni*, Calcutta, 1404 BS.
6. “Rabindranath o Itihās Chetana”, *Akapat*, Dakshin Dinajpur, 1400 BS.
7. “Sekaler Durgapujo: Phire Dekha”, Souvenir of Uttara Puja Committee, Kolkata, 2014
8. “Anugatyā o Pratibad: Mahabidrohe Sikshito Bāngalir Bhumikar Punar Mulyayon”, Proceedings of ICHR sponsored Nation Seminar on Revisiting 1857: Significance and Relevance, Kolkata, 2008.

Paper presented:

1. *The Petty Bengali Merchants in the late 19th Century Bengal*, Refreshers Course of the Dept. of History, Calcutta University, Calcutta, 2001
2. *Mahabidroher prekshite Bangla o Bangalee* UGC sponsored seminar at Professor Syed Nurul Hassan College, Farakka on 10.01.2008
3. *Mahabidroho o shikshito Bangalee* in a seminar on “The great upsurge of 1857 and its legacy” at Sri Krishna College, Nadia on 22.01.2008

Academic profile of Dr. Indranil Chattopadhyay

List of Publications:

1. “Bharat Bangladesh Samparka: Prasanga Gangar Jal Bantan” *Itihās Anusandhan*, vol –23,2006.



2. “**Bhikhur Birudhe Sena: Myanmar-e Ganatantrer Larai**”, *Yojna(Bangla)*, Ministry of information and Broarcasting, Govt of India,Jan 2008. ISSN 0971-8400
3. “**Moitrir Bacharei Sankat: Bharat Chin Samparker Atit O Bartaman**”, *Yojna (Bangla)*, Ministry of information and Broarcasting, Govt of India, Feb 2008. ISSN 0971-8400
4. “**Pakistan: Atit O Bartaman**”, *Yojna(Bangla)*,Ministry of information and Broarcasting, Govt of India,May, 2008. ISSN 0971-8400
5. “**Bharotio jatiotabad O Itihas Rachana Itihas**”, *Itihas Anusandhan*, vol – 23,2010.
6. “**Freedom with Partition: Tensions in Jalpaiguri**”, Published in S. Debnath(ed) Social and political tensions in North Bengal since 1947, National Library, Siliguri, 2007. ISBN-81-86860-23-1.
7. “**Sadhinata Uttor Duarser Sramik Neta Kalasaheb Besterwitch**”, *Itihas Anusandhan*, vol –26,2011. ISBN-978-81-910874-1-3
8. “**Jatipunjer Nirapatta Parisad: Tatyia O itihas**”, *Yojna(Bangla)*, Ministry of information and Broarcasting, Govt of India,March,2011. ISSN0971-8400
9. “**Food crisis in Duars during 1958-60**’, **Anchalik itihas O tar upada**” ,*Aruna*, Kolkata,2010. ISBN-978-93-80755-20-5
10. “**Itihas O Sahitya:Bharot Charo Andolan O Narayan Gangopadhyay**”, *Itihas Anusandhan*, vol –27,2013. ISBN-978-81-910874-3-7.
11. “**Prachin Bharote Panchabati O Paribesh: Ekti Parjalochona**”, *Itihas Anusandhan*, vol –28,2014. ISBN-978-81-910874-3-7.
12. “**Samokalin Bangali Buddhijibider chokhe Protham Biswajuddha**”, *Itihas o Sangaskriti*,vol-1,2015, ISBN 978-81-926316-2-2.

Seminars with papers:

1. Presented paper on ***Bingsa Sataker Englishbazar:Pourasabha O Rajniti*** Two days U.G.C sponsored state level Seminar on The evolution of urban centers and urban cultures in India, A.P.C.College,23.12.11.
2. Presented paper on ***History of Human right movement in India*** Two days U.G.C sponsored state level Seminar on History of Public Opinion, New Alipore College,25-26.09.12.



3. বাংলাদেশ ইতিহাস পরিষদের দশম দ্বিবার্ষিক সম্মেলনের(১৪-১৫-ই মার্চ,২০১৪) জন্য প্রবন্ধ ভূটানে রাজা রামমোহন রায়ের রাজনৈতিক সফর
4. All India history congress,28th-30th Dec 2014,Delhi, presented a paper titled,*An ecological review of Mahabharata*.
5. Full Paper (serial no 719) For international seminar on **Human values in Indian perspective** (April 29 & 30, 2014) in **Sidho-Kanho-Birsha university**, Purulia, West Bengal. জল –বাস্তুতন্ত্রঃ প্রাচীন ভারতের জলভাবনার একটি মূল্যায়ন
6. পশ্চিমবঙ্গ ইতিহাস সংসদের ৩১ তম অধিবেশনের(কলকাতা বিশ্ববিদ্যালয়, ২২-২৪ জানুয়ারি,২০১৫) জন্য প্রবন্ধ আর্থতন্ত্র ও জাতপাতের আন্দোলন
7. Presented paper on International Conference on **Modern Trends on Social and Basic Sciences- MTSBS-15**,organized by Alipurduar College from 27-28th March,2015.
8. Presented paper on **International Conference organized by Chittagong University** from 14-15 Nov,2015.

As Resource person

1. 1st Annual Conference of the History Club on 14.12.2014 under department of History Bongaon Dinabandhu Mahavidyalaya.

Invitee Lecture:

1. Inaugural programme of the History Club on 13.12.2013 under department of History Bongaon Dinabandhu Mahavidyalaya.
2. Birati Mrinalini Dutta Girls College on *Aryan homeland Problem: Its theory, making and application* in the students seminar of our college organised by the department of History on 09.09.2014.
3. Behala College 100 years of 1st world War on 22.12.14.
4. R.B.C College 100 years of 1st world War on 09.12.2015

Award for best article:

Goutam Chattopadhyay memorial prize for best article *Sadhinata Uttor Duarser Sramik Neta Kalasaheb Besterwitch*, Itihas Anusandhan, vol. –26, 2011.

Book:



1. *Antarjatik Samasya Palestine*, ISBN-81-906249-9-7 Mitram Pub, Kolkata, 2008

Academic profile of Md. Mainul Islam

List of Publications:

- 1) “Bangali Na Musalman”, *Gandhabanik Patrika*, Sraban 1414 BS.
- 2) “Evaluation of Indian Education”, *Mahiruha Patrika* 2005.
- 3) “Bharater Sampradayikata O Rajniti”, *Mahiruha Patrika*, 2011.
- 4) “Karmajogi Sanyasi”, *Mahiruha Patrika*, 2012.
- 5) “Rabindra Chintay Bharatbarsha”, *Mahiruha Patrika*, 2013.

Books:

Prasanga Hindu Musalman: Sampradayikata O Sampriti; ISBN: 978-81-921186-9-7, Banglar Mukh Prakashan, January 2013.

Paper presented:

- 1) *Krishi Banam Shilpo! Natun Bhabna, Paschim Banga Itihas Samsad*, Kolkata, 2008.
- 2) *Bharatbarsher Nimnabargiyo Itihas Charchay Rabindranath*, History Club, Bongaon, 2014.
- 3) *Banglay Islamer Rajnaitik Bijay O Muslim Samajer Pratishtha*, Paschim Banga Itihas Samsad, Kolkata, 2015.



Evaluative Report of the Department of Philosophy

- Name of the department:** Philosophy
- Year of Establishment:** 1956
- Names of Programmes/ Courses offered (UG,PG,M.Phil.,Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG
 - Philosophy Honours (started in the academic year 1997)
 - Philosophy General (started from the beginning, i.e 1956)
- Names of Interdisciplinary courses and the departments/units involved :**

Students taking up Philosophy Honours are required to take up two other subjects referred to as General papers. Philosophy Honours students are offered History along with Political Science/ Sanskrit/ Education.
- Annual/semester/choice based credit system(programme wise) :** Annual
Students are required to take three examinations conducted by the University, one at the end of each year – Part I, Part II and Part III
- Participation of the department in the courses offered by other departments :**
 - Philosophy as general subject with Honours in History, Political Science, Bengali.
 - Philosophy as compulsory general subject for B.A General.
- Courses in collaboration with other universities, industries, foreign institutions, etc.:** NA
- Details of courses/programmes discontinued(if any)with reasons :** NA
- Number of Teaching posts:**

Academic Session	Faculty	Sanctioned	Filled
2014 – 2015	Professors	NA	NA
	Associate Professors	CAS	1
	Assistant Professors	3	2



Academic Session	Faculty	Sanctioned	Filled
2013 – 2014	Professors	NA	NA
	Associate Professors	CAS	1
	Assistant Professors	3	0
2012 – 2013	Professors	NA	NA
	Associate Professors	0	0
	Assistant Professors	3	1
2011 – 2012	Professors	NA	NA
	Associate Professors	0	0
	Assistant Professors	3	1
2010 – 2011	Professors	NA	NA
	Associate Professors	0	0
	Assistant Professors	3	1

*At the entry level, only Assistant Professor posts are available. They are promoted to the post of Associate Professor through Career Advancement Scheme.

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./ M.Phil. etc.,)

Name	Qualification	Designation	Specialization	Years of Experience	Ph.D. Students guided for the last 4 years
Smt. Sangita Sengupta	MA, M.Phil	Associate Professor	Logic	16 years	Nil
Sri Imam Hossain	MA	Assistant Professor	Nyaya	1 year (8 years as Part time Lecturer)	Nil



Name	Qualification	Designation	Specialization	Years of Experience	Ph.D. Students guided for the last 4 years
Smt. Sampa Biswas	MA	Assistant Professor	Nyaya Vaisesika	1 year (4 years 6 months in school)	Nil

11. List of senior visiting faculty: NIL

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

Academic session	Guest faculty	Percentage of lectures
2013- 14	Uttam Kumar Maiti, Manikuntala Roy(Both till March 2014)	27.27
2012-13	Uttam Kumar Maiti, Manikuntala Roy, Mithu Majumder(till March 2012)	34.09
2011-12	Uttam Kumar Maiti, Manikuntala Roy, Kamalika Sinha(till May 2010)	34.09
2010-11	Uttam Kumar Maiti, Urmimala Dasgupta	27.27

13. Student-Teacher Ratio (programme wise):



Academic Session	No of honours students	Student: Teacher	No of general students	Sudent : Teacher
2014-15	8	3:1	190	63:1
2013-14	13	4:1	216	72:1

14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled:** NA

15. **Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.:**

Name	Qualification
Smt. Sangita Sengupta	M.A, M.Phil
Sri Imam Hossain	M. A
Smt. Sampa Biswas	M.A

16. **Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:** NIL

17. **Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:** NIL

18. **Research Centre/facility recognized by the University:** NIL

19. **Publications:** The faculty members do not possess any publications during this period.

20. **Areas of consultancy and income generated:** NIL

21. **Faculty as members in:**

a) National committees b) International Committees c) Editorial Boards: NIL

22. **Student projects:**

a) Percentage of students who have done in-house projects including interdepartmental/programme: NIL



b) Percentage of students placed for projects in organizations out side the institution i.e. in Research laboratories/Industry/ other agencies:
NIL

23. **Awards/Recognitions received by faculty and students:** NIL

24. **List of eminent academicians and scientists/visitors to the department:** NIL

25. **Seminars/Conferences/Workshops organized & the source of funding:**

i) Departmental Seminar on 03/03/2010 titled “*Samkhya-O-Yoga Darsane Iswar*” funded by B.K.C College.

a) National

ii) UGC sponsored two day National Conference on 9-10 Feb, 2012 titled “*Re-writing culture, re-telling Narrative: Gender and the Politics of Representation*” organized jointly by Dept. of Philosophy, English, Bengali, History in collaboration with Indian Statistical Institute, Kolkata funded by UGC.

b)International: Nil

26. **Student profile programme/course wise:**

Session	Applicati on Received for 1 st year admission	Admitted 1 st year			Admitted 2 nd year			Admitted 3 rd year		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
2014-15	3	0	1	1	0	0	0	1	6	7
2013-14	07	0	3	3	1	6	7	0	2	2
2012-13	15	2	8	10	0	8	8	0	4	4
2011-12	18	4	8	12	0	4	4	0	0	0
2010-11	27	2	11	13	1	1	2	4	22	26

(b) **Student Performance in the Part III examination**



Academic Session	Students Appeared in part-III exam	Pass Percentage	1 st class
2014-15	7	100%	0
2013-14	2	100%	0
2012-13	10	75%	0
2011-12	0	0%	0
2010-11	21	86%	1

*The result is of those students who appeared in the final examination with honours in academic year 2010-11 and so on.

#Students who have cleared honours but failed in general subject in that year is reflected here.

27. **Diversity of Students:** All the students are from West Bengal. There are few students whose original homeland is in some other states but they reside in West Bengal from childhood.
28. **How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?:** No Data found
29. **Student progression :** No Data found
30. **Details of Infrastructural facilities:**
- a) Library: Department has its own seminar library which is quite rich in collection of books.
 - b) Internet facilities for Staff & Students :The college has internet facility for staff members and students .The department has one computer with LAN connection and internet facility.
 - c) **Class rooms with ICT facility:** Room No 15 is equipped with ICT facility.
 - d) **Laboratories:**NA



31. Number of students receiving financial assistance from college, university, Government or other agencies

Academic Session	Students receiving financial assistance from college			Students Receiving aids from Government
	Full free	Half Free	Stipend	
2014-15	0	0	0	A few students received financial assistance over the years from State Government office of S.D.O under different schemes.
2013-14	0	0	0	
2012-13	0	3	0	
2011-12	3	1	0	
2010-11	9	3	1	

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts : Nil

33. Teaching methods adopted to improve student learning :

- Use of blackboard, chalk and duster
- Power point presentation

34. Participation in Institutional Social Responsibility(ISR) and Extension activities : All of faculty members and students of the department participated in centrally organized activities of the college .

35. SWOC analysis of the department and Future plans:

Strength

- Student Teacher ratio enables teachers to give individual attention to the need of student.
- Regular class test are held to assess and improve students ability of learning.

Weakness



- Decrease in students enrollment.

Opportunities

- Full strength of the enriched faculty.

Future Plan:

- The Department of Philosophy has a plan to introduce Post Graduate Course.
- Plan to organize National and International conferences, seminars supported by several National Funding Agencies
- Plan to publish Departmental Journal.
- To enrich departmental library and to introduce departmental book bank scheme.



Evaluative Report of the Department of Political Science

1. **Name of the department:** Political Science
2. **Year of Establishment:** 1963
2. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters, Integrated Ph.D. etc.) :** UG
 - i) Political Science Honours (started in the academic year 1965)
 - ii) Political Science General (1963)
3. **Names of Interdisciplinary courses and the departments/units involved:**
Students taking up Political Science Honours are required to take up two other subjects referred to as General papers. Political Science honours students are offered History along with Philosophy/Economics/Education/Journalism/Mass Communication.
5. **Annual/semester/choice based credit system (programme wise) Annual Exams.**
The West Bengal State University conducts three examinations at the end of each year namely Part 1, Part 11 & Part 111.
6. **Participation of the Department in the courses offered by other departments:**
Political Science as a general subject with Philosophy/ English/ History.
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses/programmes discontinued (if any) with reasons:** Nil



9. Number of Teaching Posts

Academic Session	Faculty	Sanctioned	Filled
2014 – 2015 (as of Sep)	Professors	NA	NA
	Associate Professors		02
	Assistant Professors	04	
2013 – 2014	Professors	NA	NA
	Associate Professors	02	02
	Assistant Professors	04	
2012 – 2013	Professors		
	Associate Professors		02
	Assistant Professors	04	
2011 – 2012	Professors	NA	NA
	Associate Professors		03
	Assistant Professors	04	
2010 – 2011	Professors	NA	NA
	Associate Professors		03
	Assistant Professors	04	

*At the entry level, only Assistant Professor posts are available. They are promoted to the post of Associate Professor through Career Advancement Scheme.

10. Faculty profile with name, qualification, designation specialization (D.Sc, D.Litt, M.Phil etc.)

Name	Qualification	Designation	Specialization	Years	Ph.D students guided for the last four years
Shampa Ghosh	M.A, B.Ed., M.Phil	Associate Professor	International Law & Organization	29	NA



Name	Qualification	Designation	Specialization	Years	Ph.D students guided for the last four years
Ruma Guha	M.A Ph.D	Associate Professor	International Law & Organization	32	NA

11. List of senior visiting faculty : Nil

12. Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty:

Academic Session	Name of the Guest Faculty	Percentage of Class taken
2014-15	Nil	NA
2013-14	Nil	NA
2012-13	i) Prasenjit Mandol ii) Biplab Majhi	i) 13.64% ii) 13.64%
2011-12	Saswati Banerjee	14.8%
2010-11	i) Biplab Majhi ii) Susmita Das	i) 13.64% ii) 13.64%

13. Student-Teacher Ratio (programmewise)

Academic Session	No of honours students	No of teachers (including guest lecturers)	Student: Teacher	No of general students	No of teachers (including guest lecturers)	Student: Teacher
2014-15	6	2	3:1	307	2	153:1
2013-14	24	2	12:1	319	2	159:1

14. Number of academic support staff (technical and administrative) sanctioned and filled : Nil

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG. :
PhD. – One
M.Phil– One



16. Number of faculty with ongoing projects from

a)National- Nil

b) International funding agencies and grants received- Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received : Nil

18. Research Centre/facility recognized by the University

19. Publications:

- Publication per faculty
- Number of papers published in peer reviewed journals(national/international) by faculty and students
 - Number of publications listed in International Database (For web of Science, Scopus, Humanities International Complete Database-International Social Sciences Directory, EBSCO host, etc.)
 - Monographs
 - Chapter in Books - The Fabric of Indian Constitution: Lincolns Legacy in Theory & Practice in Abraham Lincoln Without Borders.
 - Books Edited
 - Books with ISBN/ISSN numbers with details of publishers
 - ISBN 978-81909416-6-2,Pencraft International in association with Louisiana State University, USA & Indian Institute of Technology, Madras, Chennai.
 - Citation Index
 - SNIP
 - SJR
 - Impact factor
- h-index

20. Areas of consultancy and income generated

21. Faculty as members in

a) National committees



- b) International Committees
- c) Editorial Boards
- 22. **Student projects**
 - a) Percentage of students who have done in-house projects including interdepartmental/programme - None
 - b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies
- 23. **Awards/Recognitions received by faculty and students**
- 24. **List of eminent academicians and scientists/visitors to the department –None**
- 25. **Seminars/Conferences/Workshops organized & the source of funding** - a) National b)International
 - a) National – UGC sponsored National Conference held in March 2004
Title – India in a Globalized World; Issues and Challenges.
- 26. **Student profile programme/coursewise:**

(a) Student Admission in Pol. Sc. Honours Course

Session	Applications received for 1st year admission	Admitted - 1st Year			Admitted - 2nd Year			Admitted - 3rd Year		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
2014-15	1	0	1	1	0	0	0	1	6	7
2013-14	19	10	2	12	4	0	4	5	3	8
2012-13	11	9	2	11	7	6	13	2	1	3
2011-12	33	7	11	18	7	5	12	3	3	6
2010-11	34	14	7	21	4	9	13	3	1	4

(b) Student Performance in the Part III examination



Session	Students appeared in Part - III	Pass percentage	First Class
2014-15	2	100%	0
2013-14	7	71%	0
2012-13	3	67%	0
2011-12	6	83%	0
2010-11	5	80%	0

27. **Diversity of Students -**

All the students are from West Bengal. There are few students whose original homeland is in some other state but they reside in West Bengal from childhood.

28. **How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? - None.**

29. **Student progression**

Student progression	Against %enrolled				
	2014-15	2013-14	2012-13	2012-11	2011-10
Academic Year →					
UGtoPG	Nil	Nil	01	NA	NA
PGtoM.Phil.					
PGtoPh.D.					
Ph.D.toPost-Doctoral					
Employed • Campus selection • Other than campus recruitment			02	NA	NA
Entrepreneurship/ Self-employment		02			



30. Details of Infrastructural facilities

- a) Library- Departmental Library
- b) Internet facilities for Staff & Students
- c) Class room with ICT facility -3: Room nos !5, !7 & 10
- d) Laboratories

31. Number of students receiving financial assistance from college , university, government or other agencies

Academic Session	Students receiving financial assistance from college			Students Receiving aids from Government
	Full free	Half Free	Stipend	
2014-15	00	00		A few students received government aids over the year. No girl student received Kanyashree Prakalpa grant yet.
2013-14	01	01		
2012-13	00	01		
2011-12	02	01		
2010-11	01	01		

32. Details on student enrichment programmes (special lectures/ workshops/ seminars with external experts): Nil

33. Teaching methods adopted to improve student learning

Visits to the West Bengal Legislative Assembly are organized for the honours students when possible so that they can observe the technicalities of the law making procedure. Honours students were also taken to visit a panchayat office to get a first hand knowledge of its functioning.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Students of the department eagerly participate in awareness programmes organized by the college.

35. SWOC analysis of the department and Future plans:



Strength

- The department has a substantial collection of textual and reference books.
- A laptop and a camera are a further addition to the department's assets.
- Teacher-student interaction is constructive and friendly.
- Students actively participate in all events organized by the college.

Weakness

- Absence of the full strength of the departmental faculty as two permanent posts are vacant for a long time.
- Absence of journals in the vernacular is a major weakness of the departmental library.

Opportunities

- Scope for using the facilities provided by an upgraded library specifically for the students.

Challenges

- Teaching students who are not possessed of the infrastructural backup in their families because of their economic insolvency.
- Teaching students who are first generation literates in their families.

Future Plans

To create a database of former students of this department so that present students can have an informative interaction with their seniors which would help them in planning their future.



Evaluative Report of the Department of Education

- 1. Name of the department:** Education
- 2. Year of Establishment:** 2015 (G.O WBSU/IC/BKCC/Affi/59/15, Dated 09.08.2015)
- 3. Names of Programmes/ Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG
Education General (from 2015)
- 4. Names of Interdisciplinary courses and the departments/units involved:**
NA
- 5. Annual/semester/choice based credit system (programme wise):** Annual
Students are required to take three examinations conducted by the University, one at the end of each year – Part I, Part II and Part III.
- 6. Participation of the department in the courses offered by other departments:** The subject is offered with Bengali (Hons.), English (Hons.), History (Hons.), Philosophy (Hons.), and Political Science (Hons.) as a general subject.
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.:** None
- 8. Details of courses/ programmes discontinued (if any) with reasons :** NA
- 9. Number of teaching posts:** NIL
- 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D./ M.Phil.etc.):** Dr. Indranil Chattopadhyay is working as the co-ordinator of the department.
- 11. List of senior visiting faculty:** None
- 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:**



Academic Session	Temporary Faculty	Percentage of lectures by temporary faculty
2015-16	Smt. Rupa Chakraborty	100%
	Masket Kamal Molla	
	Sankar Kar	

13. Student-Teacher Ratio (programme wise):

Academic Session	No of general students	Sudent : Teacher
2015-16	85	28:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: NA

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/ PG:
Nil

**16. Number of faculty with ongoing projects from a)National
b)International funding agencies and grants received: None**

**17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc.
and total grants received: None**

18. Research Centre/facility recognized by the University: None

19. Publications: None

20. Areas of consultancy and income generated: None

21. Faculty as members in

a) National committees b)International Committees c)Editorial Boards: None

22. Student projects: None

23. Awards/ Recognitions received by faculty and students: None



- 24. List of eminent academicians and scientists/visitors to the department:** None
- 25. Seminars/ Conferences/ Workshops organized & the source of funding:** None
- 26. Student profile programme/course wise:** Not applicable as the department is a general department.
- 27. Diversity of Students:** All the students are from West Bengal. There are few students whose original homeland is in some other state but they reside in West Bengal from childhood.
- 28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc?:** None
- 29. Student progression:** NA
- 30. Details of Infrastructural facilities:**
- a) **Library:** The college authority has sanctioned for purchasing books.
 - b) **Internet facilities for Staff & Students:** Central facility for staff; Students can avail the facility dedicated for them at central library.
- 31. Number of students receiving financial assistance from college, university, Government or other agencies:** Subject wise data is not available for general students.
- 32. Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts:** None
- 33. Teaching methods adopted to improve student learning:**
- Use of chalk and blackboard.
 - Interactive way of learning-teaching.
 - Students are encouraged to use internet resources.
- 34. Participation in Institutional Social Responsibility (ISR) and Extension activities:**



Students of the department actively participate in awareness programmes organized regularly by the college.

35. SWOC analysis of the department and Future plans

Strength

- Student participation in all events of the college is imminently noticeable.
- It is a subject with great demand.

Weakness:

- No permanent faculty in the department.
- Absence of a departmental magazine/journal.
- Absence of departmental Computers/ Laptop.
- Absence of seminar library.

Opportunities:

- Learning Education offers a good career prospects from teaching. There is an escalating demand of Education teachers.

Challenges:

- To create permanent teaching post for the department.

Future Plans:

- To establish it as a successful department.



Evaluative Report of the Department of Journalism & Mass Communication

- 1. Name of the department:** Journalism & Mass Communication
- 2. Year of Establishment :** 2015 (GO No.-WBSU/IC/BKCC/AFFI/112/15 Dated 05/08/2015).
- 3. Names of Programmes/ Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG
Journalism & Mass Communication General (from 2015)
- 4. Names of Interdisciplinary courses and the departments/units involved:** NA
- 5. Annual/semester/choice based credit system (programme wise):** Annual
Students are required to take three examinations conducted by the University, one at the end of each year – Part I, Part II and Part III.
- 6. Participation of the department in the courses offered by other departments:** The subject is offered with Bengali (Hons.), English (Hons.), History (Hons.) and Political Science (Hons.) as a general subject.
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.:** None
- 8. Details of courses/ programmes discontinued (if any) with reasons :** NA
- 9. Number of teaching posts:** NIL
- 10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D./ M.Phil. etc.):**

Name	Qualification	Designation	Specialization	No. of year's of Experience	No. of Ph.D. Students guided for the
------	---------------	-------------	----------------	-----------------------------	--------------------------------------



Supratit Tarafdar	M.A.	Guest Lecturer		4 months	0
-------------------	------	----------------	--	----------	---

11. List of senior visiting faculty: None

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

Academic Session	Temporary Faculty	Percentage of lectures by temporary faculty
2015-16	Supratit Tarafdar	100%

13. Student-Teacher Ratio (programme wise)

Academic Session	No. of general students	Student : Teacher
2015-16	33	33:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: NA

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/ PG: PG

16. Number of faculty with ongoing projects from

a) National: None

b) International funding agencies and grants received: None

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: None

18. Research Centre/facility recognized by the University: None

19. Publications: None

20. Areas of consultancy and income generated: None

21. Faculty as members in



- a) **National committees** b) **International Committees** c) **Editorial Boards:** None
22. **Student projects:** None
23. **Awards/ Recognitions received by faculty and students:** None
24. **List of eminent academicians and scientists/visitors to the department:** None
25. **Seminars/ Conferences/ Workshops organized & the source of funding:** None
26. **Student profile programme/course wise:** Not applicable as the department is a general department.
27. **Diversity of Students:** All the students are from West Bengal. There are few students whose original homeland is in some other state but they reside in West Bengal from childhood.
28. **How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc? :** None
29. **Student progression:** NA
30. **Details of Infrastructural facilities:**
- a) **Library:** The college authority has sanctioned for purchasing books, audio recorder and handycam.
 - b) **Internet facilities for Staff & Students:** Central facility for staff; Students can avail the facility dedicated for them at central library.
31. **Number of students receiving financial assistance from college, university, Government or other agencies:** Subject wise data is not available for general students.
32. **Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts:** None
33. **Teaching methods adopted to improve student learning:**



- Use of chalk and blackboard.
- Interactive way of learning-teaching.
- Students are encouraged to use internet resources.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities: None

35. SWOC analysis of the department and Future plans

Strength

Our strength lies in

- Close interaction with the students and identifying individual capacity of our students.
- Based on assessed information we formulate our methodologies.
- This consequently enables us to complete our assignments on time.
- We also encourage innovative thinking in our students.

Weakness:

- Absence of Honours course in Journalism & Mass Communication
- Lack of adequate infrastructure.
- Limited scope for practical classes.

Opportunities:

Journalism is concerned with collection and dissemination of news through both the print and electronic media. This involves works like reporting, writing, editing, photographing, broadcasting or cable casting news items. Print journalism involves works of the editors, reporters, columnists, correspondents etc. Electronic journalism includes both Radio, Television and the Web.

- In the web, skilled people are required to maintain sites by web newspapers and popular newspapers and magazines that have their own web editions.
- In electronic journalism one can be a reporter, writer, editor, researcher, correspondent and anchor.

Challenges:

- Teaching new skills and techniques.



- Providing required equipment and software to students.
- Keeping up with a rapidly changing field of journalism.
- Determining the aptitudes of our students and preparing them as journalists of tomorrow

Future Plans:

- Conduct workshops.
- Publish departmental newspaper.



Evaluative Report of the Physics Department

- Name of the department:** Physics
- Year of Establishment:** 1956
- Names of Programmes/Courses offered (UG, PG, M. Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG
 - Physics Honours (started in the academic year 1968-69)
 - Physics General (started from the year of establishment i.e., 1956)
- Names of Inter disciplinary courses and the departments/units involved**

Students taking up Physics honours are required to take up two other subjects referred to as General papers. Mathematics is a compulsory general subject for Physics Honours students. The other general subject offered is Chemistry/Computer Science/Statistics.
- Annual/semester/choice based credit system (programme wise):** Annual
Students are required to take three examinations conducted by the University, one at the end of each year – Part I, Part II and Part III
- Participation of the department in the courses offered by other departments:** Physics as general subject with i) Mathematics Honours ii) Chemistry Honours
- Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
- Details of courses/programmes discontinued (if any) with reasons:** Nil
- Number of Teaching posts:**

Academic Session	Faculty	Sanctioned	Filled
------------------	---------	------------	--------



Academic Session	Faculty	Sanctioned	Filled
2014 – 2015	Professors	NA	NA
	AssociateProfessors	1	1
	AssistantProfessors	6	4
2013 – 2014	Professors	NA	NA
	AssociateProfessors	2	2
	AssistantProfessors	5	1
2012 – 2013	Professors	NA	NA
	AssociateProfessors	3	3
	AssistantProfessors	4	1
2011 – 2012	Professors	NA	NA
	AssociateProfessors	2	2
	AssistantProfessors	5	2
2010 – 2011	Professors	NA	NA
	AssociateProfessors	2	2
	AssistantProfessors	5	2

*At the entry level, only Assistant Professor posts are available. They are promoted to the post of Associate Professor through Career Advancement Scheme.

10. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./Ph.D./M.Phil.etc.,) from 2010 onwards

Name	Qualification	Designation	Specialization	Years Experience of	Ph.D.Students guided for the last 4 years
Safayet Karim Choudhury (retired on 31.5.2014)	PhD	Associate Professor	Particle Physics	25	Nil
Sukla Mukhopadhyay (retired on 31.12.2014)	PhD	Associate Professor	Solid State Physics	27	Nil



Name	Qualification	Designation	Specialization	Years of Experience	Ph.D. Students guided for the last 4 years
Aparajita Nag	PhD	Associate professor	Solid State Physics	15	Nil
Manas Kumar Roy	Ph.D	Assistant Prof	Material Science	5	Nil
Pinaki Patra	M.Sc	Assistant Prof	GTR, Cosmology	9 months	Nil
Shib Shankar Singha	M.Sc	Assistant Professor	Spectroscopy	9 months	Nil
Debjani Pal	PhD	Assistant Professor	High energy Physics	14 years (13 years in B. N. Mahavidyalaya) 8 months in this college	
Manas kumar Chakraborti (retired on 31.10.14)	BSc	GLI			

Dr. Gangabrata Mukherjee, Associate Professor, Department of Molecular biology, Brahmananda Keshab Chandra College takes Honours classes

11. List of senior visiting faculty:

Dr. Arabinda Chaudhuri, Assistant Professor, Department of Physics, Seth Anandaram Jaypuria college (previously Assistant Professor, Rabindra Mahavidyalaya, Champadanga)

12. Percentage of lectures delivered and practical classes handled (programme



wise) by temporary faculty

Academic Session	Name of the guest faculty	Percentage of classes taken	
		Theory	Practical
2014-15	Sri Jit Dutta	6	10
2013-14	Smt. Anupama Sarkar	6	18
2012-13	Smt. Anupama Sarkar	6	18
2011-12	Sri Prasun Sharma Choudhury	6	18
2010-11	Sri Pantha Saha	6	18

13. Student-Teacher Ratio (programme wise)

Academic Session	No of honours students	No of teachers (including guest lecturers)	Student : Teacher	No of general students	No of Teachers	Student : Teacher
2014-15	45	5	9:1	115	5	23:1
2013-14	30	5	6:1	80	5 (including G.L.I.)	16:1

14. Number of academic support staff (technical) and administrative staff sanctioned and filled:

Academic Session	Technical Staff	
	Sanctioned	Filled



Academic Session	Technical Staff	
	Sanctioned	Filled
2014-15	3	3
2013-14	3	3
2012-13	3	3
2011-12	3	3
2010-11	3	3

15. Qualifications of teaching faculty with D.Sc./D. Litt./Ph. D./M. Phil./P. G. :

Amongst the present faculties, PhD : 3; PG : 2

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: One (National)



17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received

Sl. No.	Title of the Project	Principal Investigator	Time Period	Funding agency	Sanctioned Amount (Rs)
1	Conductions by Polarons and bipolarons in ionic crystals and polar semiconductors	Sukla Mukhopadhyay	1999-2001	UGC, MRP	50,000/-
2	Low Temperature Experimental Investigations of the magnetic and Mossbauer spectral properties of Europium ion indifferent host matrices	Dr Aparajita Nag	22.11.02 - 21.05.05	UGC, MRP	50,000/-
3	Study of polaronic conduction mechanism in low dimensional semiconductors in presence of laser field	Dr Sukla Mukhopadhyay	20.10.10 to 19.10.12	UGC, MRP	1,20,000/-
4	Dynamics of ferroelectric Nano-particles Suspended in Non-polar fluid.”	Dr Manas Kumar Ray	3.02.2015 (ongoing)	UGC, MRP	4,90,000/-

18. Research Centre/ facility recognized by the University:

M.Sc Project work done by Mr Dipankar Karar on “**Dynamics of Magnetoelectrically coupled domains in Multiferroic films**” in his M.Sc project under West Bengal state University, Barasat. (2014-15)

**19. Publications:**

(a) Publication Per faculty : 5.6 (present faculty members are considered)

List of publications of faculty members after joining this college

List of Publications: Physics*

Faculty	No. of papers		No. of publications listed in Int. Data base	Chapter in books	Impact factor	h-Index	Paper presentation
	Peer reviewed Journals						
	International	Conference Proceedings					
Dr. S. K. Chowdhury	10	2					
Dr Sukla Mukhopadhyay	20						
Dr Aparajita Nag	7	6	1		1.853-2.999		3
Dr Manas Kumar Roy	7				0.766-3.569		
Shri Pinaki Patra	7				0.3-2.808		
Shri Shib Shankar Singha	2	4			2.69-3.84		1
Dr Debjani Pal	4			1	0.94-2.095		2

*Refer to the Appendix – Physics for details

20. Areas of consultancy and income generated

i) Dr. Aparajita Nag is the executive committee member of an NGO “Vivek Chetana” 2/3A, Keyatala Road Kolkata -700029 which is involved in the betterment of under-privileged women and children*

ii) DrAparajita Nag is the executive member of “Society for Direct Initiative



for Social and Health Action”20/4 Sil Lane, Kolkata -700015 an NGO which is active on different issues concerning environment, environmental health and human rights.*

* The above consultancies are voluntary

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards

Name	Life Member of the following National organizations
Dr. Sukla mukhopadhyay	1) Indian Association of Physics Teachers 2) Indian Association for the Cultivation of Science 3) Indian Physics Society
Dr. Safayet Karim Choudhury	1) Indian Association of Physics Teachers 2) Indian Association for the Cultivation of Science 3) Indian Physics Society
Dr. Aparajita Nag	1) Indian Association of Physics Teachers 2) Indian Association for the Cultivation of Science
Dr Debjani Pal	1) Indian Statistical Institute

22. Student projects

- a) **Percentage of students who have done in-house projects including inter departmental / programme:** In-house projects are not in the University curriculum.
- b) **Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/other agencies:** Not applicable for an undergraduate degree college

23. Awards/ Recognitions received by faculty and students

- 1) Prof Manas Kumar Roy was awarded the Ph.D Degree in 2013 from WBUT.
- 2) Mr Nitish Paul, III(H) student, received the best model award in the National



Level Seminar on “Physics Behind Electronics/Optoelectronics and their applications” organised by Sammilani Mahavidyalaya, Kolkata held in 1.12.2011

24. List of eminent academicians and scientists/ visitors to the department:

SI No	Name	Affiliation
1	Professor Debasish Mukherjee	Ex-Director IACS, Kolkata
2	Dr Avijit Lahiri	Retired Professor Vidyasagar evening College, Kolkata
3.	Dr Debiprasad Duari	Director, Birla Planetarium, Kolkata
4.	Professor Narayan Banerjee	ISER, Kolkata
5.	Dr Kuntal Ghosh	ISI, Kolkata

25. Seminars/Conferences/Workshops organized & the source of funding

a) National b) International

SI #	Topic	Date	Source of funding
1.	Weather and Climate in Eastern India	25.02.2004	UGC
2.	International Year of physics :	20.12.2005	State Science and Technology Council , Govt of West Bengal
3.	“A New View of the Solar System” by Dr Debiprasad Duari	18.02.2007	College
4.	“Our Universe” by Prof. Narayan Banerjee, IISER Kolkata	12.12.14	College
5.	“The Psychophysics of vision” by Dr. Kuntal Ghosh, Machine intelligence Unit, ISI Kolkata.	12.12.14	College

The department also organized a students’ seminar on 03.01.14.

i) OPAMP and its Applications by Sri Sourav Chakraborty



- ii) Solving quantum mechanical problems using Linear algebra and complex numbers by Sri Nitish Pal

26. Student profile programme/coursewise:

(a) Student Admission in Physics Honours Course

Session	Applications received for Ist year admission	Admitted - 1st Year			Admitted - 2nd Year			Admitted - 3rd Year		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
2014-15	45	27	7	34	5	0	5	5	3	8
2013-14	19	10	0	10	6	3	9	5	5	10
2012-13	59	25	4	29	8	8	16	9	0	9
2011-12	125	30	17	47	9	2	11	14	3	17
2010-11	80	32	6	38	17	4	21	2	0	2

It is observed that there is a trend among 1st year students to shift to engineering colleges next year by appearing in JEE. This explains the abrupt fall in the number of students in 2nd year.

(b) Student Performance in the Part III examination

Session	Students appeared in Part - III	Pass percentage	First Class
2014-15	8	87%	1
2013-14	12	83%	0
2012-13	13	77%	2
2011-12	12	58%	1
2010-11	6	83%	0

The number of students who appeared in the part III examination may differ than those admitted as there are casual students each year.

Pass percentage reflects those students who have cleared the Part III honours examination but has not cleared any general paper in Part II and Part III.



27. Diversity of Students:

All the students are from West Bengal. There are few students whose original homeland is in some other state but they reside in West Bengal from childhood.

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services ,etc.?

- As this is an undergraduate college, students do not appear in the national level competitions just after leaving the college. But many students are doing research work after completing their Post Graduation studies.
- A section of the students study MCA (Master of Computer applications) after completing UG. They are well placed in different software companies and are settled in India and abroad.
- A large number of students (both honours and general) clear the banking service examination and get recruited in the banks as probationary officers and clerks
- A large no of students also join school service as teachers after clearing competitive examinations



29. Student Progression:

a) Career progression (for Honours students)

Student progression	Against % enrolled				
	2014-15	2013-14	2012-13	2011-12	2010-11
Academic Year →					
UG to PG	26.68	8.33	58.33	16.67	50
PG to M.Phil.					
PG to Ph.D.			25.0	8.3	
Ph.D .to Post-Doctoral					
Employed • Campus selection • Other than campus recruitment		8.33	16.67		
Entrepreneurship/ Self-employment*					

Note: Many of the students who pass out in the general course get employed in different sectors but we donot have the data.

30. Details of Infrastructural facilities

- Library:** Seminar Library with 280 books
- Internet facilities for Staff & Students:** Internet facilities available
- Class rooms with ICT facility:** ICT Rooms of the college
- Laboratories:** The physics laboratories are well equipped with multiple numbers of instruments corresponding to each experiment to suffice the need of both honours and general students. We have a separate third year electronics laboratory which is equipped with a large no of CRO, function generators, power supplies and other electronic instruments. A separate dark room is there for doing optics experiments where all the honours students are accommodated.

SI No	Laboratory	Description	Size
1.	PLab 1	Hons : 1 st Year, 2 nd Year	48ft x 25ft



Sl No	Laboratory	Description	Size
		Gen : 1 st Year, 2 nd Year, 3 rd Year	
2	PLab 2	Dark Room	25ft x 16ft
3	PLab 3	Hons : 3 rd Year	25ft x 16ft
4	PLab 4	Seminar Library (presently shared by Mathematics Department)	15ft x 12ft
5	PLab 5	Computer Room	20ft x 10ft
6	PL1	Lecture Room 1	20ft x 16ft
7	PL2	Lecture Room 2	15ft x 12 ft
8	P-Dep	Staff Room & Research Area	25ftx16ft

31. Number of students receiving financial assistance from college, university,

Government or other agencies:

Academic Session	Students receiving financial assistance from college			Students Receiving aids from Government
	Full free	Half Free	Stipend	
2014-15	1		0	Few students received grants from the government over the years. We have few girl students, but no one availed the Kanyashree Prakalpa
2013-14	1	0	0	
2012-13	0	1	0	
2011-12	3	1	0	
2010-11	1	1	0	

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts:

Students from honours course are regularly taken to various OUTREACH programs and seminars where they get the opportunities to meet experts on the subject.



Sl #	Topic	Date
1.	Outreach Program : At SINP on Large Hadron Collider organized by SINP	28.02.2009
2.	Outreach program : At Science City on INO: A Window to the Universe organized by IISER and Science City	08.11.2013
3.	UGC sponsored National Seminar on Recent Advances in the Frontiers of Physics organized by Bidhannagar College	14.09.2013
4.	Outreach Program : At SINP organized by SINP	13.10.15

33. Teaching methods adopted to improve student learning

Type of classes	Methods implemented
Theoretical	<ul style="list-style-type: none"> • Board – Chalk • Power point presentation • Interactive discussions • Problem solving from question papers • Home assignments and regular class tests • Library and internet facility
Practical	<ul style="list-style-type: none"> • Demonstration of experiments with proper theoretical background • Supplying manuals • Performing experiments (hands-on) • Viva or oral interactions regarding experiments

34. Participation in Institutional Social Responsibility(ISR) and Extension activities:

The students of the department actively takes part in the various awareness programs conducted by the college. Some of the students were donors in the blood donation camps.

The faculty members Dr. S. K. Chowdhury, Dr. Sukla Mukhopadhyay and Dr Aparajita Nag have the experience of teaching in Post Graduate courses of



different institutes.

35. SWOC analysis of the department and Future plans:

Strength :

- The department has very energetic young faculties who are engaged in active research work in various institutes and universities.
- The laboratory attendants are very helpful and they arrange many additional practical classes whenever required.
- Strong teacher –student bonding
- Adequate laboratory facilities

Weakness:

- Two faculty posts are vacant.

Oppurtunities:

- Faculties with wide range of research experience viz. Experimental, Computational and Theoretical can build up a strong research group by itself.
- Infrastructure and research facilities of Indian Statistical Institute can be utilized to develop different curriculum (e.g. Integrated M.Sc. Program etc) as a joint collaboration
- As the college has a prime geographical location our department can be a Nodal Center for all sorts of physics programs either governed by our University or organization of equal genre.

Challenges :

- Poor communication and writing skill of majority of students is a big problem which has to be taken care of.
- Motivating the students to pursue basic science at the present social scenario

Future Plans:

- To start Post Graduate course in M.Sc. and some vocational training course to give the students hands on training to repair and service electronic goods.



- To start a departmental wall magazine



Appendix – Physics:

Publications in Journals

Faculty	Paper Details	ISSN No	impact-factor
Dr. S. K. Chowdhury	S.K.Chowdhury, Ind. Journ. Phys. <u>73B</u> , page – 395 (1999).	0973-1458	1.377
	R.Rakshit and S.K.Chowdhury, Phys. Rev. <u>C53</u> , page – 505 (1996).	0556-2813	3.733
	B.K.Parui, P.S.Majumdar, and S.K.Chowdhury, Int. Journ. Theo. Phys. <u>33</u> , page – 613 (1994).	0020-7748	1.184
	S.K.Chowdhury and R.Rakshit, Phys. Rev. <u>C48</u> , page – 598 (1993).	0556-2813	3.733
	P.S.Bragamani, S.Sur, S.K.Chowdhury and P.S.Mazumdar, Int. Journ. Theo. Phys., <u>30</u> , page 487 (1991).	0020-7748	1.184
DrSuklaMukhopadhyay	“Laser assisted bound free transition of a polaron bond to an impurity centre“ by C.Sinha, R. Biswas and S.Mukhopadhyay, J.Phys& Chem. Of Solids, <u>74</u> , page 1823 (2013).	0022-3697	1.853
	“Complete breakup of orthopositronium hydrogen ion system” by D.Ghosh, S.Mukhopadhyay and C.Sinha, Eur.Phys.j.d. 67 page 85 (2013).	1434-6060	1.228
DrAparajita Nag	“Low Temperature Measurements of magnetic susceptibility and specific heat of $\text{Eu}_2\text{Ti}_2\text{O}_7$ – an XY pyrochlore” by P. Dasgupta, Y.M. Jana, A. Nag Chattopadhyay, R. Higashinaka, Y. Maeno, D. Ghosh, J. Phys and Chem. Of Solids, <u>68</u> , page 347 (2007).	0022-3697	1.853
	“A Study on Crystal field effect and Single ion anisotropy in pyrochlore europium titanate	0925-8388	2.999



Faculty	Paper Details	ISSN No	impact-factor
	(Eu ₂ Ti ₂ O ₇)” by A. Nag (nee’ Chattopadhyay) , P. Dasgupta, Y.M.Jana and D.Ghosh, J.Alloys and Compds., <u>384</u> , page 6 (2004).		
	“Mössbauer spectra of ¹⁶⁷ Er and ¹⁶⁶ Er in Pyrogermanate and Diglycollate hosts” by A. Chattopadhyay (Nag) , and D. Ghosh, J.Alloys and Compds., <u>326</u> , page 74 (2001).	0925-8388	2.999
	“Crystal field effect on the hyperfine splittings, Mössbauer spectra and specific heat of Er ³⁺ in pyrogermanate and diglycollate hosts” by A. Chattopadhyay (Nag) , S. Jana, D. Ghosh, and E. Gmelin, J. Magn. Mater, <u>224</u> , page 153 (2001).	0304-8853	1.970
	Studu of the magnetic susceptibility and anisotropy properties of Tm ³⁺ diglycollate crystal for evaluating crystal field effects, by A. Nag , A. Sengupta and D.Ghosh, Solid State Communications, <u>111</u> page 729, (1999)	0038-1098	1.897
	Magnetic studies on trivalent Erdiglycollate (Na ₃ Er(C ₄ H ₄ O ₅) ₃ .2NaClO ₄ .6H ₂ O) by M.Ghosh, A. Nag and D.Ghosh, J.Phys:Condens. Matter, <u>10</u> , page 1873 (1998)	0953-8984	2.346
	Measurements of Magnetic susceptibilities and anisotropy of Europium Vanadate (EuVO ₄) crystal by A. Nag , D.Ghosh and B.M.Wanklyn, Solid State Communications, <u>108</u> page 265, (1998)	0038-1098	1.897
Dr Manas kumar Roy	"Development of an experimental arrangement for precise measurement of angular distribution of ultrasound scattering" by RatanSaha, Manas Kumar Roy , SubhajitKarmakar, SaibalSaha and SwapanSen,Indian Journal of Pure and Applied Physics, <u>44</u> , page 3118 (2006)	0003-6951	0.766



Faculty	Paper Details	ISSN No	impact-factor
	Evolution of 180° , 90° , and vortex domains in ferroelectric films; Manas Kumar Roy , Shamik Sarkar, and Sushanta Dattagupta, Appl. Phys. Lett. <u>95</u> , page 192905 (2009)	0975-1041	3.569
	Domain dynamics and fractal growth analysis in thin ferroelectric films; Manas K. Roy , Jaita Paul, and Sushanta Dattagupta, J. Appl. Phys. <u>108</u> , page 014108 (2010).	0021-8979	2.183
	Modeling of ferroelectric domain imaging by atomic force microscopy; Manas K. Roy , Jaita Paul, and Sushanta Dattagupta, J. Appl. Phys. <u>108</u> , 064102 (2010).	0021-8979	2.183
	Glucose induced fractal colony pattern of <i>Bacillus thuringiensis</i> ; Manas K. Roy , Paromita Banerjee, Tapas K. Sengupta, and Sushanta Dattagupta, J. Theoretical Biology <u>265</u> , page 389 (2010).	0022-5193	2.12
	Domain kinetics in ferroelectric films, Prasenjit Das, Manas K. Roy , Sanjay Puri and Sushanta Dattagupta, Euro Physics Letters, <u>104</u> page 66005 (2013)	0295-5075	2.095
	Dynamics of solid-melt front migration from a reaction-diffusion model, Amiya Baruah, Manas Kumar Roy , Shamik Sarkar, and Nibir Mandal, Heat and Mass Transfer, Springer, <u>50(1)</u> , page 31, (2014).	0947-7411	0.946
DrDebjani Pal	Topological Aspects of High-Tc Superconductivity, Fractional Quantum Hall Effect and Berry Phase”, B. Basu, D. Pal and P. Bandyopadhyay, International Journal of Modern Physics B <u>13</u> , page 3393(1999).	0217-9792	0.94
	“Pairing in high-temperature superconductors and Berry phase”, Europhysics Letters <u>56 (1)</u> , page 99 (2001)	0295-5075	2.095



Faculty	Paper Details	ISSN No	impact-factor
	“Magnus force in high temperature superconductivity and Berry phase” , D. Pal , B. Basu and P. Bandyopadhyay, Physics Letter A <u>299</u> page 304, (2002)	0375-9601	1.683
	“Topological Aspects of High-Tc Superconductivity, Fractional Quantum Hall Effect and Berry Phase”, B. Basu, P. Bandyopadhyay and D. Pal , International Journal of Modern Physics B <u>13</u> ,page 3393, (1999)	0217-9792	0.94
Shib Shankar Singha	Tuning the photoluminescence property of few-layer MoS2 by decoration with gold nanoparticles, Shib Shankar Singha , Dipanjan Nandi and Achintya Singha, Royal Society of Chemistry Advances, <u>5</u> , page 24188, (2015).	2046-2069	3.84
	Sensitization of an Endogenous Photosensitizer: Electronic Spectroscopy of Riboflavin in the Proximity of Semiconductor, Insulator, and Metal Nanoparticles, Siddhi Chaudhuri, Samim Sardar, Shib Shankar Singha , Peter Lemmens and Samir Kumar Pal, J. Phys. Chem. A , <u>119</u> , page 4162 (2015).	1089-5639	2.69
Pinaki Patra	Current conservation in charge conjugation parity time reversal symmetry violating gauge-invariant nonlocal Thirring model, Indian Journal of Physics, <u>89</u> , 1, page -87(2015).	0973-1458	1.337
	Modified Hamiltonian Formalism for Regge-Teitelboim Cosmology, Physics Research International, Publisher: Hindawi Publishing Corporation, (Physics Research International, 2014, (2014)	16876903, 20902220, 20902239	0.55
	Quantum restoration of broken symmetry in one-dimensional loop space, Pramana-journal of Physics,	0304-4289	0.649



Faculty	Paper Details	ISSN No	impact-factor
	82, 6, page 965 (2014)		
	Uncertainty principle guarantees genuine source of intrinsic randomness, Quantum information processing, 13, 4, page - 839 (2014)	1570-0755	1.932
	SUSY formalism for the symmetric double well potential, Pramana-journal of Physics, 80, 1, page - 21 (2013)	0304-4289	0.649
	Engineering light localization in a fractal waveguide network, Phys. Rev. A 87, 023814 (2013)	1050-2947	2.808
	On a General Class of Solutions of a Nonholonomic Extension of Optical Pulse Equation, Electronic Journal of Theoretical Physics, 8, 25, page - 273 (2011)	1729-5254	0.3

Resource Person:

Dr. Aparajita Nag acted as a resource person in a two weeks' refresher course in "Experimental Physics" at St. Xavier's College, Kolkata, organized by **Indian Academy of Sciences, Indian National Science Academy and The National Academy of Sciences of India** from September 4-19, 2012



Evaluative Report of the Department of Chemistry

1. **Name of the Department** : CHEMISTRY
2. **Year of establishment** : 1956- Chemistry General
1963—Chemistry Hons
3. **Names of Programmes/Courses offered (UG, PG, M. Phil, Ph. D, Integrated Masters, Integrated Ph. D, D. Sc., D. Lit. : UG**
(i) Chemistry Honours (started in the academic year 1962-63)
(ii) Chemistry General (started from the year of establishment i.e., 1956)
4. **Interdisciplinary programmes and departments involved:** NA
5. **Annual/semester/choice based credit system (programme wise):**
Annual
Students are required to take three examinations conducted by the University, one at the end of each year – Part I, Part II and Part III
6. **Participation of the department in the courses offered by other departments:** Chemistry as general subject with Honours in (i) Mathematics (ii) Physics (iii) Botany (iv) Zoology (v) Fisheries
7. **Course in collaboration with other universities, industries, foreign institution, etc. :** NA
8. **Details of programmes discontinued, if any, with reasons :** NA
9. **Number of Teaching posts**

Academic Session	Faculty	Sanctioned	Filled
2014 – 2015	Professors	NA	NA
	Associate Professors	7	4
	Assistant Professors		3
2013 – 2014	Professors	NA	NA
	Associate Professors	7	3
	Assistant Professors		2
2012 – 2013	Professors	NA	NA
	Associate Professors	7	2
	Assistant Professors		3
2011 – 2012	Professors	NA	NA
	Associate Professors	7	2



Academic Session	Faculty	Sanctioned	Filled
	Assistant Professors		3
2010 – 2011	Professors	NA	NA
	Associate Professors	7	3
	Assistant Professors		3

*At the entry level, only Assistant Professor Posts are available. They are promoted to the post of Associate Professor through Career Advancement Scheme.

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil. etc.,)

Name	Qualification	Designation	Specialization	Years of Experience	Ph.D. Students Guided for the last 4 years
DR. SOMA SEN	MSc. PhD	ASSOCIATE PROFESSOR	INORGANIC CHEMISTRY	28	NIL
DR. PUTUL CHAKRABORTI	MSc. PhD	ASSOCIATE PROFESSOR	INORGANIC CHEMISTRY	18	NIL
DR. MANASI BASU	MSc. PhD	ASSOCIATE PROFESSOR	PHYSICAL CHEMISTRY	14	NIL
DR. KARTIK KUMAR NANDI	MSc. PhD	ASSOCIATE PROFESSOR	ORGANIC CHEMISTRY	16	NIL
DR. SWARUP MANNA	MSc. PhD	ASSISSTANT PROFESSOR	PHYSICAL CHEMISTRY	05	NIL
DR. ANSHUPRIYA SHOME	MSc. PhD	ASSISSTANT PROFESSOR	ORGANIC CHEMISTRY	06 months (In BKC College) & 4 years (in Pvt. Eng. College)	NIL
DR. AMIT MANDAL	MSc. PhD	ASSISSTANT PROFESSOR	INORGANIC CHEMISTRY	02 months (In BKC College) & 4 years (in Govt. School)	NIL

11. List of senior visiting faculty: NA

12. Percentage of lectures delivered and practical classes handled



(programme wise) by temporary faculty: NA

13. Student-Teacher Ratio (programme wise)

Academic Session	No of honours students	Student: Teacher	No of general students	Student: Teacher
2014-15	52	9:1	217	36:1
2013-14	44	9:1	184	37:1

14. Number of academic support staff (technical) and administrative staff: [present status]

Sanctioned	Filled	Name of the Employee	Designation	Experience
5	3	MR. SALIL KUMAR NEOGI	Laboratory staff	21 years
		MR. ALOK KUMAR DAS	Laboratory staff	17 years
		MR. SANJOY DEY	Laboratory staff	15 years

Academic Session	Technical Staff	
	Sanctioned	Filled
2014-15	5	3
2013-14	5	4
2012-13	5	4
2011-12	5	4
2010-11	5	4

15. Qualifications of teaching faculty with DSc/D. Litt /Ph. D/MPhil/PG.:
All PhD



16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

Principal Investigator	Funding Agency	Project title	Grants Sanctioned
Dr. Kartik Kumar Nandi	UGC – NEW DELHI	<u>F.NO. – PSW-175/14-15(ERO)</u> Designing Of Sustainable Experiments; Green Reagents/Methodologies For Organic Chemistry Laboratory. Duration 2015-2017	Rs. 360000.00
Dr. Swarup Manna	UGC – NEW DELHI	<u>F. No. PSW-173/14-15(ERO)</u> “A Versatile ‘Click’ Method for Scalable Production of Functionized CNTs and CNT Nanocomposites for Aeronautical Applications.” Duration 2015-2017	Rs. 420000.00

17. Departmental projects (completed) funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

Principal Investigator	Funding Agency	Project title	Grants Received
Dr. Kartik Kumar Nandi	UGC – NEW DELHI	<u>Completed (2010-2012)</u> <u>F-PSW-118/10-11</u> One-Pot Green ... Polynuclear Aromatics/ ferrocenyls/ Heterocycles.	Rs.180000.00
Dr. Soma Sen	UGC – NEW DELHI	<u>Completed (1999-2000)</u> PSW-47/98-99-ERO; Dated:25.02.1999 “Dissolution of Arsenic Minerals in Ground Water”	Rs. 50000.00

18. Research Centre/facility recognized by the University:

Research Centre / Facility recognized by the University	
State recognition	Research Facility Recognised by the W. B. State University for project works of M.Sc. Students of the University and other PG colleges.

**19. Publications:**

Faculty	No. of papers			No. of publications listed in Int. Data base	Chap-ter in books	Books edited	Books with ISSN/ ISBN No.	Impact factor	h-Index	Paper presentation
	Peer reviewed Journals		Conference Proceedings							
	National	International								
DR. SOMA SEN	2	7			5		30(ISSN) & 1(ISBN)	0.54 to 0.79		
DR. PUTUL CHAKRABORTI		4						0.87 to 1.03		
DR. MANASI BASU		1		1				3.64		1
DR. KARTIK KUMAR NANDI	5	4	4					0.43 to 1.08		32
DR. SWARUP MANNA		15		15				0.6 to 21.757	1 2	6
DR. ANSHUPRIYA SHOME		14		14				3.35 to 13.45		4
DR. AMIT MANDAL	2	2		2				2.03 & 2.20		

* A detailed list of publication per faculty is given in **Annexure - Chemistry**

20. Areas of consultancy and income generated: NIL

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards....

Faculty	Serving as members in a) National committees b) International Committees c) Editorial Boards....
Dr. Soma Sen	<ol style="list-style-type: none"> 1. Life Member of <i>Indian Chemical Society</i>. 2. Life Member of <i>Indian Association for the Cultivation of Sciences</i>. 3. Life Member of <i>Federation Hall Society</i>. 4. Life Member of <i>Bangiya Sahitya Parisad</i> 5. Life Member of <i>Rammohan Library</i>
Dr. Putul Chakraborty	<ol style="list-style-type: none"> 1. Life Member of <i>Federation Hall Society</i>.



Dr. Manasi Basu	1. Life Member of <i>Indian Chemical Society</i> .
Dr. Kartick Kumar Nandi	1. Life Member of <i>Indian Chemical Society</i> . 2. Life Member of <i>Indian Science Congress Association</i> . 3. Life Member of <i>Indian Association for the Cultivation of Sciences</i> .
Dr. Swarup Manna	1. Life Member of <i>Indian Association for the Cultivation of Sciences</i> . 2. Life Member of <i>Indian Physical Society</i> . 3. Life Member of <i>Society for Polymer Science</i>

22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/ programme: NA
- b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies: NA

23. Awards/Recognitions received by faculty and students:

• Faculty	NA
• Doctoral/ Post-doctoral level	NA
• Students	Certificates from ministry of earth science, GOVT OF INDIA at the 100 th Indian Science Congress held at Bose Institute ; 03/01/2013-07/01/2013

24. List of eminent academicians and scientists/ visitors to the department:

No.	Name	Affiliation	Year
1.	Dr. Rana Sen	Dept. of Chemistry, Scottish Church College	2010

25. Seminars/Conferences/Workshops organized & the source of funding

- a) National: NIL
- b) International: NIL
- c) Departmental seminar with external experts:



Seminar topic with date	Speaker	Funding agency
“Fundamentals of Physical Chemistry”, 30 th November, 2010	Dr. Rana Sen, Dept. of Chemistry, Scottish Church College	B.K.C College

d) Departmental student’s seminar

Seminar topic with date	Speaker	Funding agency
<ul style="list-style-type: none"> • Stereochemistry and Chirality • SHAB Theory • Carnot Cycle • Dipole- Moment • Green Chemistry (24th Dec, 2010) 	<ul style="list-style-type: none"> • Anirban Ghosh • Gourab Ghosh • Shrita Paul • Suman Saha (2nd Year) • Aparajita Bhattacharya (2nd Year) 	B.K.C College
<ul style="list-style-type: none"> • Ferrocene • Welcome to Universe • Anti Cancer Drugs (21st Jan 2014) 	<ul style="list-style-type: none"> • Sourav Ghosh • Tanmoy Moulik • Biswajit Paul 	B.K.C College

26. Student profile programme/ course wise:

(a) Student Admission in Chemistry Honours Course

Session	Applications received for I st year admission	Admitted - 1st Year			Admitted - 2nd Year			Admitted - 3rd Year		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
2014-15	55	34	12	46	4	0	4	0	1	1
2013-14	60	31	3	34	4	3	7	5	2	7
2012-13	80	18	4	22	3	3	6	10	8	18
2011-12	115	34	9	43	12	9	21	5	5	10
2010-11	122	39	21	60	8	6	14	4	2	6

**(b) Student Performance in the Part III examination**

Session	Students appeared in Part - III	Pass percentage	Second Class	First Class
2014-15	3	100	1	-
2013-14	7	100	7	-
2012-13	18	83	8	7
2011-12	8	100	7	1
2010-11	9	100	9	-

27. Diversity of Students:

All students of the college are from the State of West Bengal.

28. How many students have cleared national and state competitive examinations such as NET,SLET,GATE, Civil services, Defence services, etc.?

We have specific information about one student who passed in 2012-13 and cleared CSIR-NET exam.

29. Student progression**a) Career progression (for Honours students)**

Student progression	Against % enrolled (final year)				
	2014-15	2013-14	2012-13	2012-11	2011-10
Academic Year →					
UG to PG		38	63	55	40
PG to M.Phil.	-	-	-	-	-
PG to Ph.D.	-	-	-	-	-
Ph.D. to Post-Doctoral	-	-	-	-	-
Employed •Campus selection •Other than campus recruitment		50	25	30	40
Entrepreneurship/ Self-employment	-	-	-	-	-

Many students have been admitted to PhD courses in IIT Bombay,



BARC, IISc. Some students have qualified in TET examination and are employed as teachers in Government schools. Others are employed in chemical laboratories.

30. Details of Infrastructural facilities:

Present details of departmental infrastructural facilities with regard to	
(i) Library	Departmental Library
(ii) Internet facilities for staff and students	2 nos. Desktop and 1 Laptop with internet facility
(iii) Total number of class rooms	3
(v) Students' laboratories	3
(vi) Research laboratories	1

31. Number of students receiving financial assistance from college, university, Government or other agencies:

Academic Session	Students receiving financial assistance from college			Students Receiving aids from Government
	Full Free	Half Free	Stipend	
2014-15	1		0	Few students received grants from the government over the years. As we have few girl student no one Availed the Kanyashree Prakalpa
2013-14	3	0	0	
2012-13	0	3	0	
2011-12	2	2	0	
2010-11	6	3	2	

32. Details on student enrichment programmes (special lectures/workshops/ Seminar) with external experts:

Seminar topic with date	Speaker	Funding agency
“Fundamentals of Physical Chemistry”, 30 th November, 2010	Dr. Rana Sen, Dept. of Chemistry, Scottish Church College	B.K.C College

Student participation in academic activities:

Year/Date	Place of Visit	Topic	Achievements by students
-----------	----------------	-------	--------------------------



03/01/2013-07/01/2013	Bose institute, Kolkata	100 th Indian science congress	Certificates from ministry of earth science, GOVT OF INDIA
19/12/2011	Scottish Church College, Kolkata	Celebration of international year of chemistry (IYC)	Participated in poster competition
16/11/2011	Saha Institute Of Nuclear Physics, Kolkata	Celebration of international year of chemistry (IYC)	
25/03/2011	Ramakrishna Mission Vidyamandir, Belur Math	Celebration of international year of chemistry (IYC)	
20/12/2010	Saha Institute Of Nuclear Physics, Kolkata	Celebration of 150 th birth anniversary of P.C.ROY	

33. Teaching methods adopted to improve student learning:

Type of classes	Methods implemented
Theoretical	<ul style="list-style-type: none"> • Extensive explanation through board work • Demonstration through models • Remedial classes • Regular evaluation • Power point presentation • Students presentation ; interactive discussions • Library and internet facility
Practical	<ul style="list-style-type: none"> • Demonstration of experiments with proper theoretical background • Performing experiments (hands-on) • Viva or oral interactions regarding experiments • Lab-Quiz

34. Participation in Institutional Social Responsibility (ISR) and Extension activities



The departmental students have been engaged in various extension activities with adequate participation in institutional social responsibility program such as NSS.

- Dr. Soma Sen and Dr. Manasi Basu have been Taking PG classes in Acharya Prafulla Chandra College ; WBSU.
- Dr. Soma Sen and Dr. Manasi Basu have been a member of Syllabus Committee of WBSU
- Dr. Kartick Kr. Nandi has guided M.Sc Research project to M.Sc students of WBSU
- Dr. Soma Sen is actively associated with the Binapani Educational Charitable Trust which works for the education of female Santhals.

35. SWOC analysis of the department and Future plans

<u>Strength</u>	<u>Weakness</u>
<ul style="list-style-type: none">• 7 full time highly qualified faculty members of the Department are actively engaged in maintaining high standard of teaching to invoke passion of chemistry among students to apply it in the wider fields.• The department is well equipped with specialized instruments which are useful in basic as well as advanced studies.• Well stocked seminar library for students and teachers.• High teacher: student ratio.• Department also has its own computer facility with internet connectivity for academic and administrative work.• The lecture rooms are equipped with audio-visual aids.	<ul style="list-style-type: none">• Students opt for professional courses and students of average merit are admitted.• Heavy load of classes act as a deterrent to pursue quality research• Inadequate space and infrastructural facility for faculty members to pursue research.



<p><u>Opportunity</u></p> <ul style="list-style-type: none">• Organization of Resource Based Activities like Seminars and Workshops through <u>Chemistry Interactive Chem Club</u> which holds seminars, quizzes and launching of wall magazines.• Student-teacher interaction and counseling of the students for higher education and career planning.	<p><u>Challenge</u></p> <ul style="list-style-type: none">• Poor communication and writing skill of majority of students is a big problem.• Motivating the students to pursue basic science at the present social scenario.• Renovation of laboratories for disposal of all chemical waste (solid, liquid and gas) in an eco friendly manner.
<p><u>Future Plans</u></p> <ul style="list-style-type: none">• To launch a Post Graduate course in Pure Chemistry.• Requesting government for funds to meet further infrastructural development .	



Annexure - Chemistry

List of Publication & Seminar Presentation

1. Dr. Soma Sen

International Publications:

- (i) “Kinetics and mechanism of formation of tetrachloropalladate (II) in the reactions of bis(oxalate)- and bis(malonato) palladate (II) with chloride in acid media.” Asim Kumar Das, **Soma Gangopadhyay** and Debabrata Banerjea. *Trans. Met. Chem.*, **1989**, *14*, 73. (I.F.=0.79)
- (ii) “Studies on the kinetics and mechanism of dissociation of copper (II) and nickel (II) complexes of macrocyclic ligand 1,5, 9, 13- tetraaza-2,4,4,10,12,12- hexametyalcyclohexadecane-1,9-diene in perchloric acid media.” A.K. Pongit, A.K. Das, S. **Gangopadhyay** and Debabrata Banerjea, *Trans. Met. Chem.* **1988**, *13*, 437. (I.F.=0.79)
- (iii) “Kinetics and mechanism of dissociation of some tri- and tetra-dentate complexes of copper (II) in acid media.” Asim Das, S. **Gangopadhyay** and Debabrata Banerjea, *Trans. Met. Chem.* **1987**, *12*, 18. (I.F.=0.79)
- (iv) “Kinetic studies on the formation of ternary complexes in the reaction of diaquo nitrilo triacetato nickelate (II) with amino acid in aqueous solution.” Asim Das, S. **Gangopadhyay** and Debabrata Banerjea, *Trans. Met. Chem.* **1986**, *11*, 259. (I.F.=0.79)
- (v) “Complex of Uranium (VI) by salicylate and substituted salicylates ; A kinetic study.” S. **Gangopadhyay**, R.N. Banerjee, and D. Banerjea, *Trans. Met. Chem.* **1985**, *10*, 325. (I.F.=0.79)
- (vi) “Kinetics and mechanism of formation and dissociation of copper (II) and nickel (II) complex of the Schiff base bis (acetylaceton) ethylenedimine in aqueous-organic solvent media.” S. **Gangopadhyay**, R.N. Banerjee, and D. Banerjea, *Trans. Met. Chem.* **1985**, *10*, 310. (I.F.=0.79)
- (vii) “Kinetics and mechanism of dissociation of some bis(N1-substitutedbiguanide) complexes of nickel (II) in aqueous acid.” R.N. Banerjee, S. **Gangopadhyay**, A.K. Banerjee and D. Banerjea, *J. Coord. Chem.* **1983**, *12*, 287. (I.F.=0.546)

National Publications:

- (i) “Studies on kinetics and mechanisms of reaction of dimethylglyoxime with iron (II), cobalt (II) and copper (II) ions in ethanol – water media.” **Soma Gangopadhyay**, Asim Das and D. Banerjea, *J. Indian Chem. Soc.* **1989**, *66*, 517.



- (ii) “Kinetics and mechanism of dissociation and electroreduction (at DMF) of the copper (II) and nickel (II) complexes of the macrocyclic ligand 1,3,6,9,11,14-hexa-azacyclohexadecane [(16)-ane- N₆] in aqueous solution.” M. Upadhyay, **S. Gangopadhyay** and D. Banerjea, J. Indian Chem. Soc. (Diamond Jubilee issue) **1985**, 62, 1029.

Articles and books

1. The History of Hindu Rasayana :The background and the Creator, Manaspatra, Book Fair, 2113 (1419)
2. The Environmental Philosophy in Ancient India. Miley Mishey, October, 2013. RNI No. WBBEN/2004/13826.
3. Social Relation between Nature and Humankind. UGC Sponsored Seminar in Ramkrishna Mission VC College in Collaboration with BKC College. 6th September 2013. Inaugural Lecture.

Travelogue:

Dekha Hoi Nai : Gangasagar. Prabasir Patra (New Delhi) 14.01.1913

Women Study:

1. 4th Rokeya Memorial Lecture : Women Artists and Sculptors of the last Century. 8th December . 2013
2. Women Artists and Sculptors Miley Mishey, October 2014.
- 3 An early Woman Artist at Shantiniketan : Chitraniva Chowdhury. Marg , A Magazine of Art . vol. 66, No. 3 (March, 2015) ISSN No : 0972 - 1444.

Life Profile :

1. The Doctor of Thakur Ramkrishna Paramhansa : Rajendra Dutta. Matrishakti Patrika. Kalpataru Sankhya. January 2015 RNI No. WBBEN/2001/3375.
2. Sur theke Ranger Khalay, Rabindra Bharati Sahitya patrika, Feb 2015.

2. Dr. Putul Chakraborti

International Publications:

- (i) “Solvent and Reversed Phase Extraction Chromatographic Separation of Molybdenum and Tungsten with Quaternary Ammonium salt reagent,



- Aliquat 336.” Nitya Ranjan Das and **Putul Chattopadhyay**, **Bull. of Chem. Soc. Japan 1989**, 3278-3282. (I.F.= 0.876)
- (ii) “Solvent and Reversed Phase Extraction Chromatographic Separation of Niobium, Zirconium and Hafnium with Aliquat 336” Nitya Ranjan Das and **Putul Chattopadhyay**, **Bull. of Chem. Soc. Japan 1988**, 1128. (I.F.= 0.876)
- (iii) “Separation of Niobium and Tantalum through solvent extraction and reversed phase extraction chromatography using Aliquat 336 as an anion exchanger.” Nitya Ranjan Das and **Putul Chattopadhyay**, **Journal of Radio analytical and Nuclear Chemistry 1987**, 45-54. (I.F.= 1.03)
- (iv) “Chemical consequences of $^{35}\text{Cl}(n,p)$ ^{35}S transformation in Alkali Chloride matrix.” Nitya Ranjan Das and **Putul Chattopadhyay**, **Journal of Radio analytical and Nuclear Chemistry 1984**, 185-195. (I.F.= 1.03)

3. Dr. Manasi Basu

International Publications:

- (i) “Dielectric relaxation in a single tryptophan protein.” **Manasi Ghose**, Surekha Mandal, Debjani Roy, Radha K. Mandal and Gautam Basu, **FEBS Letters 2001**, 509, 337-340. (I.F. 3.644)

Seminar Presentation:

1. ‘Structure and Equilibrium Unfolding of a 2S seed albumin From **Brassica Juncea**,’ XIII International Biophysics Congress; Satellite Symposium on Structural Biology and Molecular Recognition, *Saha Institute of Nuclear Physics*, **September 1999**.

4. Dr. Kartik Kumar Nandi

International Publications:

- (i) “Transition and Non-transition Metal Complexes with 1-formylferrocene-4-methoxy-benzoylhydrazone and 1-acetylferrocene-4-methoxy-benzoylhydrazone,” K. Dey and **K. K. Nandi**, **Synth . React . Inorg . Met. Org . Chem. 1999**, 29(3), 419. (I.F.=0.433)
- (ii) “Silylation Coupled with Desilylation as a Route to Newer Syntheses,” K. Dey, **K. K. Nandi** and G.B. Kauffman, **Polyhedron 1994**, 13, 2049. (I.F.= 1.081)



(iii) “Oxo-cation Complexes : Part – XIII; Dioxourenium (VI), Oxovanadium (IV) and Oxovanadium (V) Complexes of the Schiff base [N, N-2, 2-bis (aminoethyl) methylaminebis (3-carboxy-salicylideneimine)],” K. Dey, A.K. Mallick and **K. K. Nandi**, *Synth. React. Inorg. Met. Org. Chem.* **1992**, *22*, 1111. (I.F.=0.449)

(iv) “Reactions of $[\text{Cp}_2\text{MCl}_2]$ (M = Ti or Zr and Cp = $\eta^5 - \text{C}_5\text{H}_5$) with Multidentate Ligands and the Synthesis of New Cyclopentadienyl Derivatives of Titanium and Zirconium,” K. Dey, D. Bondyopadhyay, **K. K. Nandi**, S. N. Poddar, G. Mukherjee and G.B. Kauffman, *Synth. React. Inorg. Met. Org. Chem.* **1992**, *22*, 145. (I.F.=0.449)

National Publications:

(i) “Synthesis and Spectral Analysis of Nickel(II), Copper(II), Lead(II), Zinc(II), Barium(II) and Strontium(II) Complexes of Macrocyclic binucleating Ligand, 3-formyl-2-hydroxy-benzophenone,” K. Dey and **K. K. Nandi**, *Indian J. Chem.* **1996**, *35A*, 766.

(ii) “Reactions of Coordinated Ligands Leading to Newer Synthesis of 1,2,3 – trisubstituted Benzene Derivatives,” K. Dey and **K. K. Nandi**, *Indian J. Chem.* **1996**, *35B*, 318.

(iii) “Synthesis and Characterisation of Copper (II), Cobalt (II & III) and Nickel (II) Complexes with Ferrocenyl Schiff bases,” K. Dey and **K. K. Nandi**, *Indian J. Chem.* **1994**, *33A*, 908.

(iv) “Synthesis and Characterisation of Copper(II), Nickel(II), Cobalt(II), Zinc(II), Tin(IV) and Cadmium(II) Complexes with Ferrocenylmorpholine N–thiohydrazones,” K. Dey and **K. K. Nandi**, *Indian J. Chem.* **1994**, *33A*, 633.

(v) “Nickel(II) Complexes of the Hydrazones Derived from 4-Methoxybenzoylhydrazide and Salicylaldehyde, o-Hydroxyacetophenone and Diacetylmonoxime,” K. Dey, K.S. Mondal, D. Bondyopadhyaya and **K. K. Nandi**, *Indian J. Chem.* **1993**, *32A*, 358.

Seminar Presentation:

1. ‘Common Organic Water Contaminants; Concern for Environmentalists’, **K. K. Nandi**, 7TH International Congress of Environmental Research, *Journal of Environmental Research And Development (JERAD)*, India, 26-28 December, **2014**.



2. **‘Persistent Organic Pollutants In Water; Threats To Civilization’, K. K. Nandi**, VIII-WAC-International Conference- Balancing Development & Environment, *World Aqua Foundation, New Delhi*, 20-21 November, **2014**.
3. **‘Green Chemistry Education ... Friedel & Craft Acylation’ K. K. Nandi**, Emerging Area in Chemical Education & Research and National Convention on Chemistry Teachers, *Asso-Chem-Teachers & Department Of Chemistry, The IIS University*, 16-18 October-**2014**.
4. **‘Green Oxidants ... Purification of Water’, K. K. Nandi**, 101th Indian Science Congress –2014; Sec: Envs. Sciences, *UNIVERSITY OF JAMMU, JAMMU*, 3 – 7TH February, **2014**.
5. **‘Green Aldol ... Reactions of Acetylferrocene’, K. K. Nandi**, 101th Indian Science Congress –2014; Sec: Chemical Sciences, *UNIVERSITY OF JAMMU, JAMMU*, 3 – 7TH February, **2014**.
6. **‘Sustainable Alternatives For Hazardous Chemicals Used In Chemistry Laboratory,’ K. K. Nandi**, International Workshop: Green Initiatives in Energy, Environment & Health, *GCNC, TERI & Goutam Budha University; New Delhi*; 2 – 3 December, **2013**.
7. **‘Solid Phase ... Reactions For Ferrocenyl-Monochalcone’, K. K. Nandi**, National Seminar on Recent Developments in... Chemistry, *Department of Chemistry West Bengal State University*, **23rd Nonember 2013**.
8. **‘Suitable Green Bromination Experiments ... Organometallic Substrates,’ K. K. Nandi**, 15th Asian Chemical Congress 2013, *Resorts World Sentosa, Singapore*, **August 2013**.
9. **‘Synthesis of Dichloroacetylferrocenes Using ZnO-Nanoparticles, etc.’, K. K. Nandi**, Chemical Science Section of 100th Indian Science Congress 2013, *UNIVERSITY OF CALCUTTA*, **January, 3-7, 2013**.
10. **‘Ionic Liquid And Metal Oxide ... For Bioactive Ferrocenyl Compounds,’ K. K. Nandi**, International Conference on Interface between Chemistry and Environment, *Ramjas College; New Delhi*, **December 2012**.
11. **‘Life Cycle Assessment and ... in Achieving Water Sustainability,’ K. K. Nandi**, International Workshop on Chemistry for a Sustainable Future, *University of Rajasthan & University of Delhi*, **December 2012**.
12. **‘H₂O₂ As ... Oxidants For ... Purification Of Water,’ K. K. Nandi**, VI - *World Aqua Congress 2012*; Emerging New Technologies, *World Aqua Foundation, New Delhi*, **November 2012**.



13. 'Hazardous Chemicals In Chemistry Lab... Development,' K. K. Nandi, Environment and Human Health, *N. Env. Sc. Ac.; New Delhi*, November 2012.
14. 'Selected Green Bromination Expts. ... for Organic Chemistry Curriculum,' K. K. Nandi, 22nd International Conference on Chemistry Education, *ROME ITALY*, July 2012.
15. 'Alternative Solvents; Organic / Bio-Organic Reactions & Extractions,' K. K. Nandi, UGC- Workshop on Alternative Sustainable Processes, *UGC, ICT, MUMBAI*, March 2012.
16. 'Emerging Water Pollutants; Threats to Modern Civilization,' K. K. Nandi, Vth World Aqua Congress. International Conference, New Delhi, November, 2011.
17. 'Simple Method For Organotitanium ... Thiohydrazones Ligands,' K. K. Nandi, National Seminar, NSIC-2011 150th Birth Anniversary of A. P. C. Ray, *Jadavpur University Kolkata –700 032*, July, 2011.
18. 'Water Pollution ... Materials & Related Health Hazards,' K. K. Nandi, 3rd National Seminar Recent Approaches in Env. Science, *Gwalior Engineering College; M.P.*, June, 2011.
19. 'Recent Approaches of Green Chemistry ... Water Pollution,' K. K. Nandi, National Seminar Recent Approach in Env. Science, Gwalior Engineering College; M.P., June, 2011.
20. 'Water Quality ... Water Pollution,' K. K. Nandi, National Seminar Water pollution, *SKM University, DUMKA*, April, 2011.
21. 'Scope of green chemistry... future,' K. K. Nandi, National Seminar Water pollution, *SKM University, DUMKA*, April, 2011.
22. 'Tagore's ... Science Popularization,' K. K. Nandi, National Conf. Science...Nature, *Visva Bharati University*, March, 2011.
23. 'Photosynthesis ... Vision,' K. K. Nandi, National Conf. Science...Nature, *Visva Bharati University*, March, 2011.
24. 'Eco-Friendly..... of Aromatic Compounds,' K. K. Nandi, 98th Indian Science Congress Association- 2011, *ISCA & SRM University*; January, 2011.



25. 'Simple And Eco-Friendly -Ferrocene Over ZnO,' **K. K. Nandi**, Int. Symposium Green/Sustainable Chemistry' -2006, *IUPAC; NJIT & University of Delhi*, **January, 2006.**
26. 'Strategic Approach To Env. Chem.Edu. & Awareness,' **K. K. Nandi**, Second Indian Educ. Science Congress – 2000, *University of Kalyani; KALYANI*, **January, 2000.**
27. 'Metal Mediated Organic Synthesis,' **K. K. Nandi**, Pre-IUPAC Int. Symposium-1994, *NCL, PUNE*, **December, 1994.**
28. 'ISCAYoung Scientist Award- New Organo-metallic Compounds,' **K. K. Nandi**, 81st Indian Science Congress Association- 1994, ISCA & Rajasthan Univ. JAIPUR, **January, 1994.**
29. 'Cu(II) ...ferrocenyl Schiffbases ... Reactions,' **K. K. Nandi**, 30th Annual Convention of Chemists – 1993, *Ind. Chem. Society & Bose Institute*, **December, 1993.**
30. 'Paper Under Young Scientist Program of ISCA – 1993,' **K. K. Nandi**, 80th Indian Science Congress Association- 1993, ISCA & Goa University; GOA, **January, 1993.**
31. 'Reactions of π -Cp₂MCl₂ (Ti/Zr) Compounds,' **K. K. Nandi**, 28th Annual Convention of Chemists – 1991, Jadavpur University CALCUTTA, **December, 1991.**
32. 'Reactivity of Coordinated Ligands,' **K. K. Nandi**, 78th Indian Science Congress Association- 1991, ISCA & Devi Ahilya Univ. INDORE, **January, 1991.**

5. Dr. Swarup Manna

International Publications:

- (i) 'Supramolecular Organization of (Camphor-10-sulfonic Acid and *N,N*-Dimethyl Formamide into Giant Spherulites', **Swarup Manna** and Arun K. Nandi, *J. Phys. Chem. B (Letter)* **2004**, *108*, 6932-6934. (I.F.= 3.83)
- (ii) 'Thermoreversible Gelation of Poly(vinylidene fluoride)–Camphor System', Debarshi Dasgupta, **Swarup Manna**, Sudip. Malik, Cyrille Rochas, Jean-Michel Guenet and Arun K. Nandi *Macromolecular Symposia* **2005**, *222*, 175-180. (I.F.=0.606)



- (iii) 'Thermodynamic Structural and Morphological Investigation of Poly(vinylidene fluoride) / Camphor System: Preparing Porous Gels from a Solid Solvent', Debarshi Dasgupta, Swarup Manna, Sudip Malik, Cyrille Rochas, Jean-Michel Guenet and Arun K. Nandi *Macromolecules* **2005**, *38*, 5602-5608. (I.F.= 4.02)
- (iv) 'Preparation and Characterization of Silver-Poly(vinylidene fluoride) Nanocomposites: Formation of Piezoelectric Polymorph of Poly(vinylidene fluoride)', Swarup Manna, Sudip K. Batabyal, and Arun K. Nandi, *J. Phys. Chem. B* **2006**, *110*, 12318-12326. (I.F.= 4.12)
- (v) 'A two component thermoreversible hydrogel of riboflavin and melamine: Enhancement of photoluminescence in the gel form', Swarup Manna, Abhijit Saha and Arun K. Nandi *Chem. Commun.* **2006**, 4285-4287. (I.F.= 4.52)
- (vi) 'Low Molecular Weight Organogelators from Self-assembling Synthetic Tripeptides With Coded Amino Acids: Morphological, Structural, Thermodynamic and Spectroscopic Investigations', Apurba K. Das, Swarup Manna, Michael G. B. Drew, Sudip Malik, Arun K. Nandi and Arindam Banerjee *Supramolecular Chemistry* **2006**, *18*, 645-655. (I.F.= 1.86)
- (vii) 'Piezoelectric β Polymorph in Poly(vinylidene fluoride)-Functionalized Multiwalled Carbon Nanotube Nanocomposite Films', Swarup Manna and Arun K. Nandi, *J. Phys. Chem. C* **2007**, *111*, 14670-14680. (I.F.= 3.40)
- (viii) 'A Mechanistic Approach on the Self-Organization of the Two-Component Thermoreversible Hydrogel of Riboflavin and Melamine', Abhijit Saha, Swarup Manna and Arun K. Nandi *Langmuir* **2007**, *23*, 13126-13135. (I.F.= 4.01)
- (ix) 'Morphology, Structure, Rheology, and Thermodynamics of Piezoelectric Poly(vinylidene fluoride)-Ethylene Carbonate Thermoreversible Gel', Debarshi Dasgupta, Swarup Manna, Ashes Garai, Arnab Dawn, Cyrille Rochas, Jean-Michel Guenet and Arun K. Nandi, *Macromolecules* **2008**, *41*, 779. (I.F.= 4.41)



- (x) ‘Hierarchical tuning of 1-D macro morphology by changing composition of a binary hydrogel and its influence on photoluminescence property’, Abhijit Saha, **Swarup Manna** and Arun K. Nandi, *Chem. Commun.* **2008**, 3732 – 3734. (I.F.= 5.34)
- (xi) ‘Multifunctional Hydrophilic Poly(vinylidene fluoride) Graft Copolymer with Super-toughness and Super- gluing Properties’, Sanjoy Samanta, Dhruva P. Chatterjee, **Swarup Manna**, Amit Mandal, Ashesh Garai and Arun K. Nandi, *Macromolecules* **2009**, *42*, 3112-3120. (I.F.=4.539)
- (xii) ‘Temperature and pH sensitive photoluminescence of riboflavin-methyl cellulose hydrogel: towards AND molecular logic gate behaviour’, Abhijit Saha, **Swarup Manna** and Arun K. Nandi, *Soft Matter* **2009**, *5*, 3992-3996. (I.F. = 4.15)
- (xiii) ‘Fabrication of Nanostructured Poly(3-thiophene methyl acetate) within Poly(vinylidene fluoride) Matrix: New Physical and Conducting Properties’, **Swarup Manna**, Amit Mandal, and Arun K. Nandi, *J. Phys. Chem. B* **2010**, *114*, 2342–2352. (I.F.= 3.696)
- (xiv) ‘Reply to “Comment on ‘Preparation and Characterization of Silver–Poly(vinylidene fluoride) Nanocomposites: Formation of Piezoelectric Polymorph of Poly(vinylidene fluoride)’”, **Swarup Manna** and Arun K. Nandi, *J. Phys. Chem. B* **2011**, *115*, 12325–12326. (I.F.=3.696)
- (xv) ‘Living supramolecular polymerization realized through a biomimetic approach’, Soichiro Ogi, Kazunori Sugiyasu, **Swarup Manna**, Sadaki Samitsu and Masayuki Takeuchi, *Nature Chemistry* **2014**, *6*, 188–195. (I.F.= 21.757)

Seminar Presentation:

1. ‘Supramolecular Organization of \pm Camphor-10-Sulfonic Acid and Various Amides’, **Swarup Manna** and Arun K. Nandi, 40th IUPAC World Polymer Congress, **Macro-2004**, Proceedings, e-polymer, Paris, France, 4-9 July 2004.
2. ‘Isothermal Crystallization of Supramolecular Polymer Produced from Self-Organized Systems of Camphor-10-Sulfonic Acid and Different



Amides, Swarup Manna and Arun K. Nandi, International Conference on Polymer for Advanced Technologies, **Macro 2004**, Proceedings, Thiruvananthapuram, India, 14-17 December, **2004**, p-248.

3. **'Self Organized Systems of Camphor-10-Sulfonic Acid and Different Amides: Formation of Giant Spherulites'**, **S. Manna** and A. K. Nandi in Book of Abstracts of **IUPAC International Symposium on Ionic Polymerization**, October 23-28, **2005**, Goa p.136-137.

4. **'Formation of piezoelectric β polymorph of poly(vinylidene fluoride) in silver poly-(vinylidene fluoride) nanocomposite'**, **S. Manna** and A. K. Nandi, National Conference of Polymer for advanced Technologies, **Macro-2006** proceedings, December 17-20, **2006**, National Chemical Laboratory, Pune.

5. **'Elucidation of Gelation Mechanism of a Two Component Supramolecular Polymer'**, 10 th National conference on Recent Advances in Polymeric Materials, **Macro 2009**, Proceedings, IIT Madras, India, March 9-11, **2009**.

6. **"Living Supramolecular Polymerization"**, **Swarup Manna**¹, Soichiro Ogi, Kazunori Sugiyasu and Masayuki Takeuchi, International Symposium on Polymer Science and Technology, **"MACRO 2015"**, Proceedings, IACS And Society for Polymer Science, India, January 23-26, **2015**.

6. **Dr. Anshupriya Shome**

International Publications:

(i) "In-situ synthesized Ag-nanoparticle in self-assemblies of amino acid based amphiphilic hydrogelators: Development of antibacterial soft nanocomposites." **Anshupriya Shome**, Sounak Dutta, Subhabrata Maiti, Prasanta Kumar Das, **Soft Matter** **2011**, 7, 3011. (I. F. =4.39)

(ii) "Spontaneous Formation of Biocompatible Vesicles in Aqueous Mixtures of Amino Acid-Based Cationic Surfactants and SDS/SDBS", **Anshupriya Shome**, Tanmoy Kar, Prasanta Kumar Das, **Chem. Phys. Chem.** **2011**, 12, 369. (I. F. =3.412)

(iii) "Devising SWNT-Nanoconstructs for Efficacious Protein Delivery through Rational Modification of Dispersing Agents" Sayanti Brahmachari, Dibyendu Das, **Anshupriya Shome**, Prasanta Kumar Das, **Angew. Chem. Int. Ed.** **2011**, 50, 11243. (I. F. = 13.455)



- (iv) “Copolymers of 2-(N, N-dimethylaminoethyl)methacrylate and Alkylacrylate: Characterization, Antimicrobial Activity, DNA Binding, and Cytotoxicity Studies”, Pranabesh Dutta, Joykrishna Dey, **Anshupriya Shome**, Prasanta Kumar Das, *Int. J. Pharmaceutics* **2011**, 414, 298. (I. F. = 3.35)
- (v) “Counterion-Induced Modulation in the Antimicrobial Activity and Biocompatibility of Amphiphilic Hydrogelators: Influence of in-Situ-Synthesized AgNanoparticle on the Bactericidal Property” Sounak Dutta, **Anshupriya Shome**, Tanmoy Kar, and Prasanta Kumar Das, *Langmuir* **2011**, 27, 5000. (I. F. = 4.186)
- (vi) “Hydrogelation Through Self-Assembly of Fmoc-Peptide Functionalized Cationic Amphiphiles: Potent Antibacterial Agent.” Sisir Debnath, **Anshupriya Shome**, Dibyendu Das, Prasanta Kumar Das, *J. Phys. Chem. B*, **2010**, 114, 4407. (I. F. = 3.603)
- (vii) “Influence Varying Sized Gold Nanoparticles in Improving the Lipase Activity within Cationic Reverse Micelles.” Subhabrata Maiti, Dibyendu Das, **Anshupriya Shome**, Prasanta Kumar Das, *Chem. Eur. J.* **2010**, 16, 1941. (I. F. = 5.476)
- (viii) “Counterion dependent hydrogelation of aminoacid-based amphiphiles: Switching from non-gelators to gelators and facile synthesis of silver nanoparticles.” Sounak Dutta, **Anshupriya Shome**, Sisir Debnath, Prasanta Kumar Das, *Soft Matter* **2009**, 5, 1607. (I. F. = 4.87)
- (ix) “Antimicrobial activity, biocompatibility and hydrogelation ability of dipeptide-based amphiphiles.” Rajendra Narayan Mitra, **Anshupriya Shome**, Pritha Paul, and Prasanta Kumar Das, *Org. Biomol. Chem.* **2009**, 7, 94. (I. F. = 3.762)
- (x) “Organogelation and Hydrogelation of Low-Molecular-Weight Amphiphilic Dipeptides: pH-Responsiveness in Phase Selective Gelation and Dye Removal.” Tanmoy Kar, Sisir Debnath, Dibyendu Das, **Anshupriya Shome**, Prasanta Kumar Das, *Langmuir* **2009**, 25, 8639. (I. F. = 3.898)
- (xi). “Role of Linker Groups between Hydrophilic and Hydrophobic Moieties of Cationic Surfactants on Oligonucleotide-Surfactant Interactions.” Deenan Santhiya, Rita S. Dias, **Anshupriya Shome**, Prasanta Kumar Das, Maria G. Miguel, Björn Lindman, Souvik Maiti, *Langmuir* **2009**, 25, 13770. (I. F. = 3.898)
- (xii) “Head Group Modulated pH-Responsive Hydrogel of Amino Acid-Based Amphiphiles: Entrapment and Release of Cytochrome c and Vitamin B₁₂.”



Anshupriya Shome, Sisir Debnath, Prasanta Kumar Das, *Langmuir* **2008**, 24, 4280. (I. F. = 4.097)

(xiii) “Dipeptide Based Low-Molecular-Weight Efficient Organogelators and Its Application in Water Purification.” Sisir Debnath, **Anshupriya Shome**, Sounak Dutta, Prasanta Kumar Das, *Chem. Eur. J.* **2008**, 14, 6870. (I.F.=5.454)

(xiv) “Nonionic Surfactants: A Key to Enhance the Enzyme Activity at Cationic Reverse Micellar Interface.” **Anshupriya Shome**, Sangita Roy, Prasanta Kumar Das, *Langmuir* **2007**, 23, 4130. (I. F. = 4.097)

Seminar Presentation:

1. Anshupriya Shome, Dibyendu Das and Prasanta Kumar Das. The effect of mixed reverse micelles on the activity of surface activity enzymes. National symposium on surface science. The Central Glass & Ceramic Research Institute (CGCRI), January 14-16, **2007**.

2. Anshupriya Shome, Dibyendu Das and Prasanta Kumar Das. The effect of mixed reverse micelles on the activity of surface activity enzymes. Centre for Advanced Materials, Indian Association for the Cultivation of Science, July 13th, 2007.

3. Anshupriya Shome, Sisir Debnath and Prasanta Kumar Das. pH-responsive amino acid-based hydrogel: entrapment and release of bioactive materials. 11th CRSI National Symposium in Chemistry” held at National Chemical Laboratory, Pune (India), 6-8 February, **2009**.

4. Dibyendu Das, Subhabrata maiti, **Anshupriya Shome**, Sisir Debnath and Prasanta Kumar Das Nano material in reverse micelles: The route for superior activity of enzymes. Published in the Proceeding of the “**In-house symposium on IACS foundation day**” held at Indian Association for the Cultivation of Science, Kolkata, on July 29th, **2009**.

6. Dr. Amit Mondal

International Publications:

(i) “In alkaline media, Fremy’s salt oxidizes alkanols by a hydrogen atom transfer mechanism”, Piyali De, Dhurjati Prasad Kumar, **Amit Mondal**, Pulak Chandra Mandal, Subrata Mukhopadhyay and Rupendranath Banerjee, *Polyhedron* **2010**, 29, 1358–1362. (I.F.=2.033)



(ii) “Kinetics of oxidation of quinol and ascorbic acid with the phen substituted semiquinone ligand, (5,6-dioxolene-1,10-phenanthroline-O,O), bound to the $Ru^{II}(bipy)_2$ moiety,” **Amit Mondal**, Piyali De, Subrata Mukhopadhyay, Rupendranath Banerjee, Prasenjit Kar, Amilan D. Jose and Amitava Das, *Polyhedron* **2009**, 28, 2655–2660. (I.F.=2.207)

National Publications:

(i) “Kinetics and mechanism of uncatalyzed oxidation of hydrazine with superoxide coordinated to cobalt(III),” **Amit Mondal** and Rupendranath Banerjee, *Ind. J. Chem.* **2009**, 48A, May, 645-649.

(ii) “Kinetics and mechanism of oxidation of quinol, ascorbic acid and hydrogen peroxide by $[Mn_2^{IV}(\mu-O)_2(phen)_4]^{4+}$ ion,” Piyali De, **Amit Mondal**, Dhurjati P. Kumar, S. Mukhopadhyay, R. Banerjee and Dilip Maji, *J. Ind. Chem. Soc.* **2008**, 85, Dec., 1191-1198.



Evaluative Report of the Department of Mathematics

1. **Name of the department:** Mathematics
2. **Year of Establishment:** 1956
3. **Names of Programmes/Courses offered (UG, PG, M. Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG
 - i) Mathematics Honours (started in the academic year): 1961
 - ii) Mathematics General (started from the beginning, i.e 1956)
 - iii) PG-Mathematics (commencing from the academic year 2016, vide letter No. Aff (WBSU)/MS/213/SCHE/2015, dated 11.6.2015 through West Bengal State Council of Higher Education).
4. **Names of Interdisciplinary courses and the departments/units involved:** Nil
5. **Annual/semester/choice based credit system (programme wise):** Annual
Students are required to take three examinations conducted by the University, one at the end of each year – Part I, Part II and Part III
6. **Participation of the department in the courses offered by other departments:**
 - a). Mathematics as general subject with honours in i) Physics ii) Chemistry and iii) Economics.
 - b). Mathematics as compulsory general subject for B.Sc. General (Pure and Eco Science)
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses/programmes discontinued (if any) with reasons:** Not Applicable



9. Number of teaching posts

Academic Session	Faculty	Sanctioned	Filled
2014 – 2015	Professors	NA	NA
	AssociateProfessors	CAS	02
	AssistantProfessors	05	03
2013 – 2014	Professors	NA	NA
	AssociateProfessors	CAS	02
	AssistantProfessors	05	02
2012 – 2013	Professors	NA	NA
	AssociateProfessors	0	0
	AssistantProfessors	05	04
2011 – 2012	Professors	NA	NA
	AssociateProfessors	0	0
	AssistantProfessors	05	04
2010 – 2011	Professors	NA	NA
	AssociateProfessors	0	0
	AssistantProfessors	05	04

*At the entry level, only Assistant Professor Posts are available. They are promoted to the post of Associate Professor through Career Advancement Scheme (CAS).

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M. Phil.etc.,) from 2010 onwards

Name	Qualification	Designation	Specialization	Years of Experience	Ph.D.Students guided for the last 4 years
Shyamal Sen	M.Sc., Ph.D.	Associate Professor	Operation Research	18 years
Neeta Pandey	M.Sc., Ph.D.	Associate Professor	Algebraic Topology	15 years



Name	Qualification	Designation	Specialization	Years of Experience	Ph.D. Students guided for the last 4 years
Saral Dutta	M.Sc., M.Phil	Assistant Professor	Complex analysis	15 years
Subhrojyoti Debnath	M.Sc., Ph.D.	Assistant Professor	Bio Mechanics	5 years 8 months (as Permanent) 2 years (as Guest Lec.)
Sheikh Ahmed Hossain	M.Sc.	Assistant Professor	Fluid Mechanics	14 years

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: NA

13. Student-Teacher Ratio (programme wise):

Session	Student-Teacher ratio (Mathematics Honours)	Student-Teacher ratio (Mathematics General)
2014-15	9 : 1	26 : 1
2013-14	14 : 1	20 : 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: Nil

15. Qualifications of teaching faculty with DSc/D. Litt/Ph. D/M. Phil/PG.:

Name	Qualification
Shyamal Sen	M.Sc., Ph. D.
Neeta Pandey	M.Sc., Ph. D.
Saral Dutta	M.Sc., M. Phil.



Subhrojyoti Debnath	M.Sc., Ph. D.
Sheikh Ahmed Hossain	M.Sc.

16. **Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:** NIL

17. **Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received**

Minor Research Projects: UGC

Sheikh Ahmed Hossain, Department of Mathematics

- Undertook a Minor Research Project entitled “**Studies on Mathematical Methods for Portfolio Selection Problems in Uncertain Environment**” under UGC and got Rs. 1, 32,000/- (2012-14).

UGC Minor Research Projects					
Name of the PI	Duration	Funding Agency	Allocated	Received	Status
Sheikh Ahmed Hossain	2012-14	UGC	Rs. 1,32,000/-	Rs. 1,10,582/-	Completed

18. **Research Centre/facility recognized by the University:** Nil

19. **Publications:** For details see Annexure - I

- Publication per faculty
- Number of papers published in peer reviewed journals (national/ International) by faculty and students
 - Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.)
 - Monographs
 - Chapter in Books
 - Books Edited
 - Books with ISBN/ISSN numbers with details of publishers
- Citation Index
- SNIP



Faculty	No. of papers			No. of publications listed in Int. Data base	Chapter in books	Books edited	Books with ISSN/ ISBN No.	SNIP	SJR	Impact factor	h-Index	Paper presentation
	Journal		Conference Proceedings									
	National	Inter-national										
Shyamal Sen	-	07	14	15	01	-	-	-	-	-	-	14
Neeta Pandey	-	05	-	05	-	-	-	-	-	-	-	07
Saral Datta	-	02	01	02	-	-	-	-	-	-	-	06
Subhrojyoti Debnath	02	05	02	05	-	-	-	-	-	-	-	04
Seikh Ahmed Hossain	-	02	02	02	01	-	01	-	-	-	-	04

- SJR
- Impact factor
- h-index

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards....

Name of Faculty	International/ National Committee	Editorial Board	Other	Membership/ Year
Shyamal Sen	Life member of Calcutta Mathematical Society	---	---	---
Subhrojyoti Debnath	Life member of Institute of Theoretical Physics	---	---	---



Seikh Ahmed Hossain	Life member of Operation Research Society of India	---	---	---
---------------------	--	-----	-----	-----

22. Student projects

- a) Percentage of students who have done in-house projects including interdepartmental/programme: Nil
- b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies: Nil

23. Awards/Recognitions received by faculty and students:

Name of the faculty	Awarded for	Awarded By	Year
Shyamal Sen	Ph. D.	University of Kalyani	2011
Subhrojyoti Debnath	Ph. D.	University of Kalyani	2013

24. List of eminent academicians and scientists/visitors to the department

No.	Name	Institute	Year of visit
1.	Prof. Amartya Dutta	Professor, Indian Statistical Institute, Kolkata, West Bengal.	2004
2.	Prof. Somesh Chandra Bagchi	Professor, Indian Statistical Institute, Kolkata, West Bengal.	2007
3.	Prof. Sadhan Kumar Mapa	Professor, Presidency College, Kolkata, West Bengal	2007
4.	Prof. Mihir Kumar Chakraborty	Professor, Dept. of Pure Mathematics, University of Calcutta, Kolkata, West Bengal	2007



5.	Prof. Dulal Chandra Sanyal	Professor, Dept. of Mathematics, University of Kalyani, Kalyani, West Bengal.	2014
6.	Prof. Amartya Dutta	Professor, Indian Statistical Institute, Kolkata, West Bengal.	2015

25. Seminars/Conferences/Workshops organized & the source of funding a) National:

- a) The department organized a National Seminar “Knowledge Based systems” on 2nd – 3rd December, 2004 in collaboration with Indian Statistical Institute (ISI, Kolkata).
- b) A proposal of a National Seminar to be organized by the Department will be submitted to the UGC. The title of the proposed Seminar is “Algebra and its Applications”.
- c) Upcoming Events: The department is going to organize a Teachers’ Training Workshop in collaboration with Indian Statistical Institute (ISI, Kolkata) and National Centre for Mathematics (NCM).

The tentative date: First week of February, 2016

d) Departmental student’s seminar

Title of the seminar : Many Facets of Mathematics (9th, 2nd Oct 2015).

Seminar topic with date	Speaker	Funding agency
<ul style="list-style-type: none"> • The area of circle without magnitude of pi. • Set Theory • Discovery of Mathematical number. • History of Probability. 	<ul style="list-style-type: none"> • Animikh Gowwami (1st Year) • Rittik Chakraborty (1st Year) • Atmadeep Banerjee (1st Year) • Rakesh Bairagi (3rd Year) • Shubhrajeet Chatterjee (3rd Year) • Trinayanee Sukul (3rd Year) • Sanjib Ghosh (3rd Year) 	B.K.C College



<ul style="list-style-type: none"> • Banach-Tarsky Paradox • Magic Square • Game Theory 		
--	--	--

b) International - Nil

26. Student profile programme/course wise:

(a) Admission related record for last five year (Session 2010-11 to 2014-15)

Session	Applications received for I st year admission	Admitted - 1st Year			Admitted - 2nd Year			Admitted - 3rd Year		
		Male	Femal e	Total	Male	Femal e	Total	Male	Femal e	Total
2014-15	26	8	5	13	9	4	13	7	6	13
2013-14	58	15	9	24	9	7	16	7	7	14
2012-13	42	17	5	22	7	6	13	3	1	4
2011-12	102	30	14	44	4	2	6	8	2	10
2010-11	95	23	7	30	10	2	12	6	0	6

It is observed that there is a trend among 1st year students to shift to engineering colleges next year by appearing in JEE. This explains the abrupt fall in the number of students in 2nd year.

(b) Result of Final Year Student

Session	Students appeared in Part - III	Pass percentage	First Class
2014-15	10	90%	
2013-14	13	77%	
2012-13	5	100%	
2011-12	9	89%	



2010-11	9	89%	
---------	---	-----	--

*The result is of those students who appeared in the final examination with honours in academic year 2010-11 and so on.

#Students who have cleared honours but failed in general subject in that year is reflected here.

The number of students who appeared in the part III examination may differ than those admitted as there are casual students each year.

Pass percentage reflects those students who have cleared the Part III honours examination but has not cleared any general paper in Part II and Part III.

27. Diversity of Students

All students are from West Bengal only.

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Sl. No.	Name	Department	Year and Examination
1.	Sanjay Ghosal	Mathematics	2007, NET
2.	Subhabrata Sarkar	Mathematics	2009, NET; 2009, GATE

29. Student progression

a) Career progression (for Honours students)

Student progression	Against %enrolled				
	2014-15	2013-14	2012-13	2011-12	2010-11
UG to PG	16	Data not available	60	40	Data not available
PG to M.Phil.					
PG to Ph.D.					



Student progression	Against %enrolled				
	2014-15	2013-14	2012-13	2011-12	2010-11
Academic Year →					
Ph.D. to Post-Doctoral					
Employed • Campus selection • Other than campus recruitment					
Entrepreneurship/ Self-employment					

Note : Many of the students who pass out in the general course get employed in different sectors but we do not have the data.

30. Details of Infrastructural facilities

- a) **Library:** Department has its own seminar library which is quite rich in collection of books.
- b) **Internet facilities for Staff & Students:** The department has one computer with LAN connection and internet facility. Staff members and departmental students can access this facility.
- c) **Class rooms with ICT facility:** Room No. 15 is equipped with ICT facility. The department uses ICT facility for teaching and arranging the departmental seminars.
- d) **Laboratories:** The department has a well equipped Computer and computational Lab.

31. Number of students receiving financial assistance from college, university, Government to other agencies:

Year	Financial assistance from the College					
	Full Free Studentship			Half Free Studentship		
	1st Year	2 nd Year	3 rd Year	1st Year	2 nd Year	3 rd Year
2014-15	1		1		1	
2013-14		1				



2012-13					2	
2011-12	1		1			1
2010-11		2	2			

Financial assistant from Government of West Bengal			
Year	Name of the student	Name of the scholarship Scheme	Amount (in Rupees)
2013-14	Shyam Sundar Pal		10,800 /-
	Rizwana Khatun	WB minority & Merit – cum -Means	3,000 /-
	Surauya Anjum	WB minority & Merit – cum -Means	3,000 /-
2014-15	Moumita Pramanick	Kanyashree	25,000 /-

32. Details on student enrichment programmes (special lectures/workshops/ Seminar) with external experts

Seminars organized by the department (funded by the College):

No.	Speaker	Affiliated with	Topic	Date
1	Dr. Subhrojyoti Debnath	B .K. C. College	Mathematical Biosciences	10.09.2011
2	Prof. Dulal Chandra Sanyal	University of Kalyani	Mathematical Modelling in Pharmacology	17.02.2014
3	Prof. Amartya Dutta	Indian Statistical Institute, Kolkata	Bhavana : From Brahmagupta to Bhargava	29.09.2015

33. Teaching methods adopted to improve student learning:

- Power Point Presentation is used as a modern teaching aid.
- Black Board, Chalk and Duster (Traditional tools) are used for teaching.
- The department has organized students' seminar s. These enable



them to prepare a paper outside their usual course work and enhances in public capabilities.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- All of the faculty members and students of the department participated in centrally organized activities of the College.
- Professor Neeta Pandey worked as a Guest Lecturer for PG course (session 2013-14) in the department of Mathematics, Dum Dum Matijhil College, Kolkata.
- Professor Subhrojyoti Debnath is involved to the examination system of Visva-Bharati University and University of Kalyani (UG). He is also involved with the examination system of University of Burdwan and Netaji Subhas Open University (PG).
- Professor Sheikh Ahmed Hossain delivered a Lecture on “Introduction to Graph Theory: Thinking is Progress” at Purash Kanpur Haridas Nandi Mahavidyalaya on 29.09.2007.
- He delivered Series Invited of Lectures at National institute of Technology, Arunachal Pradesh during October 20-29, 2011 for the 1st Semester students in Mathematics.

35. SWOC analysis of the department and Future plans

Strength:

- Student-Teacher ratio enables teachers to give individual attention the need of student.
- Special time is devoted for weaker students.
- Regular tutorials and class tests are held to assess lacuna in learning.
- The departmental library has several books which are useful for the student of honours course as well as the student of general course.
- Well equipped computer and computational lab.



Weakness:

- Lack of space.
- Decrease in students' enrollment.

Opportunities:

- The curriculum is so designed that student may go for higher studies or there are several job opportunities.
- Due to the interdisciplinary nature of the subject the students may explore other areas like Computer Science, Statistics, and M. Tech. etc.

Challenges:

- Increase the students' enrollment.
- Many students are first generation learner.
- Support the students to minimize the number of dropouts.
- Produce not only good students but also good citizens

Future Plan:

- To upgrade the Departmental Library.
- To upgrade the Computer and computational lab.
- Department has a plan to introduce PG course. The proposal has been already submitted to the University (West Bengal State University) as well as the department of Higher Education Council, West Bengal. The Council already visited this year. Some advices have been suggested. We have started the process of following their suggestions. We are hopeful for the commencement of PG course in the next session (2016-2017).



Annexure – Mathematics

NAME: SHYAMAL SEN

A. Published Papers in Journals

#	Title with page nos.	Journal	ISSN/ ISBN No.	Whether peer reviewed Impact factor, if any	No. of co-authors	Whether you are the main author	Name the International Database, if any.
1.	A multiobjective interval goal programming method using penalty function (Accepted), 2014	Int. J. Operational Research (IJOR)	ISSN online: 1745-7653 ISSN print: 1745-7645	Yes	None	Yes	
2.	A piecewise linear approximation method to solve fuzzy separable quadratic programming problem Vol. 3, No. 1, pp. 230-235 , 2013	International Journal of Advanced Computer Research	ISSN: 2249-7277 (Print); 2277-7970 (Online)	Yes	Two	Yes	
3.	Interval Goal Programming Approach to Multiobjective Fuzzy Goal Programming Problem with Interval Weights	Procedia Technology (Elsevier)	ISSN: 2212-0173	Yes	Two	Yes	



#	Title with page nos.	Journal	ISSN/ ISBN No.	Whether peer reviewed Impact factor, if any	No. of co- authors	Whethe r you are the main author	Name the Internatio- nal Database, if any.
	Vol. 10, pp. 587 – 595, 2013						
4.	A priority-based goal programming method for solving academic personnel planning problems with interval-valued resource goals in university management system. Vol. 4, No. 3, pp. 284-312, 2012.	International Journal of Applied Management Science (IJAMS)	ISSN: 1755- 8921 (Online); 1755- 8913 (Print)	Yes	Three	No	
5.	Priority based fuzzy goal programming approach for fractional multilevel programming problems Vol. 6, No. 1, pp. 1- 14, 2011	International Review of Fuzzy Mathematics	ISSN: 0973- 4392	Yes	Three	No	
6.	A linear goal programming approach to multiobjective fractional programming with interval parameter sets. Vol. 3, pp. 697-714, 2011.	International Journal of Mathematics in Operational Research (IJMOR)	1757- 5869 (Online); 1757- 5850 (print)	Yes	Three	No	



#	Title with page nos.	Journal	ISSN/ ISBN No.	Whether peer reviewed Impact factor, if any	No. of co-authors	Whether you are the main author	Name the International Database, if any.
7.	Taylor Series approximation method for solving interval valued multiobjective fractional programming problems using goal programming Vol. 6, No. 4, pp. 879-886, 2010	International Journal of Computational Intelligence Research	ISSN: 0973-1873	Yes	Three	Yes	

B. Articles/ Chapters published in Books

#	Title with page nos.	Book	ISSN/ ISBN No.	Whether peer reviewed.	No. of co-authors	Whether you are the main author	Name the International Database, if any.
1.	FGP for Chance Constrained Fractional MODM Problem pp. 919-935	Encyclopedia of Business Analytics and Optimization; Published by IGI Global, USA , 2014	978-1-4666-5202-6 (hardcover); 978-1-4666-5203-3 (ebook); 978-1-4666-5205-7 (print & perpetual Access)	Yes	one	Yes	



C. Full Papers in Conference Proceedings

#	Title with page nos.	Details of Conference publication	ISSN/ ISBN No.	No. of co-authors	Whether you are the main author	National/ International/ Local
1.	Interval goal programming approach to multiobjective programming with fuzzy data uncertainty Vol.-1, p.p. 457-467	Proceeding of Second International Conference on Information and Intelligent Applications (INDIA-2015), Vol.-1, p.p. -457-467 Springer-Verlag, Berlin Heidelberg, 2015	978-81-322-2249-1 (Print) 978-81-322-2250-7 (Online)	One	Yes	International
2.	Using fuzzy goal program for long-term water resource allocation planning in agricultural system: A case study.	Proceedings of International conference in Mathematical Modelling and Scientific Computation (ICMMSC 2012), Published by Springer-Verlag, Berlin Heidelberg, 2012.	ISBN No: 978-3-642-28925-5	four	No	International
3.	Use of appropriate weight structure for solving linear multiobjective programming problem with crisp and fuzzy goals	Proceedings of International workshop on fuzzy sets, rough sets, uncertainty analysis and application (FRUAA 2011), Dept. of Mathematics, NIT Durgapur,		Two	yes	International



		Durgapur, India.				
4.	The Use of Chance Constrained Fuzzy Goal Programming for Long-Range Land Allocation Planning in Agricultural System Vol. 140, P Balasubramaniam (Ed.), pp. 174-186. (Spinger)	Proceedings of First international conference on Logic, control and computation(ICLICC 2011)	ISSN: 1865-0929;	Three	yes	International
5.	An interval-valued goal programming approach to stochastic multiobjective decision making problems. pp. 415-423	International conference on Operations and Management Sciences 2010 (ICOMS 2010), Excel India Publishers.	ISBN No: 978-93-80043-79-1	Three	yes	International
6.	A linear goal programming method for solving fractional bilevel programming problems. pp. 476-488	International Conference on Rough Sets, Fuzzy Sets and Soft computing (ICRFSC 09), Dept. of Mathematics, Tripura University, Tripura, India. Proceedings published by Serials Publication.	ISBN No: 978-81-8387-417-5	Three	No	International
7.	A fuzzy goal programming approach to chance constrained multiobjective decision making problems	International Conference on Rough Sets, Fuzzy Sets and Soft computing (ICRFSC 09), Dept. of Mathematics,	ISBN No: 978-81-8387-417-5	Two	Yes	International



	pp. 529-539	Tripura University, Tripura, India Proceedings published by Serials Publication.				
8.	An iterative fuzzy goal programming for solving linear fractional bilevel programming problems. pp. 21-30	Proceedings of the First Indian Conference on Trends in Modern Engineering Systems (Icon TiMES 2008), JIS College of Engineering, Kalyani, India	ISBN No: 978-81-906401-0-7	Three	Yes	National
9.	Solving multiobjective fractional programming problems using fuzzy goal programming. pp. 40-50.	Proceedings of the First Indian Conference on Trends in Modern Engineering Systems (Icon TiMES 2008), JIS College of Engineering, Kalyani, India	ISBN No: 978-81-906401-0-7	Three	Yes	National
10.	A priority based interval-valued goal programming approach for land utilization planning in agricultural system: A case study	International Conference on Computing, Communication and Networking Technologies (ICCCNT 2010). Proceedings published by IEEE digital Library.	ISBN No: 978-1-4244-6591-0	Three	No	International
11.	A linear fuzzy goal programming approach for solving patrol manpower deployment planning problems-	IEEE Region 10 colloquium and 4 th International conference on Industrial and Information systems	ISBN No: 978-1-4244-4836-4	Three	No	International



	A case study pp. 244-249	(ICIIS 2009), University of Peradeniya, Sri Lanka. Proceedings published by IEEE digital Library.				
12.	A fuzzy goal programming approach for solving multiobjective fuzzy stochastic programming problems pp. 239- 243	IEEE Region 10 colloquium and 4 th International conference on Industrial and Information systems (ICIIS 2009), University of Peradeniya, Sri Lanka. Proceedings published by IEEE digital Library.	ISBN No: 978-1- 4244- 4836-4	Three	Yes	International
13.	A linear approximation approach to chance constrained multiobjective decision making problems pp. 70-75.	First International Conference on Advance Computing (ICAC 2009), MIT, Chennai, India. Proceedings published by IEEE Xplore digital Library.	ISBN No: 978- 1-4244- 4786-2	Three	No	International
14.	A goal programming procedure for solving Interval valued multiobjective fractional programming problems. pp. 297-302	16 th International conference on Advance computing and communication (ADCOM 2008), India. Proceedings published by IEEE Xplore digital Library.	ISBN No: 978- 1-4244- 2962-2	Two	Yes	International



15.	A linear goal programming procedure for academic personnel management problems in university system pp. 1-7 (Paper ID 437)	IEEE Region 10 colloquium and 3 rd International conference on Industrial and Information systems (ICIS 2008), IIT Khargpur, India. Proceedings published by IEEE digital Library.	ISBN No: 978-1-4244-2806-9	Two	Yes	International
-----	--	---	----------------------------	-----	-----	---------------

D. Papers presented in Conferences, Seminars, Workshops, Symposia

S. No.	Title of the Paper Presented	Title of the Conference / Seminar	Organised by	Whether International / national / state / regional / college or university level
1.	Interval goal programming approach to multiobjective programming with fuzzy data uncertainty	Second International Conference on Information and Intelligent Applications (INDIA-2015)	Faculty of Engineering, Technology and Management, University of Kalyani (January 8-9, 2015)	International
2.	Interval goal programming approach to solve multiobjective programming problem with fuzzy random objective coefficients	International Conference on Facets of Uncertainties and Applications (ICFUA 2013)	O.R. Society of India, Calcutta Chapter and Dept. of Applied Mathematics, University of Calcutta.	International
3.	Using fuzzy goal program for long-term water resource allocation planning in agricultural system: A	International conference in Mathematical Modelling and Scientific	Dept. of Mathematics, Gandhigram Rural Institute-Deemed	International



S. No.	Title of the Paper Presented	Title of the Conference / Seminar	Organised by	Whether International / national / state / regional / college or university level
	case study.	Computation (ICMMSC 2012),	University, Gandhigram, Tamil Nadu, India.	
4.	A Minsum fuzzy goal programming approach for solving linear multiobjective programming problems using the most favourable weights from a pairwise comparison matrix	National Seminar on analysis Modelling and Geometry (NSAMG 2011)	Dept. of Mathematics, Univeristy of Kalyani, Kalyani, India.	National
5.	A chance constrained fuzzy goal programming model for long-term production planning in Agricultural System	7 th All India Peoples' Technology Congress (2011)	Forum of Scientists, Engineers & Technologists (FOSET), Kolkata.	National
6.	Goal Programming approach for solving interval valued multiobjective fractional programming problems using Taylor's Series approximation	National Conference on Recent Trends in Mathematical Modelling and simulation (RTMMS-2010)	Dept. of Applied Mathematics, Institute of Technology, Banaras Hindu University, India	Nationa l
7.	A fuzzy goal programming approach for solving multiobjective fuzzy stochastic programming problems	Fourth IEEE International Conference on Industrial and Information System (ICIIS 2009)	Dept. of Electrical Engineering, Peradeniya University, Peradeniya, Sri Lanka.	International



S. No.	Title of the Paper Presented	Title of the Conference / Seminar	Organised by	Whether International / national / state / regional / college or university level
8.	A genetic algorithm based goal programming approach to bilevel fractional programming problems	3 rd Annual International Conference on Decision in management and social sciences for sustainable development (2009).	Indian Institute of Social Welfare and Business Management, Kolkata, India	International
9.	A fuzzy goal programming approach to chance constrained multiobjective decision making problems	International Conference on Rough Sets, Fuzzy Sets and Soft Computing (ICRFSC 09)	Dept. of Mathematics, Tripura University, Tripura, India.	International
10.	A fuzzy goal programming approach to long term land use planning in agricultural system: A case study	7 th All India Peoples' Technology Congress (2009)	Forum of Scientists, Engineers & Technologists (FOSET), Kolkata.	National
11.	A linear goal programming approach to multiobjective fractional programming with interval parameter sets	International conference on Operation Research applications in Engineering and Mangement (ICOREM 2009)	Anna University, Tiruchirapalli, Tamilnadu.	International
12.	Using Dinkelbach approach for solving multiobjective fuzzy linear fractional programming problem	2 nd National Conference on Recent Trends in Information Systems (ReTIS-	Dept. of Computer Science & engineering, Jadavpur	National



S. No.	Title of the Paper Presented	Title of the Conference / Seminar	Organised by	Whether International / national / state / regional / college or university level
		08)	University, Kolkata, India.	
13.	A goal programming procedure for solving interval valued multiobjective fractional programming problems	16 th International Conference on advanced Computing and Communication (ADCOM 2008)	Dept. of Information Technology, MIT Campus, Anna University, Chennai, India.	International
14.	A linear goal programming procedure for academic personnel management problems in university system	IEEE Region 10 th colloquium and 3 rd International Conference on Industrial and Information Systems (ICIIS 2008)	Dept. of Electrical Engineering, IIT Kharagpur, Kharagpur, India.	International

Name: NEETA PANDEY

A. Published Papers in Journals

#	Title with page no.	Journal	ISSN / ISBN No.	Whether peer reviewed. Impact factor, if any	No. of co-authors	Whether you are the main author	Name the International Database, if any.
1.	Equivariant Morse Relations Pages 467-483	Homology, Homotopy and its Applications, Volume 9(1), 2007.		Peer reviewed	1	No	



#	Title with page no.	Journal	ISSN / ISBN No.	Whether peer reviewed. Impact factor, if any	No. of co-authors	Whether you are the main author	Name the International Database, if any.
2.	Homotopy G-Algebra Structure on Bredon-Illman Cochain Complex Pages 51-65	Topology and its Applications, Volume 144, 2004.		Peer reviewed	1	No	
3.	Morse Theory on G-Manifolds Pages 351-361	Topology and its Applications, Volume 123, 2002.		Peer reviewed	1	No	
4.	Equivariant Cohomology with Local Coefficients Pages 227-232	Proceedings of the American Mathematical Society, Volume 130, No.1, 2001		Peer reviewed	1	No	
5.	A Combinatorial Lefschetz Fixed Point Formula Pages 1-10	Proceedings of Indian Academy of Sciences (Math. Sci.), Volume 109, No.1, 1999		Peer reviewed	0	Yes	

B. Papers presented/Accepted in Conferences, Seminars, Workshops, Symposia



#	Title of the Paper Presented	Title of Conference / Seminar	Organized by	Whether International/ National/ State/ Regional /College/ University Level
1.	Lie Groupoids	Workshop on Lie Groupoids and Lie Algebroids 10.12.12 to 21.12.12	Stat.-Math Unit, Indian Statistical Institute, Kolkata	International
2.	Spectral Sequences	Workshop on Kervaire Invariant Problem 14.05.12 to 25.05.12	Stat.-Math Unit, Indian Statistical Institute, Kolkata	International
3.	Stoke's Theorem on Manifolds	Advanced Training School in Mathematics for Lecturers in Calculus and Differential Geometry 28.11.11 to 10.12.11	Stat.-Math Unit, Indian Statistical Institute, Kolkata	National
4.	Homological Algebra	Advanced Instructional School on Algebraic and Differential Topology 05.12.2006 to 06.12.2006	Stat.-Math Unit, Indian Statistical Institute, Kolkata	National
5.	Equivariant Morse Relations	International Workshop and Conference on Geometric Methods in Topology 12.06.2006 to 24.06.2006	Department of Mathematics, Indian Institute of Science, Bangalore	International
6.	Equivariant Morse Functions on surfaces with semi free actions.	National Seminar on Recent Developments in Pure Mathematics 29.03.2005 to 30.03.2005	Department of Pure Mathematics, University of Calcutta	National



#	Title of the Paper Presented	Title of Conference / Seminar	Organized by	Whether International/ National/ State/ Regional /College/ University Level
7.	Topological Lefschetz Fixed Point Formula	National Conference on Mathematical Analysis And Applications 02.03.2005	Department of Mathematics, Jadavpur University	National

NAME: SARAL DATTA

A. Published Papers in Journals

Sl. No.	Title with page nos.	Journal	ISSN/ ISBN No.	Whether peer reviewed. Impact factor, if any	No. of co-authors	Whether you are the main author	Name the International Database, if any.
1.	Maiorana-McForland Z –Bent Functions	Mathematical & Computatuional Sciences Vol. 1, No. 12, 2014	ISSN: 1307-6892				
2.	Construction of Z-Bent Functions	COMSOMATH Vol. 18, No. 1,	ISSN: 0972-				



Sl. No.	Title with page nos.	Journal	ISSN/ ISBN No.	Whether peer reviewed. Impact factor, if any	No. of co-authors	Whether you are the main author	Name the International Database, if any.
		March, 2015	2971				
3.	A new construction of bent functions through Z-bent functions	Proceedings: "Present Day Mathematics and its Application" July, 2015	ISBN:978-93-83360-22-2				

B. Papers presented in Conferences, Seminars, Workshops, Symposia

Sl. No.	Title of the Paper Presented	Title of the Conference / Seminar	Organized by	Whether International / national / state / regional / college or university level
1.	A new construction of Bent functions through Z – Bent functions.	UGC Sponsored one day State Level Seminar	The Dept. of Mathematics, K.K.Das College in collaboration with the Dept. of Mathematics, Jogesh Chandra College (30 th January, 2015)	State Level
2.	A special class of Z – Bent Functions	Recent Advances in Mathematics and its	Dept. of Pure Mathematics, University of	National



Sl. No.	Title of the Paper Presented	Title of the Conference / Seminar	Organized by	Whether International / national / state / regional / college or university level
		Applications (RAMA-2015)	Calcutta (March 12, 2015)	
3.	Maiorana –Mc Forland type Bent and Z Bent Functions	Recent Trends in Mathematics and its Applications (ICRTMA-2015)	Dept. of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University (18 th , 19 th March, 2015)	International
4.	Non-splitting Z – Bent Functions	Recent Trends in Applied Mathematics and it Computational Aspects.	Dept. of Applied Mathematics, University of Calcutta (March 25-27, 2015)	National
5.	A new construction of Bent Functions	Recent Trends in Applicable Mathematics	The Bhawanipur Education Society College, Kolkata in collaboration with Indian Association for Productivity Quality and Reliability, Kolkata. Apr.24,2015	National
6.	On Z-bent Functions	Mathematics and its impact on Natural Sciences	Bangabasi Morning College, 11-12 Sept.,2015	National



NAME: SUBHROJYOTI DEBNATH

A. Published papers in Journal

No	Title with page numbers	Journal	ISSN/ ISBN No.	Whether peer reviewed or not. Impact factor, if any	No. of co-authors	Whether you are the main author	Name the International Database, if any.
1	Pulsatile Flow of Biviscous Fluid Through a Tube of Varying Cross-Section pp. 01-08	Int. Jour. of Comput. Intel. and Health care informatics Vol.1(1),2008	ISSN : 0973-7413	Yes	Two	Yes	
2	Some Characteristics of Blood Flow in a Stenosed Artery pp. 153-170	Antarctica Journal of Mathematics Vol. 6(2), 2009	ISSN : 0972-8643	No	One	Yes	
3	Effect of Dust Particles on the Transport of air in Trachea with time Dependent Pressure Gradient pp. 145-162	International e-Journal of Engineering Mathematics : Theory and Application Vol. 7, Sept. 2009	ISSN : 1687-6156	Yes	Two	Yes	
4	Heat Transfer in a Two-Layered Blood	African Journal of	ISSN : 1050-	Yes	Two	Yes	



No	Title with page numbers	Journal	ISSN/ ISBN No.	Whether peer reviewed or not. Impact factor, if any	No. of co-authors	Whether you are the main author	Name the International Database, if any.
	Flow Model in a Narrow Tube in Presence of Magnetic Field, pp. 01-08	Mathematical Physics Vol. 7(1), 2009	5164				
5	On Relative Coefficients of Viscosity of Blood Through Narrow Vessel pp. 113-124	Bulletin of the Allahabad Mathematical Society Vol. 25(1), 2010	ISSN : 0971-0493	Yes	Two	Yes	
6	Flow of Blood in an Equally Branched Channel pp. 105-110	Assam University Journal of Science and Technology Vol. 7(II), 2011	ISSN : 0975-2773	Yes	Two	Yes	
7	Influence of Slip Condition and Heat Transfer on MHD Pulsatile Flow of Third Order Fluid in an Asymmetric	Afrika Matematika (African Mathematical Union and Springer-	ISSN : 1012-9405	Yes	One	No	



No	Title with page numbers	Journal	ISSN/ ISBN No.	Whether peer reviewed or not. Impact factor, if any	No. of co-authors	Whether you are the main author	Name the International Database, if any.
	Channel	Verlag) Vol., 2012					

B. Papers presented in Conferences, Seminars, Workshops, Symposia

Sl. No	Title of the Paper Presented	Title of the Conference / Seminar	Organized by	Whether International / national / state / regional / college or university level
1.	Pulsatile Flow of a non-Newtonian Biviscous Fluids through a Tube With Varying Cross Section with Suction/Injection	International Conference on Frontier of Mathematics and Applications (ICFMA-2008)	Dept. of Mathematics, University of Burdwan, Burdwan, West Bengal	International
2.	Some Characteristics of Blood Flow in a Stenosed Artery	National Seminar on Roles of Mathematical Analysis and Models in Science and Society	Dept. of Mathematics, University of Kalyani, Kalyani, West Bengal	National
3.	Influence of Slip in a Non-Newtonian Flow in	National Conference on	Dept. of Mathematics,	National



Sl. No	Title of the Paper Presented	Title of the Conference / Seminar	Organized by	Whether International / national / state / regional / college or university level
	an Artery with Mild Stenosis	Emerging Trends in Physics of Fluids and Solids (NCETPFS-2015)	Jadavpur University, Kolkata, West Bengal	
4.	A Study on the Effect of Slip in Inner wall of Artery With Mild Stenosis	International Conference on Recent Trends in Mathematics and its Applications	Dept. of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University, Midnapore, West Bengal	International

NAME: SHEIKH AHMED HOSSAIN

A. Published Papers in Journals

Sl. No.	Title with page no.	Journal	ISSN/ ISBN No.	Whether peer reviewed. Impact factor, if any	No. of co-authors	Whether you are the main author	Name the International Database, if any.
1	Fuzzy Cross Entropy-Mean-Variance-Skewness Model for Portfolio Selection Volume 26, Issue 1, January 2014,	Journal of King Saud University - Computer and Information Sciences			2	no	



Sl. No.	Title with page no.	Journal	ISSN/ ISBN No.	Whether peer reviewed. Impact factor, if any	No. of co-authors	Whether you are the main author	Name the International Database, if any.
	P. 79–87						
2	A Possibilistic Sharpe Ratio Maximization Model in Multi-Period Environment for Portfolio Selection Vol. 53 Nos. 3 & 4	“SURVEY”, A Management Research Journal of IISWBM, Kolkata – India’s First B- School.			3	No	

B. Articles/Chapters Published in Books

Sl. No	Title with page nos.	Book Title, Editor & Publisher	ISSN/ ISBN No.	Whether peer reviewed.	No. of co-authors	Whether you are the main author	Name the International Database, if any.
1	Multiple Attribute Decision Making with Entropy Weights under Intuitionistic Fuzzy Environment: A Fuzzy TOPSIS Approach.	“Operations Research Recent Advances” published by Narosa Publishing House, New Delhi	Operations Research: Recent Advances Author: Sheikh Ahmed Hossain, Samarjit Kar ISBN: 978-81-8487-255-2 Publishing Year: 201	Yes	1	yes	



Sl. No	Title with page nos.	Book Title, Editor & Publisher	ISSN/ ISBN No.	Whether peer reviewed.	No. of co-authors	Whether you are the main author	Name the International Database, if any.
			4				

C. Full Papers in Conference Proceedings:

Sl. No.	Title with page nos.	Details of Conference Publication	ISSN/ ISBN No	No. of co-authors	Whether you are the main author	National/ International/ Local
1	Portfolio Selection with Possibilistic Kurtosis- pp. 303-313, 2015.	Springer Proceedings in Mathematics & Statistics, Volume 125	.	one	Yes	International
2.	Linear Error Correcting Codes Generated from a Complete Graph with Five Vertices and its Properties pp. 704-711, 2010.	<i>Properties – A. Hossain,</i> AIP conf. Proc 1298, 704(2010).	ISBN-978-0-7354-0854-8, ISSN – 0094-243X, American Institute of Physics.			

D. Books published as single author/editor

Sl. No.	Title with page nos.	Type of Book and Authorship	Publisher and ISSN/ ISBN No.	Whether peer reviewed	No. of co-author	Whether you are the main author
1	Operations	Author: Sheikh	II	Yes	01	Yes



	Research: <i>Recent Advances</i> No. of page - 164 Year: 2014	Ahmed Hossain, Samarjit Kar	ISBN: 978-81-8487-255-2			
--	---	--------------------------------	--------------------------------	--	--	--

E. Papers presented in Conferences, Seminars, Workshops, Symposia

Sl. No.	Title of the Paper Presented	Title of the Conference / Seminar	Organized by	Whether International / national / state / regional / college or university level
1.	Portfolio Selection with Possibilistic Kurtosis	International Conference on Facets of Uncertainties and Applications (ICFUA-2013)	organized by Operations Research Society of India (ORSI) Calcutta Chapter (December 05-07, 2012 at Purash the Ramakrishna Institute of Culture, Golpark, Kolkata)	International
2.	Multiple Attribute Decision Making with Entropy Weights under Intuitionistic Fuzzy Environment: A Fuzzy TOPSIS Approach	the UGC Sponsored National Conference on Recent Advances on Operations Research	Organized by Purash Kanpur Haridas Nandi Mahavidyalaya, Howrah, West Bengal(August 02-03, 2012)	National
3.		International Conference on Operations Research for Sustainable Development in Globalised Environment	organised by Operations Research Society of India (ORSI) and held at Kolkata Business School, Kolkata, West Bengal (International



Sl. No.	Title of the Paper Presented	Title of the Conference / Seminar	Organized by	Whether International / national / state / regional / college or university level
			January 06-08, 2012)	
4.	Linear Error Correcting Codes Generated from a Complete Graph with Five Vertices and its Properties	the International Conference on Modeling, Optimization and Computing (ICMOC 2010)	Organised by Department of Chemical Engineering, National Institute of Technology, Durgapur, West Bengal (October 28-30, 2010)	International



Evaluative Report of the Department of Botany

1. **Name of the department:** BOTANY
2. **Year of Establishment:** 1968 (Previously it was known as Biology since 1956)
3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
 - i. UG-Botany General (started from the inception, i.e 1956)
 - ii. UG-Botany Honours (started in the academic year 1968-69)
 - iii. PG-Botany (commencing from the academic year 2016, vide letter No. Aff (WBSU)/MS/213/SCHE/2015, dated 11.6.2015 through West Bengal State Council of Higher Education).
4. **Names of Interdisciplinary courses and the departments/units involved**

Interdisciplinary departments involved are Zoology, Chemistry and Molecular Biology.
5. **Annual/semester/choice based credit system (programme-wise):**

Annual

Students are required to take three examinations conducted by the University, one at the end of each year – Part I, Part II and Part III.
6. **Participation of the department in the courses offered by other departments:**

Students of Botany Honours can take up general papers with either of the departments; Zoology, Chemistry or Molecular Biology. Dr. Sangita Gangopadhyay has been the Environmental Studies (ENVS) Co-ordinator for the college from 2010 to 30th July, 2015. Dr. Swapan Mandal is the present Co-ordinator of ENVS of the college.



7. Courses in collaboration with other universities, industries, foreign institutions, etc.: None

8. Details of courses/programmes discontinued (if any) with reasons: NA

9. Number of Teaching posts:

Academic Session	Faculty	Sanctioned	Filled
2014 – 2015	Professors	NA	NA
	Associate Professors	CAS	1+1(On lien)
	Assistant Professors	6	4
2013 – 2014	Professors	NA	NA
	Associate Professors	CAS	2
	Assistant Professors	6	2
2012 – 2013	Professors	NA	NA
	Associate Professors	CAS	2
	Assistant Professors	6	2
2011 – 2012	Professors	NA	NA
	Associate Professors	CAS	2
	Assistant Professors	6	2
2010 – 2011	Professors	NA	NA
	Associate Professors	CAS	1
	Assistant Professors	6	3

**At the entry level, only Assistant Professor posts are available. They are promoted to the post of Associate Professor through Career Advancement Scheme.*



10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil. etc.,)

Name	Qualification	Designation	Specialization	Years of Experience	Ph.D. Students guided for the last 4 years
Dr. Papiya Chakraborti	PhD	Principal /Associate Professor	Cell Biology and Genetics	18	NA
Dr. Sangita Gangopadhyay	M.Phil, Ph.D.	Associate Professor	Plant Physiology, Biochemistry and Biotechnology	16	NA
Dr. Swapan Mandal	Ph.D.	Assistant Professor	Cytology and Plant Breeding	16 [5 years in college + 7 years in Bashirhat College (Guest lecturer) +4 years in Govt. aided schools]	NA
Dr. Biswarupa Ghosh	Ph.D.	Assistant Professor	Angiospermic Taxonomy and Plant Ecology	6	NA
Dr. Dipanshu Kumar Vishwas	NET, Ph.D.	Assistant Professor	Biochemistry, Biotechnology, Genetics	< 1	NA
Mr. Chandan Barman	M.Sc., NET, Ph.D. pursuing	Assistant Professor	Ecology and Pollination Biology	< 1	NA



11. List of senior visiting faculty: NA

12. Percentage of lectures delivered and practical classes handled (programme-wise) by guest lecturers:

Year	Percentage of Theory Classes	Percentage of Practical Classes	Name of Guest Lectures/qualification
2014-15	8	10	Aditi Saha, MSc
2013-14	8	10	Aditi Saha, MSc
2012-13	11	19	Aditi Saha, MSc Nanda Khan, MSc
2011-12	8	10	Nanda Khan, MSc
2010-11	9	10	Nanda Khan, MSc

13. Student-Teacher Ratio (programme wise):

Academic Session	No of honours students	No of teachers (including guest lecturers)	Student : Teacher
2014-15	55	6	9:1
2013-14	60	5	12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled.

Post: Technical Staff (Gr-D)			
Year	No of Sanctioned Post	No of Filled Posts	Name of Staff/Qualification



2014-15	2	2	Mr. Mussharaf Hossein, PG Mr. Meer Tarif, UG
2013-14	2	None (one Casual staff)	Mrs Sunita Saha, +12
2012-13	2	-do-	Mrs Sunita Saha
2011-12	2	-do-	Mrs Sunita Saha
2010-11	2	-do-	Mrs Sunita Saha

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG :

Five faculties have PhD, One faculty pursuing PhD from Delhi University.

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received- One

Project PI	Title of the Project	National Funding Agency	Duration	Sanctioned Amount (Rs)
Dr. Papia Chakraborti	Phyco-diversity of the Bon-Hooghly lake and adjoining water bodies in Kolkata- status and potential applications.	UGC Major Research Project	2014-17	13.7 Lakhs

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received

The department has received the DBT-BOOST project for developing and promoting biotechnology in the field of Life Science.



Title of the Project	State Funding Agency	Duration	Sanctioned Amount (Rs)	Project PI
BOOST-I (Biotechnology Opportunities Offered for Science And Technology Program)	West Bengal, Department of Biotechnology	2014-19	20 Lakhs	Dr. Papia Chakraborti

18. Research Centre/facility recognized by the University

University Practical Examination Centre:

The University regularly recognizes the department as the facilitating center for Botany Honours University Practical Examination of Part I, Paper I and Part-III, Paper IX.

19. Publications:

*a) Publication per faculty

Publications	Papia Chakraborti	Sangita Gangopadhyay	Swapan Mandal	Biswarupa Ghosh	Dipanshu Kumar Vishwas	Chandan Barman
No of papers in peer-reviewed journals (national/international)	2	14		1	6	1
Paper presented (International-IN)	IN-1 N-3	N-1	IN-2 N-10	IN-5 N-2	IN-2 N-7	N-1



National-N)						
Number of publications listed in International Databases	2	14		3	6	1
Monographs	-	-	-	-	-	-
Chapter in Books	3	7	-	-	-	1
Books Edited	-		-	1	-	-
Books with ISBN/ISSN numbers and publisher	-	7	-	-	-	-
Citation Index	60	278		1	21	
SNIP	-	-	-	-	-	-
SJR	-	-	-	0,293	-	-
Impact factor	1.849 – 4.765	0.753-2.612		0.897	1.172-3.529	3.234
h-index	-	9	-	1	3	

* The details of papers/presentations are given in *Annexure - Botany*.

20. Areas of consultancy and income generated:

1. Dr. Papia Chakraborti:

- As Technical Advisor (Botanist) in preparation of PBR (Peoples



Biodiversity Register) of Madhyamgram Municipality (2010-2012).

- As Vice President of Madhyamgram Green March an NGO under WB Pollution Control Board (2011-2014).
- As Principal Investigator in NEAC (National Environment Awareness Campaign) under MoEF, Govt of India (2011).

2. Dr. Biswarupa Ghosh:

- As editor for the preparation of Village Botanist Manual of Uttarakhand in Hindi in collaboration with the Institute of Centre for Conservation of Natural Resources (CCNR), Trans-Disciplinary Health Sciences and Technology-FRLHT, Bangalore and Brhmananda Keshab Chandra (BKC) College (2010-11).
- As editor for the preparation of Village Botanist Manual of West Bengal in Bengali in collaboration with the Institute of Centre for Conservation of Natural Resources (CCNR), Trans-Disciplinary Health Sciences and Technology-FRLHT, Bangalore and BKC, College (2013-14).
- As Technical Resource Person for Taxonomic input and recruiting students as field assistant for the preparation of PBR of Sonamukhi, Bankura district, West Bengal in collaboration with National Biodiversity Authority of India, School of Health Sciences, Institute of Trans-Disciplinary Health Sciences and Technology-FRLHT, Bangalore and BKC College, Kolkata (2014-15).

**Both the consultancies were taken up to promote the involvement of the students who were provided with remuneration and certificate.*

3. Dr. Sangita Gangopadhya:

- Counselor in PG Botany at Jogomaya Devi College Study Centre



under Directorate of Distant Education Centre, Vidyasagar University 2010 onwards.

- Paper setter for West Bengal Public Service Commission, 2015.
- Associated with Examination Systems of Guru Nanak Institute of Pharmaceutical Science & Technology under WBUT (Genetics, Biotechnology and Microbiology), 2014.

21. Faculty as members in:

a) National committees b) International Committees c) Editorial Boards....

1. Dr. Papia Chakraborti.

- Associated with Madhyamgram Green March, a NGO under WB Pollution Control Board as Executive Board member.
- Associated with Indian Science News Association as life member.
- Associated with Presidency College Alumni Association as life member.
- Associated with Probir Chatterjee Research Foundation, Dept. of Botany, Calcutta University as life member.
- Associated with UG Board of Studies as member of University of Gour Banga, Malda.

2. Dr. Swapan Mandal

- Life Member, Indian Science Congress.
- Member, Indian Journal of Genetics and Plant Breeding.

3. Dr. Biswarupa Ghosh

- Life Member, Indian Science Congress.
- Life Member, World Science Congress.



22. Student projects:

a) Percentage of students who have done in-house projects including interdepartmental/programme.

The students of Botany Department are engaged in various students' projects on Biodiversity Conservation, Waste Management, Medicinal Plants and Pharmacognosy etc., for which they are assessed internally. The assigned project work not only develops the scientific temperament of the students, but also makes them sensitive to, and accountable for Biodiversity Conservation. These project works also train them on research methodology, use of computers, data collection and presentation. Such experience prepares them to take part in national surveys and higher studies (see *Table*).

Table: List of Students' Projects/seminar topics along with the No of students guided and marks allotted.

Year	Topics for Project	No of Students and UG level	Marks allotted from internal assessment (20 marks)	Guide Teachers
2014-15	People's Biodiversity Register (PBR) of Bonhoogly lake, Kolkata. Survey of crude drugs in various areas of Kolkata.	18/Gen-III YR	20	BG
	Projects /seminars from syllabus on Pteridophytes./seminar	18/Hons-I-YR	NA	BG



2013-14	PBR of Bonhoogly Lake. Socio-Economics of medicinal plants of West Bengal. Waste management and recycling in Bonhoogly. Pharmacognosy and its importance.	29/Gen-III YR	16	BG
	Projects/seminar from the syllabus on Pteridophytes, Bryophytes	21/Hons-I-YR	NA	BG/SG
2012-13	PBR of Bonhoogly Lake. Socio-Economics of medicinal plants of West Bengal. Waste management and recycling in Bonhoogly.	27/Gen-III YR	10	BG
2011-12	Biodiversity survey of Bonhoogly Lake Livelihood options from medicinal plants sold in markets of West Bengal Edible flowers of West Bengal Economic Botany	28/ Gen-III YR	8	PC/BG

Abbreviations for guide teacher – PC- Papia Chakraborti, SG- Sangita Gangopadhyay, BG- Biwsarupa Ghosh

The projects are so designed that 100% of BSc IIIrd Yr General students get project work outside the syllabus topic for which they are given credit through internal assessment in their Final University Examinations. However, is no scope for any internal assessment for honours students and the projects are given from syllabus to improve and benefit their learning process for the final examinations (See *Table*).



In the academic session of 2015-16 all faculty are involved in the syllabus oriented students projects for Part-I Botany Honours.

The students' projects/seminars not only improved the score in the final examination of Botany General –III year students but also improved the academic temperament and scientific spirit of all Botany students. A direct outcome of such Projects/Seminars were the poster presentation (Table) and paper presentation (Table) by the students in the Environment Fairs, State and National level scientific seminars.

Table: List (selected few) of Students' Poster presented in Environment Fair and Departmental Seminars.

#	Title of posters	Name of Student	Guide Teachers
1	Neem (<i>Azadiractha indica</i>) it uses and livelihood options in West Bengal	Ashima Das	BG
2	Rudraksha, the sacred medicine of meditation in Indian tradition	Baishakhi Saha	BG,PC
3	Lichen as bioindicator	Pranab Saha, Anupama Bairagya, Sumana HazraChoudhury	SG, PC, BG
4	Save plants, plants have life- a tribute to Sir Jadadish Chandra Bose	Ayan Kolay, Arijit Das Gupta, Lokenath Choudhury, Matrina Chatterjee	PC, SG



5	A survey of crude drugs micro market of West Bengal	Arjan Munshi, Biswajit Paria, Gargi Ghosh, Arin Adhikari, Tania Ghosh, Proloy Ballav, Swarnali Naskar	BG
6	Role of Bryophytes in plant succession	Priyanka Sikdar	SG
7	Algae as source of Food	Suschimita Chatterjee	PC

Table: List of Students' Paper presentation in State and National Level seminars.

No.	Student's Name/Year	Paper presented in seminars
1.	Arijit Das Gupta & Lokenath Chowdhury, 2013-14	'Biofuel (GM)- The Future Source of Renewable Energy' at Environment , Resources & Development , in the UGC National seminar on Botanical Products in Human Welfare at Vivekananda Centenary College, Rahara on 11 th Jan, 2013.
2.	Matrina Chatterjee & Ayan Koley, 2013-14	'Roundup ready Herbicide tolerant GM crops' in UGC sponsored National seminar at RKM VC College, Rahara on 11 th Jan, 2013.
3.	Lokenath Chowdhury, 2013-14	Biofuel (GM)- The Future Source of Renewable Energy' at UGC –National Seminar on Environment , Resources & Development at Lalbaba College, CU, from 4 th -5 th March, 2013.
4.	Matrina Chatterjee & Ayan Koley, 2013-14	'Roundup ready Herbicide tolerant GM crops and their Environmental Aspects' in UGC Sponsored State Level Seminar at Lalbaba College, CU, from Feb 25 th -26 th , 2013.



5.	Arojit Sen,2012-13	Prospects of Indian Ginseng-Ashwagandha (<i>Withania somnifera</i>) in West Bengal in UGC-National Conference at Miranlini Data Mahavidyapith and WBSU from 29 th - 30 th September, 2013.
----	--------------------	--

- b) Percentage of students placed for projects in organizations outside the institution .e.g. Research laboratories/Industry/ other agencies.

Three percent (3%) students were placed in the PBR of Sonamukhi, Bankura, West Bengal in collaboration with the Biodiversity Authority of India and School of Health Sciences, Institute of Trans-Disciplinary Health Sciences and Technology-FRLHT, Bangalore in 2014.

Another 2% students were involved in the preparation of Village Botanist Manual of West Bengal in collaboration with School of Health Sciences, Institute of Trans-Disciplinary Health Sciences and Technology-FRLHT, Bangalore in 2014.

23. Awards/Recognitions received by faculty and students

Dr. Papia Chakraborti, Associate Professor in Botany, has joined as the Principal of the College from 2nd July,2015, after serving as the Teacher In Charge of this College for a brief tenure from 3rd February to 1st July,2015.

Dr. Biswarupa Ghosh has received the Best Poster Award for the paper on “Bat Pollination of *Daubanga grandiflora*’ in 4th International Conference of Science organized by World Science Congress, at Jadavpur University Kolkata, from 16th-18th December, 2014.



Table: List of Students' Awards/Recognition received of Botany Department.

No.	Name	Academic Session	Awards/ Publications Presentations/
1.	Rituparna Saha	III rd Yr-G, 2013-14	1 st prize for Slogan to SAVE ENVIRONMENT, held at Madyamgram Municipality Environment Fair.
2.	Arijit Das Gupta	III rd Yr-Hons, 2013-14	2 nd prize for Slogan to SAVE ENVIRONMENT, held at Madyamgram Municipality Environment Fair.
3	Shilpa Dutta	II nd Yr-Hons, 2014-15	Annual Sports, BKC, 2014
4	Suschismita Chatterjee	II nd Yr-Hons 2014-15	2 nd Position, NIIT- Bhavishya Joyti Scholarship Examination, 2015

24. List of eminent academicians and scientists/visitors to the department.

1. Mr. Hariramurthi, Associate Professor, School of Health Sciences, Institute of Trans-Disciplinary Health Sciences and Technology-FRLHT, Bangalore, 2013.
2. Mr. Anirban Roy, Research Officer, West Bengal Biodiversity Board, Kolkata, 2012.
3. Dr. Debabrata Saha, Senior Scientist, Institute of Trans-Disciplinary Health Sciences and Technology-FRLHT, Bangalore, 2014.



**25. Seminars/Conferences/Workshops organized & the source of funding
(a) National (b) International**

- a) (i) UGC sponsored National Seminar on “Botanical Resources and Human Welfare”, organized by Department of Botany, Ramakrishna Mission Vivekananda Centenary, College in collaboration with Dept. of Botany, BKC College, Kolkata on 6th September, 2013.

26. Student profile programme/coursewise:

Session	Applications Received	Admitted in Part-I			Admitted in Part-II			Admitted in Part-III		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
2014-15	69	16	27	43	3	4	7	0	5	5
2013-14	67	21	26	47	3	5	8	4	1	5
2012-13	69	16	11	27	9	4	13	2	1	3
2011-12	87	26	13	39	4	1	5	1	1	1
2010-11	70	26	13	39	4	2	6	2	3	4

Students’ Performance in the Final University Examination.

Session	Students Appeared in Part-III Exam	Pass Percentage
2014-15	5	75
2013-14	4	67
2012-13	3	75
2011-12	1	0
2010-11	4	100

*The result is of those students who appeared in the final examination with honours in academic year 2010-11 and so on.



#Students who have cleared honours but failed in general subject in that year is reflected here.

27. Diversity of Students:

All students of the college are from the State of West Bengal.

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.

Not applicable for UG programme.

29. Student progression

Academic Year →	2014-15	2013-14	2012-13	2011-12	2010-11
UG to PG	40%	25%	66%	0%	40%
PG to M.Phil.	NA	NA	NA	NA	NA
PG to Ph.D.	NA	NA	NA	NA	NA
Ph.D. to Post-Doctoral	NA	NA	NA	NA	NA
Employed • Campus selection • Other than campus recruitment		5%	1%	0%	2%
Entrepreneurship/Self-employment	2%				

30. Details of Infrastructural facilities

a) **Library:** Seminar Library with 70 number of books and 3 journals (Everman’s Science, Dreams, Amruth-Heritage).

b) **Class rooms with ICT facility:** 1 class room with overhead projector (Room no-10), the



department uses projectors, laptop, desktop, Wi-Fi for teaching in other rooms.

c) **Laboratories:** Three (3) Laboratories & DBT-BOOST Lab (400 sq. ft, 416 sq. ft, 956 sq. ft & 300 sq. ft).

31. Number of students receiving financial assistance from college, university, Government or other agencies:

Academic Session	Students receiving financial assistance from college			Students Receiving aids from Government
	Full free	Half Free	Stipend	
2014-15	1	1	0	Kanyshree
2013-14	1	0	0	Kanyshree
2012-13	0	1	0	-
2011-12	0	0	0	-
2010-11	1	1	0	-

32. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts:

- **Departmental Seminar:** To improve the student's understanding of biodiversity around the threats to this environment. The department organized a one day-Workshop-cum-Seminar on BIODIVERSITY IN A MAN MADE ECOSYSTEM with Dr. Anirban Roy, West Bengal Biodiversity Board, Kolkata on 29th November, 2013.
- **Visit to Botanical Survey of India (BSI), Kolkata:** During every educational field trip a lecture on Taxonomy is arranged with the Dr. Subir Bandopadhyay, Scientist, BSI.
- **Screening of Educational movie - Galapagos 2 of 3 Island that**



Changed the World (Darwin's origin of species) on 19th November, 2015 during field trip to Ravangla, Sikkim.

- **To foster the eco-friendly attitude among the college students and staff the Eco-Club, Botany Department** gave presentations on “*Ecology and Sustainable Development*” in 2014 and ‘*Household Pollutants and its impact on Biodiversity Loss*’ in 2015, during the World Environment Day celebration in the college.

33. Teaching methods adopted to improve student learning

Type of classes	Methods implemented
Theoretical	<ul style="list-style-type: none">• ICT- integrated web based pertinent teaching resources.• Powerpoint and picture presentations through macro and plan-top projectors• Teaching Aids-Charts, Museum specimens, chalk dusters• Students projects and seminar from-syllabus/outside-syllabus
Practical	<ul style="list-style-type: none">• Hands on for instruments that are used frequently• Practical work-out with fresh sample, bottle specimen, permanent slides• On-field teaching through campus, local and long distance excursions for observation and collection.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

1. The Department has been involved in recording the biodiversity and human profile of the adjacent Bonhoogly Lake since 2012. The effort has been to make door-to-door awareness regarding the proper use of the lake and conservation of the surrounding biodiversity. The full report on the Flora,



Fauna, Human demography and the use of the Lake for various activities is recorded in the PBR report of Bonhoogly Lake (see *Appendix*)

2. The department has been involved in creating awareness on community health and environment, air pollution, waste management, and popularizing the use and conservation of medicinal plants through posters/presentations/models in:
 1. Environment Fair, 2012 and 2013 organized by Madhyamgram Municipality and Dumdum Municipality, Govt. of West Bengal.
 2. Workshop on Biodiversity in a Man-Made Ecosystem. Dept of Botany, 2012
 3. UGC-National Seminar, Mrinalini College. Kolkata, 2013.
 4. UGC-National Seminar, CU, Kolkata, 2014.
 5. UGC-International Seminar, IBM at ISI, Kolkata, 2014
 6. District Youth Science Fair, 2015, Govt. of West Bengal.
 7. The department has been involved in organizing the seminar ‘Water in Crisis-West Bengal Case’ presented by Dr. Kalyan Rudra in 2013 under the guidance of Dr. Sangita Gangopadhyay, Convenor of NAAC, Criterion –IV (2013)
 8. The Eco-Club of the department has been entrusted with documentation of Flora of the college premises.
 9. The Eco-Club of the department was a volunteer in the initiative taken by the college to create awareness among the surrounding community on diabetes by organizing a seminar titled ‘‘ Diabetes Awareness’’ delivered by Dr. Anindya Ghosh, AMRI, Kolkata on 30th September, 2015.
 10. The Eco-Club of the department was a volunteer in the college program to create awareness among the surrounding community on



e-waste management by organizing a seminar that was delivered by DISHA, Kolkata on 6th October, 2015.

11. The department has been involved in organizing the NAAC seminar ‘titled Health is Wealth-Say No to Drugs’ presented by MUKTI Foundation, NGO Kolkata, 18th November, 2015, where Dr. Biswarupa Ghosh was the Convenor of Criterion –VII (2015).

35. SWOC analysis of the department and Future plans:

Strength

- Highly qualified and experienced faculty with good national and international publications.
- All six sanctioned posts are filled. The present Principal, Dr. Papia Chakraborti is one of the faculties of the department.
- Two highly qualified non-teaching staff as Technical Staff.
- Well-equipped department with Instruments and Teaching Aids
- Wi-Fi and computer access for both Staff and Students.
- Departmental Seminar Library for supplementary reference for both Teachers and Students.
- Regular departmental meetings before every activity.
- The Department has availed the facility of DBT-BOOST which is an added attraction for the subject and has future job prospects in the field of Life Science.
- The department conducts regular Parent-Teacher meeting and class test for monitoring the students’ performance.
- The department conducts students’ projects from the syllabus and outside the syllabus. It also facilitates students’ seminar participation outside the syllabus for developing the academic aptitude of the students.
- High team spirit is observed among the staff and the students.
- As a part of the syllabus the department conducts mandatory field excursions for both Botany honours and general students every year. This includes two short distance visits to Calcutta National Herbarium (CNH)



at Botanical Survey of India, Howrah (BSI) and any Medicinal plant gardens or biodiversity rich natural habitat. While one long distance excursion is conducted to visit a different Phyto-geographical region for creating practical knowledge and interest in the subject.

- **List of field trips organised by the department in the last five years:**

Botany Field Excursions			
Year	Local-1	Local-2	Long-Distance
2014-15	CNH,BSI, Howrah	Eco-Park, Kolkata	Ravangla, Sikkim
2013-14	-do-	Wild vegetation near WBSU, Kolkata	Digha, West Bengal
2012-13	-do-	Medicinal plant garden, Narendrapur, Kolkata	
2011-12	-do-	Bidhan Chandra Krishi ViswaVidyalaya, Nadia	Panchalingashwer, Orissa
2010-11	-do-	Medicinal plant garden, Narendrapur, Kolkata	

- In 2015-16 the department is visiting Ravangla, Sikkim for long distance students' field excursion.
- The Eco-Club for developing students' team spirit, scientific temperament, cultural fervour and social responsibility.
- The department has an able and competent team of teachers/staff and student who have carried out various administrative, academic and cultural responsibilities of the college.

Thus, it is evident that the faculty, staff and students of the department have contributed significantly towards the development of the department and the College.



Weakness

- No separate room for the Herbarium.
- No permanent gardener for taking care of the potted plants and those planted in the college premises.
- No robust cleaning system available.

Opportunities

- Students passing out of Botany department have wide career opportunities in pursuing Higher Studies and Research, Jobs in Education Sector, National Surveys, IT, Pharmaceuticals, Medicinal Plant Gardens, Media for Nature reporting, BSI, Entrepreneurs in the management of natural resources etc.
- The UG students will have an opportunity to continue their Master's Degree in the same institution with the commencement of Post-Graduation in Botany department from the academic session of 2016-17.

Challenges

- The college was formerly under the flagship of the Calcutta University. In 2009 it was transferred under the administration of West Bengal State University. The logistic of the college is such that bright students can join colleges under CU if they move a little ahead of BKC College. This has created a serious challenge for the department to recruit good quality students during the UG admission. Subsequently, there has been a drop in the quality of marks secured in the final examination.

Future Plans

- A. The Department of Botany on recommendation from the West Bengal Council of Higher Education is prepared to start Post Graduation Program in 2016 with specializations in the following papers:
1. Cyto-genetics and Plant tissue Culture
 2. Plant Physiology, Biochemistry and Plant Molecular Biology



3. Biosystematics and Conservation
 4. Phycology
- B. The department has submitted a project proposal to State Medicinal Plant Board for Herbal Garden in the college premises for popularizing the use and conservation of medicinal plants and also to beautify the college campus.
- C. The department is preparing a project on Plant Rescue Centre of endangered plant species of West Bengal employing biotechnological tools and ex-situ conservation in both green house and garden of the college premises.
- D. The department aims at developing a separate Herbarium for the UG and PG students for rekindling the interest in Taxonomy.
- E. Areas of future research by the Faculty in next five years is given below:

- **Dr. (Mrs.) Papia Chakraborti, Principal**

Interest: Study of Phycodiversity, Algal Bioresource Conservation and its sustainable utilization

Phytoplankton constitutes the basic components of the aquatic food chain. They act as primary producers and represent themselves as a direct food source for other aquatic animals. The community composition of phytoplankton is largely influenced by the interaction of a number of physico-chemical factors.

The algae are of widespread occurrence in moist situations as tree trunks, walls, woods, rocks and damp soil. The habitats of algae are mainly classified into three categories viz. aerial habitats, aquatic habitats and sometimes unusual habitats. Aquatic algae are generally growing on floating waters, ponds, lakes, pools, ditches, bogs and swamps. The algae of running water are more diversified than those of any other aquatic habitats



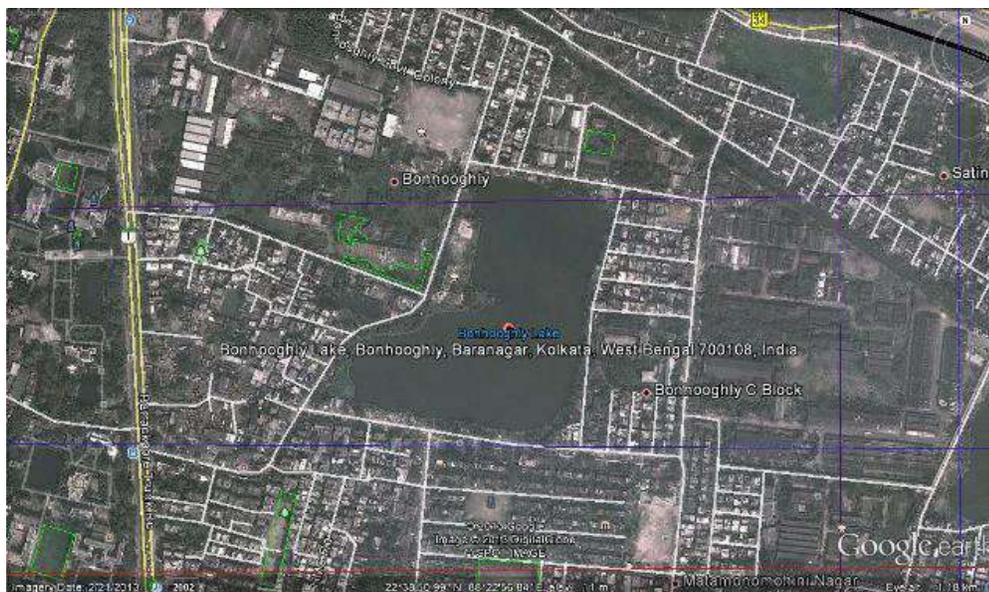
Despite their reputation as unsightly pond slime, the potential of these simple aquatic plants as the basis for numerous, possibly world-changing biotechnologies has long been recognized by scientists. Today's non-transgenic, commercial algal biotechnology produces food additives, cosmetics, animal feed additives, pigments, polysaccharides, fatty acids and biomass. Recent progress in algal transgenics promises a much broader field of application, molecular farming, the production of proteins or metabolites that are valuable to medicine or industry – to produce recombinant antibodies, vaccines, insecticidal proteins, or bio-hydrogen has already been demonstrated. Genetic modifications that enhance physiological properties of algal strains and optimization of algal production systems should further improve the potential of this auspicious technology in the future. Algae are already grown for use in the chemical and 'nutraceutical' industries. Algae could be used for "bioremediation", recovering nutrients from waste streams.

The most publicized possible use of algae in the future, however, is as a prospective, sustainable alternative to fossil fuels. Many species of algae can produce high levels of oils, or can divert photosynthetic energy into hydrogen production, which could then be tapped as fuel. Their productivity is high because they grow quickly, and they do not need to be cultivated on arable land or freshwater. Unlike first-generation biofuels, this means that as a fuel crop, the rearing of algae would not compete with food production.

The proposed plan of work aims to deal with **Study of Phycodiversity, Algal Bioresource Conservation and its sustainable utilization** keeping in view the prevailing environmental and socio-economic conditions in and around the proposed area of study. The Bon-Hooghly area of Baranagar has numerous water bodies of which the largest and beautified water body - the **Bon-Hooghly lake in Baranagar**, is now mainly used for fishing purposes as well as human use like washing and bathing etc. The area around the lake has a rich biodiversity of flora as well as fauna which needs conservation.



The avifaunal diversity is remarkable in and around this lake. But human intervention has created loss of biodiversity in the area and hence a great imbalance in the ecosystem as well. The proposed study can also augment awareness about algae as an investment opportunity among the



local socio-economically backward population and thereby promote the algal bio-resource conservation through its sustainable utilization.

- **Dr. Sangita Gangopadhyay, Associate Professor, Dept. Botany**
Interest: *Understanding the interplay of osmoregulatory genes regulating salt tolerance in rice*

Rice, the most loved cereal of Asia, which feeds the majority of the world's population essentially, is a salt-sensitive crop (Shannon et al., 1998). Breeding rice varieties with in-built salt tolerance is realized as the most promising, less resource consuming, economically viable and socially acceptable approach. Salt tolerance is a multigenic trait, which has been dissected from various research angles, viz. physiology and biochemistry vis-à-vis molecular biology. In an earlier research programme the present worker has reported plant regeneration of salt



adapted callus of indica rice (var. *Basmati 370*, a salt sensitive variety) in saline conditions and correlated the survival of the somaclonal variants with increased proline level (Basu et al., 1997). While elucidating further the mechanism of salt tolerance in the somaclonal variants, the same group reported that the presence or retention of K^+ in rice callus was a key factor for salt tolerance as it was found to be positively correlated with growth while proline was probably the last metabolic device that rice calluses opted for when exposed to salt stress (Basu et al., 2002). With the advent of genomics in recent years, the genes controlling the osmoregulators imparting salt tolerance have been elucidated. The Marker Assisted Selection approach has reported rice QTL (Quantitative Trait Locus), *SKC1* for salt tolerance which encodes a sodium transporter; and regulates K^+/Na^+ homeostasis under salt stress (Ren et al., 2005). Furthermore, the genes those play roles in proline metabolism (*P5CS*, *P5CR*, *PDH*, *P5CDH*) are being worked out (Çelik and Ünsal, 2013). With this background information the present projected work envisages to understand the interplay of the aforesaid genes with a functional genomics approach through semi quantitative PCR techniques using certain salt sensitive and resistant varieties / landraces of rice. The work, in the long run will pave the way for better screening of rice varieties/landraces suitable for growing in salt prone areas.

- **Dr. Swapan Mondal, Assistant Professor, Dept. Botany**

Interest: *Micropropagation of Orchids*

In the development of plant biotechnology, we are witnessing a most dynamic evolution of new techniques, applicable to Agriculture & Industry especially in Orchids. Strategies for application of Tissue culture tools & techniques would include cloning of orchid plants which implies large scale in vitro propagation of orchid plants of uniform or differing qualities.



The one singular area where tissue culture as a technology has found its widest practical application is in the realm of micro propagation. In coming times our objective is to develop:

- An efficient regeneration protocol for micro propagation of orchid through shoot tip culture will be established.
- Major investigations on explants-based orchid tissue culture starting from the pioneering works.
- Mass clonal propagation of an orchid.
- Subculture and multiplication of protocorms.
- Floral induction and development in vitro.

- **Dr. Biswarupa Ghosh, Assistant Professor, Dept. Botany**

Interest: Popularize the use and conservation of medicinal plants and crude drugs in Kolkata.

It is well known that throughout the country there exist numerous folk traditions of local health care in tribal, rural, sub-urban as well as other areas. The carriers of these traditions are the millions of vaidyas, hakims, sages, local village healers, midwives, housewives, etc. These traditional practices are dependent on the crude drugs. They also form the backbone of modern pharmaceutical trade. An estimate suggests about 13, 000 plant species known to have worldwide use as drugs (Ram, 2004). Of the 25 million plant species known for their medicinal uses; 80% are exploited in Ayurvedic, 46% in Unani and 33% in Allopathic medicines (Gouri, 1996).

The increased demand for crude drugs and habitat loss of medicinal plants has blown the bugle for conservation of MPs and monitoring its utilization. In West Bengal of the 43 species of conservation concern, 17 species are recorded in high volume trade, as per the national level trade study. *Picrorhiza kurroa*, *Swertia chirayita*, *Taxus wallichiana* (CR) and *Gymnema sylvestre*, *Asparagus racemosus* (EN) are a few species of conservation concern of West Bengal as these are in high volume trade (Ved and Goraya, 2008).



The conservation practices and awareness campaign in this area intends to involve students/staffs and their parents through proposed funded projects, Herbal Garden and Plant Rescue Centre. These endeavors also intend to develop the departmental Herbarium and Crude Drug Repository.



Annexure - Botany:

Publications

Dr. Papia Chakraborti, Associate Professor, Dept. Botany

1. Publication: Referred Papers

No.	Title with page numbers	Journal	ISSN/ ISBN No.	Whether peer reviewed or not. Impact factor, if any
1.	<i>An unedited 1.1 kb mitochondrial orfB gene transcript in the Wild Abortive Cytoplasmic Male Sterility (WA-CMS) system of Oryza sativa L. subsp. indica.</i> No. of Pages -18	BMC Plant Biology 2010, 10:39	ISSN no. 1471- 2229	Peer reviewed Impact Factor 4.75 Citations 20
2.	<i>Estimation of genetic variability of Vigna radiata cultivars by RAPD analysis</i> No. of Pages -5	BIOLOGIA PLANTARUM 48 (2): 205-209, 2004	ISSN no. 0006- 3134	Peer- reviewed Impact factor 1.66 Citations 30

2. Monographs/Books/Chapters Published in Books

An Article on “ For Living in Harmony with Nature- Conventions on Biodiversity ” published in Proceedings of Madhyamgram Green March, a NGO under WB Pollution Control Board on World Environment Day.	5 th June, 2013
---	-------------------------------



An Article on “ Biodiversity in crisis ” published in Proceedings of Madhyamgram Green March, a NGO under WB Pollution Control Board on World Env. Day	5 th June,2012
An article on “ Biofuel-pros and cons ” published in Proceedings at the 6 th Environmental Awareness Fair, Madhyamgram Municipality, from 29 th Dec.2011 to 1 st Jan. 2012.	Dec.,2011

3. Full Papers in Conference Proceedings-

Sl. No.	Title with page nos.	Details of Conference Publication
1.	<i>‘Biodiversity in crisis’</i>	UGC Sponsored National Seminar on Environment , Resources & Development organized by Dept. of Geography, Lalbaba College in collaboration with Dept. of Geography, CU, on March 4 th -5 th , 2013 Sub-theme- Biodiversity
2.	<i>biofuel (GM)- The Future Source of Renewable Energy’</i>	UGC Sponsored National Seminar on Environment , Resources & Development organized by Dept. of Geography, Lalbaba College in collaboration with Dept. of Geography, CU, on March 4 th -5 th , 2013 Sub theme – Use of Alternative Energy – Problems and Prospects
3.	<i>Role of RNA editing in controlling fertility in plants</i> No. of Pages 3	Proceedings of International Seminar on Frontiers of Basic & Applied Molecular Biology , Calcutta, 96-98, 2005
4.	<i>RNA editing –recent news</i>	Proceedings of Refresher course in Life Science , University of Calcutta, 1-3, 2004



4. Research Publications (Books, Chapters in Books)

Sl. No.	Chapters contributed to edited knowledge based volumes published by National/International Publishers	
1.	Chapter on ' <i>Bioproducts From Algae - Prospects and Challenges – an Omics approach</i> ' in the book Practices and Perspectives in Sustainable Bioenergy - A Systems Thinking Approach, Springer International Publishing , 2015	
2.	<i>'ROUNDUP READY Herbicide tolerant GM crops and their Environmental Aspects'</i> Pg. 117-123	Current Perspectives in Natural Resource Management Sub-theme – Biodiversity Resources Progressive Publishers, India 2014. ISBN : 978-81-8064-207-4
3.	<i>'BIO-FUEL- The Future Source of Renewable Energy'</i> Pg.225-229	Current Perspectives in Natural Resource Management Sub- theme – Energy resources & Climate Change Progressive Publishers, India 2014 ISBN : 978-81-8064-207-4

5. Review articles published-



An Article on “ For Living in Harmony with Nature- Conventions on Biodiversity ” published in Proceedings of Madhyamgram Green March, a NGO under WB Pollution Control Board on World Env. Day.	5 th June, 2013
An Article on “ Biodiversity in crisis ” published in Proceedings of Madhyamgram Green March, a NGO under WB Pollution Control Board on World Env. Day	5 th June, 2012
An article on “ Biofuel-pros and cons ” published in Proceedings at the 6 th Environmental Awareness Fair, Madhyamgram Municipality, from 29 th Dec. 2011 to 1 st Jan. 2012.	Dec., 2011

6. Invited Lectures or Presentations for conferences/seminars etc.

Sl. No.	Title of Lecture/ Academic Session	Title of Conference/ Seminar Etc.	Organised by	Whether international/national/State/regional
1.	<i>Think, Eat, Save</i>	‘ <i>Reduce your Food print</i> ’ on World Environment Day, 8 th June, 2013	Green March, Madhyamgram, NGO under WB Pollution Control Board.	Regional
2.	<i>Biodiversity in crisis</i>	‘ Green Economy ’ on World Environment Day, 10 th June, 2012	Green March, Madhyamgram, NGO under WB Pollution Control Board.	Regional
3.	<i>Biodiversity-conservation and</i>	National Environment Awareness	Green March, Madhyamgram, NGO under WB Pollution	National



Sl. No.	Title of Lecture/Academic Session	Title of Conference/Seminar Etc.	Organised by	Whether international/national/State/regional
	<i>sustainable development</i>	Campaign on 19 th Feb, 2012 by Ministry of Environment & Forest, Govt. of India.	Control Board.	
4.	<i>RNA Silencing-Yesterday, Today and Tomorrow</i>	As Resource Person Seminar during Pre-PhD Course work in Botany on 22 nd Feb, 2011	Dept. of Botany, CU	National
5.	<i>Analysis of Mitochondrial Genome of Cytoplasmic Male-Sterile lines of Rice</i>	Seminar on Biotechnology of rice on 14-07-2000	Advanced centre for Plant Genetic Engg. (formerly BREF BIOTECH), IIT, Kharagpur, WB	National

Dr. Sangita Gangopadhyay, Associate Professor, Dept. Botany

1. Publication: Referred Papers

Sl. No.	Title with page no.	Journal	ISSN No.	Whether peer reviewed.	No. of co-author	Whether you are the
---------	---------------------	---------	----------	------------------------	------------------	---------------------



No.				Impact factor, if any	s	main author
2009						
1	<i>Agrobacterium</i> -mediated genetic transformation of pineapple var. Queen using a novel encapsulation -based antibiotic selection technique. 97: 295-302	Plant Cell Tissue and Organ Culture	0167-6857	Yes, 2.612 (2013)	3	No
2005						
2	Encapsulation of pineapple micro shoots in alginate beads for temporary storage. 88(6): 972-977	Current Science	0011-3891	Yes, 0.833 (2014)	4	No
2004						
3	<i>Luffa</i> sponge - a unique matrix for tissue culture of Philodendron. 86(2): 315-319	Current Science	0011-3891	Yes, 0.833 (2014)	3	No



		2003				
4	Micropropagation of <i>Tectonagrandis</i> : assessment of genetic fidelity. 46(3): 459-461	Biologia Plantarum	0006-3134	Yes, 1.740 (2013)	4	No
		2002				
5	Salt tolerance in rice <i>in vitro</i> : Implication of accumulation of Na ⁺ , K ⁺ and proline. 69(1):55-64	Plant Cell Tissue and Organ Culture	0167-6857	Yes, 2.612 (2013)	2	Yes
		1997				
6	<i>In vitro</i> selection and physiological characterization of NaCl- and mannitol – adapted callus lines in <i>Brassica juncea</i> . 50: 161-169	Plant Cell Tissue and Organ Culture	0167-6857	Yes, 2.612 (2013)	2	No
7	Effects of salt and osmotic shocks on unadapted and adapted callus lines of tobacco. 49: 45-52.	Plant Cell Tissue and Organ Culture	0167-6857	Yes, 2.612 (2013)	3	No



8	Plant regeneration of salt adapted callus of indica rice (var. Basmati 370) in saline conditions. 50: 153-159.	Plant Cell Tissue and Organ Culture	0167-6857	Yes, 2.612 (2013)	3	Yes
9	Isozymes of peroxidases and esterases as osmotic stress-markers in rice callus cultures. 35: 1359-1364.	Indian Journal of Experimental Biology	0019-5189	Yes, 0.753 (2013)	2	Yes
		1996				
10	Salinity induced changes on peroxidases in <i>Nicotiana tabacum</i> (var. Jayasri) callus cultures. 1(4): 247-250.	Indian Journal of Plant Physiology	0019-5502	Yes	3	No
11	Screening for cross tolerance against related osmotic stress in adapted calli of salt sensitive and tolerant varieties of	Phytomorphology	0031-9449	Yes	3	Yes



	rice. 46(4): 357-364					
		1995				
12	Effects of an ionic and a non ionic osmotic stresses on <i>Nicotiana tabacum</i> L. (var. Jayasri) callus lines. 49: 95-101.	Journal of National Botanical Society (I)		Yes	3	No
13	Establishment of callus cultures and regeneration of plantlets in three indica varieties of rice (<i>Oryza sativa</i> L.). 49: 109-114.	Journal of National Botanical Society (I)		Yes	3	Yes
14	Water, salt and freezing stresses: Effect on relative water content, viability and banding patterns of some isozymes in <i>Brassica juncea</i> (L) Czern. callus. XXXVIII	Indian Journal of Plant Physiology		Yes	5	No



	(1): 41-44.					
--	-------------	--	--	--	--	--

2. Monographs/Articles/Chapters Published in Books-

S. No.	Title with page nos.	Book Title, Editor & Publisher	ISBN No.	Whether peer reviewed.	No. of co-authors	Whether you are the main author
2012						
1	Bioinformatics in relation to Plant Biotechnology. 419-430.	Plant Tissue Culture: Totipotency to Transgenic. (Eds. Sharma, H.P., Dogra, J.V.V. and Misra, A. N.), AGROBIOS, India	8177544675	Yes	1	Yes
2000						
2	Role of biotechnology in the improvement of bioactive compound with	Recent trends in Spices and Medicinal Plants Research (Ed. De, A.K.), Associated	81-85211-42-7	Yes	1	Yes



S l . N o .	Title with page nos.	Book Title, Editor & Publisher	ISBN No.	Whether peer reviewed.	No. of co-authors	Whether you are the main author
	special reference to the medicinal plants. 106 – 121.	Publishing Co., New Delhi, India				
3	Proline as osmotic stress marker in <i>in vitro</i> system. 283 – 304.	Advances in Plant Physiology – vol III (Ed. Hemantaranjan, A.), Scientific Publishers, Jodhpur, India.	81-7233-233-5	Yes	1	No
4	Isozymes and proteins as osmotic stress marker in <i>in vitro</i> system. 305 – 320.	Advances in Plant Physiology – vol III (Ed. Hemantaranjan, A.), Scientific Publishers, Jodhpur, India.	81-7233-233-5	Yes	1	No
			1999			
5	Proline enigma and osmotic	Plant Tissue Culture and Biotechnolo	81 7371 148 8	Yes	4	Yes



S l . N o .	Title with page nos.	Book Title, Editor & Publisher	ISBN No.	Whether peer reviewed.	No. of co-authors	Whether you are the main author
	stress – tolerance in rice (<i>Oryza sativa</i> L.). 275-281.	gy – Emerging Trends. (Ed. Kavi Kishor, P.B.) Universities Press, Hyderabad				
			1997			
6	Physiological changes of tobacco callus (<i>Nicotiana tabacum</i> L. var. Jayasri) grown under osmotic stress. 386-392.	Biotechnological Applications of Plant Tissue and Cell Culture. (Eds. Ravishankar, G.A. and Venkataraman, L.V.). Oxford IBH, New Delhi.	81-204-1167-6	Yes	3	No
7	Physiological changes of <i>Oryza sativa</i> L. callus due to salt stress. 380-385.	Biotechnological Applications of Plant Tissue and Cell Culture. (Eds. Ravishankar, G.A. and	81-204-1167-6	Yes	3	Yes



S l . N o .	Title with page nos.	Book Title, Editor & Publisher	ISBN No.	Whether peer reviewed.	No. of co-authors	Whether you are the main author
		Venkataraman, L.V.). Oxford IBH, New Delhi,				

3. **Participation/Presentation of Research Papers (Oral/Poster) In Conference/ Seminar/Symposium:**

Title of the Article	Author	Co-Author(s)	Name of the Programme	Organizer	Date	Level: International/ National/ Regional/ Local
Bioinformatics in relation to plant biotechnology. (ORAL)	S. Basu Gangopadhyay	G. Gangopadhyay	National Seminar on Plant Science	Department of Botany, Bidhanagar College, Kolkata	11th to 12th Jan 2012	National



			Research in Human Welfare	ata and UGC	012.	
--	--	--	---------------------------	-------------	------	--

Dr. Biswarupa Ghosh, Assistant Professor, Department of Botany.

1. Publication: Referred Papers

Sl No.	Title with page numbers	Journal	ISSN / ISBN No.	Whether peer reviewed or not. Impact factor, if any	No. of co-authors	Whether you are the main author
1.	Changes in Health status of Soliga tribe in BRT due to modern interventions. 1688-1689.	<i>Current Science</i> , 92 (12), 2006		Peer reviewed (0.897)	2	YES



Sl	Title with page numbers	Journal	ISSN / ISBN No.	Whether peer reviewed or not. Impact factor, if any	No. of co-authors	Whether you are the main author
2.	Environmental Impact assessment of NERCORMP intervention in north eastern districts. (Annexure VII-Page 54-59) www.necorps.org/word/nercormp-pcr-2008.pdf	MoEF Project Completion Report for North Eastern Region Community Resource Management Project for Upland Areas, 2008.		no	1	NO

2. Monographs/Books /Chapters Published in Books

Village Botanist Manual of West Bengal, 2014. Eds- D. K.Ved, D. Shrivastave, A. Karim and B. Ghosh. Publisher- FRLHT, 74/2 Yelahanka, Bangalore.

3. Presentation of Research Papers (Oral/Poster) In Conference/ Seminar/Symposium:



Title of the Article	Author	Author (s)	Name of the Programme	Organizer	Date	Level: International/ National/ Regional/ Local
Contribution of NTFPs to two traditionally managed ecosystems of Meghalaya (ORAL)	Ghosh, B.	Ankar, Uma, Barik, SK.	National Seminar on Plant Science Research in Human Welfare	Department of Botany, Bidhanagar College, Kolkata and UGC	11th to 12th January, 2012.	National
Prospects of Indian Ginseng-Ashwagandha (<i>Withania somnifera</i>) in West Bengal. (ORAL)	Ghosh, B.	S., A., Chakroborty, P., and Gangopadhyay, S.,	National Conference on Biodiversity: Interrelationship Between Flora, Fauna and Human	Department of Botany, Zoology and Anthropology, Miranlani Datta Mahavidyalaya and	29 th and 30 th September, 2013.	National



Title of the Article	Author	Author (s)	Name of the Programme	Organizer	Date	Level: International/ National/ Regional/ Local
				UGC		
Flower of Spermatophytes as the Guardian of Life on Earth. (POSTER)	B. Ghosh,		National Seminar on “Botanical Resources and Human Welfare”,	Department of Botany, Ramakrishna Mission Vivekananda Centenary, College and UGC	6 th September, 2013.	National
Status of crude drugs micro-market in Kolkata, West Bengal. (ORAL)	Ghosh, B			Botanical Society of Bengal and CAS, Dept. Of	4 th to 6 th December, 2014.	National



Title of the Article	Author	Author (s)	Name of the Programme	Organizer	Date	Level: International/ National/ Regional/ Local
				Botany, University of Calcutta		
<p><i>Duabanga grandiflora</i> (DC.) Walp. an important timber yielding-cum-medicinal plant that plays a significant role in honey production and livelihood of the local community – A case study from the tropical wet-evergreen forest of</p>	Ghos	h, a, D. B.	India Biodiversity Meet (IBM)	Indian Statistical Institute, Kolkata	23-24 November, 2014	International



Title of the Article	Author	Author (s)	Name of the Programme	Organizer	Date	Level: International/ National/ Regional/ Local
Biodiversity hotspot in North East India. (ORAL)						
Nectar- pollinator relationship in <i>Duabanga grandiflora</i> (DC.) Walp. – A case study from the tropical wet-evergreen forest of Biodiversity hotspot in North East India.” (ORAL and POSTER).	Ghosh, B.	a, D	4 th International Conference,	World Science Congress, Kolkata,	16 th - 18 th December, 2014.	International
The use of medicinal plants and crude drugs micro-market	Ghosh, B.		National Science Day and 7 th Nation	World Science Congress,	2 nd -3 rd February, 201	National



Title of the Article	Author	Author (s)	Name of the Programme	Organizer	Date	Level: International/ National/ Regional/ Local
in West Bengal. (ORAL)			al Science Conference	Kolkata	5	
Household Pollutants and their Impact on Biodiversity Loss. (POSTER)	Ghosh, B.		UGC sponsored State level Seminar on Environmental Pollution: Causes, Impacts and Control	Bhawanipur Education Society College, Kolkata	25 th April, 2015	National

Dr. Dipanshu Kumar Vishwas, Assistant Professor, Dept. Botany

1. Publication: Referred Papers

List of Publications



Sl. No.	Title with volume/ page numbers	Journal (Year)	N/ ISBN No.	Impact factor
1.	Improvement of oxidative stress and immunity by melatonin: An age dependent study in golden hamster. 48; 168-182.	Experimental Gerontology (2012)	0531-5565	3.529
2.	Melatonin improves humoral and cell-mediated immune responses of male golden hamster following stress induced by dexamethasone. 259; 17-25.	Journal of Neuroimmunology (2013)	0165-5728	2.786
3.	Photoperiodic induced melatonin regulates immunity and expression pattern of melatonin receptor MT ₁ in spleen and bone marrow mononuclear cells of male golden hamster. 128:107-114.	Journal of Photochemistry and Photobiology B: Biology (2013)	1011-1344	2.803
4.	MT ₁ receptor expression and AA-NAT activity in lymphatic tissue following melatonin administration in male golden hamster. 22: 258-265.	International Immunopharmacology (2014)	1567-5769	2.711
5.	Melatonin prevents dexamethasone induced testicular oxidative stress and germ cell apoptosis in golden hamster, <i>Mesocricetus auratus</i> . xx, 1-12 (doi: 10.1111/and.12357).	Andrologia (2014)	1439-0272	1.172



List of Publications				
Sl. No.	Title with volume/ page numbers	Journal (Year)	N/ ISBN No.	Impact factor
6.	Age dependent oxidative stress and immunity in golden hamster: Role of melatonin. <i>In Proceedings of the Eleventh International Symposium on Neurobiology and Neuroendocrinology of Aging</i> , Bregenz, Austria. 48 (7); 700 (http://dx.doi.org/10.1016/j.exger.2013.05.052). (Awards- Air travel grant received from DBT-CTEP, Govt. of India for attending an International symposium and one week summer school at Bregenz, Austria in the year of 2012)	Experimental Gerontology (July, 2013)	0531-5565	3.529
7.	Synthesis and in vitro evaluation of melatonin entrapped PLA nanoparticles: An oxidative stress and T-cell response using golden hamster	Journal of biomedical Material Research (2015)	1552-4965	3.369

2. Participation/Presentation of Research Papers (Oral/Poster) In Conference/ Seminar/Symposium:



Title of the Article	Author	Author(s)	Name of the Programme	Organizer	Date	Level: International/ National/ Regional/ Local
Participation	Dipanshu Kumar Vishwas		Workshop on Radiation Safety In Teaching & Research	U Varanasi & RB Mumbai	12.01.2011	National
Participation	Dipanshu Kumar Vishwas		Endocrinology & Reproduction: Molecular Mechanism To Molecular Medicine And 28th Meeting Of The SRBCE	J and NIHF New Delhi	Feb 4-6, 2010	International
Participation	Dipanshu Kumar Vishwas		Cross-Talk Between Zoology And Technology	Department of Zoology North Bengal University	Nov 16-17, 2006	National
Isolation and characterization of suitable bacteria for solid substrate fermentation of Marigold	Dipanshu Kumar Vishwas	Madhir Chakraborty	Diversity And Functionality Of Plants And Microbes	Department of Botany, North Bengal University	Jan 24-25, 2008	National



Title of the Article	Author	Author(s)	Name of the Programme	Organizer	Date	Level: International/ National/ Regional/ Local
petals for better recovery of lutein						
Effect of melatonin on dexamethasone induced suppression of bone marrow macrophage progenitor cells and general immunity of golden hamster, <i>M. auratus</i>	Dipanshu Kumar Vishwas	Indana Hal dar	Brain Storming Meeting On Advances In Neuroendocrinology	Dept. Zoology, U Varanasi	Feb 14-15, 2011	National
Age dependent immune activity in male golden hamster, <i>M.</i>	Dipanshu Kumar Vishwas	Indana Hal dar	Recent Advances In Molecular And Cellular Endocrinology	Dept. Zoology, U Varanasi	Sept 23-25, 2011	National



Title of the Article	Author	Author(s)	Name of the Programme	Organizer	Date	Level: International/ National/ Regional/ Local
<i>auratus</i>						
Photoperiodic effect on bone marrow granulocyte macrophage progenitor cell function and general immunity of golden hamster, <i>M. auratus</i>	Dipanshu Kumar Vishwas	Chandana Haldar	30th symposium of SRBCE and National Conference on Novel aspects and emerging trends in reproduction and endocrinology	Department of Zoology, Mohanlal Sukhadia University, Udaipur, Rajasthan	Jan 30- Feb 1, 2012	National
Age dependent oxidative stress and immunity : Role of melatonin	Dipanshu Kumar Vishwas	Ankur Mukherjee, Chandana Haldar	11th International Symposium on Neurobiology and Neuroendocrinology of Ageing/ MARK-AGE 2012 Summer School	Wolfratshausen, Bregenz, Austria	July 29- August 3, 2012	International



Title of the Article	Author	Author(s)	Name of the Programme	Organizer	Date	Level: International/ National/ Regional/ Local
MT1 receptor expression and AA-NAT activity in lymphatic tissue following melatonin administration in male golden hamster	Dipanshu Kumar Vishwas	Chandana Halder, Arun Mukherjee	National symposium on Animals and Alternatives in Life Science Research and LASAI	Dept. Zoology, U Varanasi	Feb 16-18, 2014	National

3. Workshop and Training Courses:

Name of Training	Organization where training was received	Year	Duration (From)	Duration (To)
SERC SCHOOL IN CHRONOBIOLOGY	JNCASR INDIA Bangalore,	2010	25.12.2009	7.01.2010
MARK-AGE 2012 Summer School	Mehrerau, Austria Bregenz,	2012	29.07.2012	3.08.2012

Mr. Chandan Barman, Assistant Professor, Dept. Botany



1. Publication: Referred Papers

S.No.	Title with page numbers	Journal	ISSN/ISBN No.	Impact factor, if any
1.	Nectar Robbing Positively Influences the Reproductive Success of <i>Tecomella undulata</i> (Bignoniaceae)	PLOS ONE	ISSN: 1932-6203	3.534

2. Research Publications (Books, Chapters in Books)

No.	Book chapter contributed
1.	Chapter on ' Plant-pollinator-robber interaction ' in the book: Mutualistic interactions between flowering plants and animals . Edited by Palatty Allesh Sinu & K.R. Shivanna Manipal University Press, Manipal, India. 2015

Dr. Swapan Mandal

1. Papers presented in Conferences, Seminars, Workshops, Symposia

S.No.	Title of the paper presented	Title of Conference/seminar	Organized by	Whether international/national/State/regional/College or University level
1	Biochemical Characterization Of Cashew Kernel	Present Scenario & Future Prospects Of Microbiology & Plant	Asutosh College & Bose Institute, Kolkata, 09.03.2011-10.03.2011	National



		Biotechnology		
2	Conventional Breeding And Biotechnological Improvement	Advancement Of Biological Sciences Towards Sustainable Development	Behrampur Girls College (Behrampur) & UGC 29.03.2012- 30.03.2012	National
3	Pachimbangar Unnato Dhaner Mulayan	19 th West Bengal Science & Technological Congress	SINP & Govt. of West Bengal, Kolkata 01.03.2012- 02.03.2012	National
4	The Seed Chemistry Of Cashew nut	Rediscovering The Science In India	Behrampur College & UGC, Kolkata 19.09.2012 - 20.09.2011	National
5	Lipid Profile Of Kernel 18.11.11	Organic Farming & Biosafety	Gurudas Colleg, E & Bidhan Chandra Krishi Viswavidyalaya, Nadia 18.11.2011	National
6	Mangrooves Impact Against Salt Tolerance	Biodiversity & Its Management	East Calcutta Girls College & West Bengal Biodiversity Board, Govt Of West Bengal, Kolkata 08.12.2011 - 09.12.2011	National
7	Genetic Diversity Of Cashew In West Bengal	20 th West Bengal Science & Technological Congress	Bengal Engineering & Science University & Govt Of Wb 28.02.2012- 02.03.2012	National



		Page 129		
8	The Chemical Profile Of <i>Arachis Hypogea</i>	Recent Advances In Chemical Sciences & Dst, Csir, New Delhi	Arya Post Graduate College, Panipath Hariyana 24.02.2013 -26.02.2013	International
9	Seed Chemistry Of Cashew	Biodiversity & Scientific Evaluation In Human Beings	Mrinalini Devi Mahavidyalaya College & UGC, Birati 29.09.2013	National
10	Correlation & Path Analysis Of Cashew Germplasms	Annual Botanical Conference-2012	Dept. Of Botany, University Of Chittagong & Bangladesh Botanical Society, Bangladesh 20.11.2012	Inter National
11	Diversity Of India Rice In West Dinajpur, West Bengal	Biodiversity & It Applications 2012	UGC & Dum Dum Motijhil College, Kolkata 04.02.2012	National
12	Physico-Chemical Characters Of Mango Cultivers In Murshidabaad, West Bengal	Plant Products In Human Welfare	Bidhan Nagar Govt. College & UGC & BSI, Kolkata 11.01.2012	National



Evaluative Report of the Department of Zoology

- Name of the department:** Zoology
- Year of Establishment:** 1956 (As a Biology Department)
- Name of Programmes/ Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG
 - Zoology Honours (started in the academic year 1968-69)
 - Zoology General (started from the beginning, i.e. 1956)
- Names of Interdisciplinary courses and the departments/units involved:** N.A
- Annual/semester/choice based credit system (programme wise) :**

Annual, Students are required to sit for three examinations conducted by the University, one at the end of each year – Part I, Part II and Part III
- Participation of the department in the courses offered by other departments:**

Zoology as general subject with Honours in Botany and Industrial Fish and Fisheries.
- Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
- Details of courses/programmes discontinued (if any) with reasons:** N.A
- Number of Teaching posts:** Presently total no. of departmental teaching staffs 4

Academic Session	Faculty	Sanctioned	Filled
2014 – 2015	Professors	-	-
	Associate Professors	1 (CAS)	1 +2*



	Assistant Professors	6	3
2013 – 2014	Professors	-	-
	Associate Professors	3 (CAS)	3
	Assistant Professors	6	2
2012 – 2013	Professors	-	-
	Associate Professors	3(CAS)	3
	Assistant Professors	6	2
2011 – 2012	Professors	-	-
	Associate Professors	3 (CAS)	3
	Assistant Professors	6	2
2010 – 2011	Professors	-	-
	Associate Professors	3 (CAS)	3
	Assistant Professors	6	2

*At the entry level, only Assistant Professor posts are available. They are promoted to the post of Associate Professor through Career Advancement Scheme. Dr. Sanjib Chattopadhyay and Dr. Bidisha Ghosh Dastidar were appointed as the Principal of the College from Associate professor, they are on lien.

10. Faculty profile with name, qualification, designation, specialization,(D.Sc./D.Litt./Ph.D./M.Phil. etc.

Name	Qualification	Designation	Specialization	Years of Experience	Ph.D.Students guided for the last 4 years
Dr. Paritosh Kumar Roy	M.Sc, Ph.D	Associate Professor	Fisheries and Ecology (M.SC)	19 years	Research guidance enclosed***
Dr. Bidisha Ghosh Dastidar	M.Sc, Ph.D	Associate Professor (on lien) Presently appointed as Principal, Banipur Mahila	Ecology (M.Sc)	18 years and six months	-----



Name	Qualification	Designation	Specialization	Years of Experience	Ph.D.Students guided for the last 4 years
		Mahavidyalaya			
Dr. Sanjib Chattopadhyay	M.Sc, Ph.D	Associate Professor (on lien) Presently appointed as Principal, Bangabasi College Evening	Fish and Fisheries(M.Sc)	18 years and six months	-----
Dr. Subhendu Bikash Patra	M.Sc, Ph.D	Assistant Professor	Entomology(M.Sc)	5 years	-----
Smt. Debashree Golder	M.Sc	Assistant Professor	Fish Biology (M.Sc)	5 years	Perusing Ph.D. at WBSU (Have already completed course-credit system for Ph.D program)
Dr. Madhumita Roy	M.Sc, Ph.D	Assistant Professor	Ecology (M.Sc)	9	-----

****Brief outline of research guidance of Dr. Paritosh Kumar ray

Name of the course	Number Enrolled	Thesis Submitted	Degree Awarded



M. Phil or equivalent	13 (Vidyasagar University, Midnapore, W.B.) 3 (Barkatullah University, Bhopal, M.P.)	2003 2004	Dissertation (M.Sc., Zoology) Dissertation (M.F.Sc., Applied Aquaculture)
Ph. D. or equivalent	-----	-----	-----

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty

	2010-2015	Before 2010
Theory	None	30% (average)
Practical	None	25% (average)

Name of Guest lecturers (Before 2010)	Qualification
Sujoy Chatterjee	M.Sc (Zoology)
Shanta Saha	M.Sc (Zoology)
Subhoraj Manna	M.Sc (Zoology)
Sheuli Das	M.Sc (Zoology)

13. Student-Teacher Ratio (programme wise)

Academic Session	No of honours students	No of teachers (including guest lecturers)	Student: Teacher	No of general students	No of Teachers	Student : Teacher
2014-15	83	5	17 : 1	135	5	27 : 1



Academic Session	No of honours students	No of teachers (including guest lecturers)	Student: Teacher	No of general students	No of Teachers	Student : Teacher
2013-14	80	5	16 : 1	123	5	25 : 1
2012-13	104	5	21 : 1	Data not available		
2011-12	125	5	25 : 1	Data not available		
2010-11	155	5	31 : 1	Data not available		

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: No. of non-teaching staff (technical)- 2

Academic Session	Technical Staff	
	Sanctioned	Filled
2014-15	2	2
2013-14	2	2
2012-13	2	2
2011-12	2	2
2010-11	2	2

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG:

Name	Qualification
Dr. Paritosh Kumar Roy	M.Sc, Ph.D



Dr. Bidisha Ghosh Dastidar	M.Sc, Ph.D
Dr. Sanjib Chattopadhyay	M.Sc, Ph.D
Dr. Subhendu Bikash Patra	M.Sc, Ph.D
Smt. Debashree Golder	M.Sc
Dr. Madhumita Roy	M.Sc, Ph.D

16. Number of faculty with ongoing projects from a. National b. International funding agencies and grants received:

Name of faculty	Name of Ongoing research Project	Scheme/Plan	Sanctioned date and no:	Tenure	Funding agency	Grant sanctioned (Rs)
Smt. Debashree Golder	Biomonitoring of water pollution by heavy metal in some oxbow lake in the southern parts of West Bengal	UGC XII th Plan, Minor Research Project (MRP)	No.F. PSW-151/13-14(ERO) dated 18.03.2014	2 years (24 months)	University Grants Commission (UGC)	2,60,000



17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

Name of faculty	Title	Funding Agency	Period	Grant received (Rs.)
Dr. Paritosh Kumar Ray	Seed Production of <i>Mystus gulio</i> (Ham.), a Brackishwater catfish and assessment of its culture potentiality in freshwater system.	University Grants Commission UGC Xth Plan	2002 – 2004	
	An Investigation on Disease in Ornamental fishes with a note on Prophylactic and Therapeutic measures.	University Grants Commission UGC XIth Plan	2007 - 2009	
Smt. Debashree Golder	Biomonitoring of water pollution by heavy metal in some oxbow lake in the southern parts of West Bengal	UGC XII th Plan, Minor Research Project (MRP) No.F. PSW-151/13-14(ERO) Dated 18.03.2014	2 years (24 months) ongoing	2,60,000

18. Research Centre/facility recognized by the University: WBSU

19. Publications: a) Publication per faculty

* Number of papers published in peer reviewed journals (national/

International) by faculty and students

* Number of publications listed in International Database (For Eg:



Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.)

- * Monographs
- * Chapterin Books
- * Books Edited
- * Books with ISBN/ISSN numbers withdetails of publishers
- * Citation Index
- * SNIP
- * SJR
- * Impact factor
- * h-index

Dr. Paritosh Kumar Ray:

A. Published papers in Journals

Sl. No.	Title with page numbers	Journal	ISSN/ISB N No.	Whether peer reviewed or not. Impact factor, if any	No. of co-authors	Whether you are the main author
1.	Exotic and Hybrid Fishes: Boon or Bane. 116 – 120	<i>Fishing Chimes,</i> 2008 .28(1), 116-120	ISSN No. 0971 - 4529	Peer reviewed	None	Yes
2.	Common Diseases of Gold fish with a note on Prophylactic and Therapeutic measures.	<i>Fishing Chimes</i> 2012 (accepted for publication)	ISSN No. 0971 - 4529	Peer reviewed	None	Yes



3	Induced breeding and larval rearing of the Brackishwater catfish, <i>Mystus gulio</i> in salinity free water.	<i>Fishing Chimes</i> , 2005, 25(4):9-12	ISSN No. 0971 -4529	Peer reviewed	None	Yes
4.	Predaceous adaptation of the head of Bombay Duck, <i>Harpadon nehereus</i> (Ham.), a marine teleost.	<i>Proc.Zool. Soc. Calcutta</i> , 2003, 56(2):89-96	ISSN No. 0373-5893	Peer reviewed	one	Yes
5.	Anatomical peculiarities of the cranial osteology of Bombay Duck, <i>Harpadon nehereus</i> (Ham). (Scopelomorpha : Aulopiformes)	<i>Proc.Zool. Soc. Calcutta</i> , 2002,55(1): 47-62.	ISSN No. 0373-5893	Peer reviewed	one	Yes

B. Articles/Chapters in Books

Sl. No	Title with page nos.	Book Title, Editor, Publisher	ISSN/ISBN No	Whether peer reviewed or not.	No. of co-authors	Whether you are the main author
--------	----------------------	-------------------------------	--------------	-------------------------------	-------------------	---------------------------------



1.	Cephalic Sensory canal system of some Cyprinodont Fishes in Relation to their Habitat. 193 - 202	Fish Morphology Horizon of New Research. Ed., J.S.Dattamunshi and H.M. Dutta Publisher, Science Publishers Inc .USA	ISBN 1-886106-31-	Peer reviewed	1	Yes
----	--	---	-------------------	---------------	---	-----

C. Invited Lectures and Chairpersonship –

Sl. No.	Title of Lecture/ Academic Session	Title of Conference/Seminar Etc.	Organized by	Whether international /national
1.	Selection of fishes for a profitable venture and brood fish maintenance. 2006	Rural Entrepreneurship Development Programme on Ornamental Fish Farming.	Ramkrishna Vivekananda Mission Institute of Advanced Studies and NABARD.	National
2.	Ornamental fish resources of India. 2005.	Aviculture and Ornamental Fish Culture.	Ramkrishna Mission Samaj Sevak Sikshanmandir, Belur Math.	National
3.	Breeding of Ornamental fishes	Advanced Training Program to Breeders of Ornamental Fish	MPEDA	National
4.	Co ordinator 2006	National Seminar and Workshop on Ornamental Fish.	Central Calcutta Science and Culture for Youth and Department of Fisheries, Aquaculture, Aquatic Resources & Fishing Harbors, Govt. of West	National.



			Bengal.	
--	--	--	---------	--

Author	Title of published paper/chapter/book/papers presented in conference, seminar etc.	Journal, volume, pages, year
Dr. Bidisha Ghosh Dastidar	“Impact of pesticides on the development of chick embryo”	“Environment and Ecology”, 30(3A):659-663, 2012
Dr. Bidisha Ghosh Dastidar	Seminar on “Contemporary Bengali literature in search of folklore elements”.	
Dr. Bidisha Ghosh Dastidar	Article entitled “Manush o jibjagater abismaraniya lokkatha – titas ekti nadir naam”	ISBN No: 978-93-83521-09-8 published on 10 th November,2013 Pg 208-215
Dr. Sanjib Chattopadhyay	“Biodiversity of planktons in tropical lake”	“Environment and Ecology”, 30(3B):603-608,2012
Smt. Debashree Golder	Pathophysiology changes in Rohu (<i>Labeo rohita</i> , Hamilton) fingerlings following arsenic exposure	ISSN 0250-541X DOI 10. 1007/s40009-014-0345-1 “ National Academy Science Letters”, Springer Publication Published online: 9 th June, 2015



Dr. Subhendu Bikash Patra:

A. Publications / Presentation / Submission

- S.B.Patra “Some observations of zooplankton community of river Damodar with special references of its environmental conditions ” Proceedings of the World Biodiversity Congress (WBC) held at Chiang Mai, Thailand. November 26-30, 2013
- S.B.Patra “Fluctuation of different zooplanktonic groups of a wetland in some abiotic factors” Proceedings of the National Conference on Biodiversity : NCB-2014 Issue, Concern and Future Strategies held at Kolkata, 16th to 18th January, 2014.
- B.K.Bandyopadhyay, S.B.Patra and J.Nath. “ Reclamation of weed infested shallow Wetlands for successful freshwater aquaculture in West Bengal, India”
Proceedings of the 100th Indian Science Congress held at Kolkata ,January 3 to 7 , 2013.

B. Seminar/Symposia/Conference/Meeting

- Seminar on “Use Of Cosmetics: How Safe?” held at Bose Institute, 18 september, 2010, organized by National Environmental Science Academy, West Bengal Chapter.
- Seminar on “Re-writing Culture, Re-telling Narratives: Gender and the politics of representation” organized by B.K.C.COLLEGE, Kolkata-108 , 9th and 10th February ,2012.
- National seminar on “Higher Education in 12th Five Year Plan:Agenda,Role of Teachers & Teachers’ Movement” organized by



M.G.Kashi Vidyapith Affiliated College Teachers’ association. at Varanasi.

- ‘100th Indian Science Congress’ held at Calcutta University from 3 to 7 January 2013.
- “Science Exhibition” organized by National Environmental Science Academy on December 28th 2013.
- National Conference on “Biodiversity: Issue, Concern and Future Strategies “held on 16th to 18th January, 2014 in Kolkata.

Dr. Madhumita Roy

A. Published papers in peer reviewed journals

Sl . No	Title with page no.	Journal	ISSN/ISB N No.	Whether peer reviewed. Impact factor, if any	No. of co-authors	Whether you are the main author
1.	2015 <i>Impact of Environmental Factors on Maintaining water Quality of Bakreswar Reservoir, India</i>	Computational Ecology and Software	2220-721X	Yes IF-0.1176	5	No
	2014					



2.	<i>Impact of Environmental Factors on the Carbon Dynamics at Hooghly Estuarine Region</i> Article ID 607528, Doi: 10.1155/2014/60752	Journal of Ecosystem. Hindwai Publication	2314-6001	yes	3	No
	2012					
3	<i>Dynamic modelling of dissolved oxygen in the creeks of Sagar Island, Hooghly –Matla estuarine system, Westbaengal, India. Vo. 36. Issue 12 (December), pp5952-5963.</i>	Applied Mathematical Modelling, Elsevier	0307-904X	Yes IF-2.0251	5	No
	2008					
4	<i>Detrital ontogenic model including decomposer diversity. Vol. 215, pp 200-206</i>	Ecological Modelling, Elsevier	ISSN 0304-3800	Yes IF-2.321	2	Yes



	2006					
5	<i>Dipteran flower visitors of Ateraceae</i> Vol.12; pp 114-116	Flora and Fauna	ISSN 0971-6920	yes	1	No

B. Articles/Chapters Published in Books

Sl. No.	Title with page nos.	Book Title, Editor & Publisher	ISSN/ISBN No.[or Renowned publishers]	Whether peer reviewed	No. of co-authors	Whether you are the main author
2012						
1	<i>Body Size Versus Rate Parameters of Zooplankton and Phytoplankton – Effects on Aquatic Ecosystem</i> .Chapter10. pp193-218, 2012	Zooplankton and Phytoplankton; Types, Characteristics and Ecology (Editor: Giri Kattel); Nova Science publication, USA	ISBN:978-1-61324-508-8	yes	5	No
2	<i>Aquatic Ecosystem Health-A</i>	Aquatic Ecosystems (Editor:	ISBN: 978-1-61324-	yes	3	No



	<i>Review. Chapter 2, pp57-102</i>	Sheila A. Brown). Nova Science publication, USA	399-2			
2011						
3	<i>Mechanisms of transformation of various forms of carbon and cycling pathways in The Hooghly estuarine system. Chapter-6; pp93-114.</i>	Estuaries: classification, ecology and human impacts (Editor: Steve Jordon). Nova Science publication, USA	ISBN: 978-1-61924-083-0	Yes	4	No

C. Full Papers in Conference Proceedings

Sl. No.	Title with page nos.	Details of Conference Publication	ISSN/ ISBN No	No. of co-authors	Whether you are the main author	National/ International/ Local
	2012					
1	<i>Modelling of impact of detritus on</i>	Procedia Environmental Sciences, vol.	2878-0296	2	yes	International



	<i>detritivorous food chain of sundarban mangrove system, India'</i> <i>pp 377-390</i>	13. Elsevier, Peer-rivewed				
--	---	-------------------------------	--	--	--	--

D. Paper presentation / Participation in conferences and Symposia (2010-1015)

Year	International / National	Name of the conference or symposia	Organizers	Date	Mode of participation
2015	International	International conference-India biodiversity meet-2015	AERU Unit, ISI, Kolkata	16 th -18 th Nov, 2015	Oral presentation
2014	International	International conference-India biodiversity meet-2014	AERU Unit, ISI, Kolkata	21 st -23 th Nov, 2014	Poster presentation
2014	International	International Conference on Environmental Biology and Ecological Modeling(ICEBE M 2014)	Department of Zoology, Visva-Bharati, Santiniketan, India.	24 th -26 th Feb, 2014	Poster presentation



2013	International	International seminar on Environmental Interface: An Interdisciplinary Approach Towards Sustainable Development	Muralidhar Girls' College, Kolkata.	3 rd May, 2013	Participated
2012	National	UGC Sponsored National Seminar on Traditional and Non-Traditional Security Concerns in the 21 st Century: A South Asian Perspective	South Calcutta Girls College, Kolkata.	6 th 7 th March 2012	Participated
2012	National	UGC Sponsored National Seminar on Philosophical Thoughts of Rabindranath.	South Calcutta Girls college, Kolkata in collaboration with Indian Academy of Philosophy	5 th -6 th Jan, 2012	Participated
2011	International	The 18 th Biennial ISEM conference; Ecological Modeling for Global Change	ISEM in collaboration with Beijing Normal	Sep, 2011	Oral presentation



		and Coupled Human and Natural System.	University, China		
--	--	---------------------------------------	-------------------	--	--

20. Areas of consultancy and income generated: Nil

21. Faculty as members in:

a) National committees b) International Committees c) Editorial Boards:

Dr. Paritosh Kumar Ray:

- i) . Undergraduate Board of Studies (WBSU) – 2009-2012
- ii). Expert Committee in Industrial Fish and Fisheries (CU) – 2004

Dr. Sanjib Chattopadhyay:

- i). Undergraduate Board of Studies (WBSU) (2011. continuing)
- ii). University nominee G.B member of Mrinalini Mahila Mahavidyalaya (2012, continuing)

Smt. Debashree Golder:

University nominee G.B member of Nahata J.N.M.S Mahavidyalaya (2015 , continuing)

Dr. Madhumita Roy:

Year	University (UG/PG)	Nature of work	Date
2010	Member of University of Calcutta, Council for Undergraduate Studies	Revision of existing syllabi in B.Sc. (Hons. & General) Courses of Studies in	22 nd May, 2010



		Zoology.	
--	--	----------	--

22. Student projects

- Ist year students , 2015 – Project on Poriferan classification and structure
- 3rd year students, 2015 – project on novel discovery

a) **Percentage of students who have done in-house projects including interdepartmental/programme:** 98% students submitted their projects

b) **Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies:** Data Unavailable

23. Awards/Recognitios received by faculty and students:

Name	Award; Institute	Title	Date
Dr. Madhumita Roy	Ph.D Visva-Bharati	Impact of Mangrove Detritus on Detritivorous fish Dynamics of Hooghly Matla estuarine complex	9 th October, 2015
Dr. Madhumita Roy	Special Achievement Award, Indian Statistical Institute	Mangrove Litter: the source of biodiversity in Sundarnabn	18 th Nov, 2015

24. List of eminent academicians and scientists/visitors to the department: Nil

25. Seminars/Conferences/Workshops organized &the source



of funding

a) National: Nil b) International: Nil

26. Student profile programme/ coursewise:

Session	Applications received for Ist year admission	Admitted - 1st Year			Admitted - 2nd Year			Admitted - 3rd Year		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
2014-15	227	18	29	47	8	9	17	6	12	18
2013-14	145	17	20	37	5	13	18	8	17	25
2012-13	222	19	37	56	8	15	23	7	18	25
2011-12	253	24	37	61	8	22	30	17	17	34
2010-11	230	43	33	76	19	24	43	15	21	36

*The result is of those students who appeared in the final examination with honours in academic year 2010-11 and so on.

#Students who have cleared honours but failed in general subject in that year is not reflected here.

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
U.G (Honours and General)	100%	Nil	Nil



28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Academic Year →	2014-15	2013-14	2012-13	2012-11	2011-10
NET/SLET/GATE (%)	0.8 %	0.6%	0.9%	1%	1%
Employed (SSC, Banking, WBCS)	1%	1%	1%	1.3%	2%

29. Student progression

Student progression	Against % enrolled				
Academic Year →	2014-15	2013-14	2012-13	2012-11	2011-10
UG to PG	45	40	42	46	47
PG to M.Phil.	5	6	4	5	4
PG to Ph.D.	3	2	2	3	3
Ph.D.to Post-Doctoral	-	-	-	-	-
Employed •Campus selection (N.A) •Other than campus recruitment (only)	15	12	10	11	10
Entrepreneurship/ Self-employment	2	1	1	2	1

30. Details of
Infrastructural
facilities:



- a)Library:**
 Departmental seminar
 library, College
 library
- b) Internet facilities for Staff & Students:** Yes, internet facility is accessible to both staff and students.
- c) Class rooms with ICT facility:** Digital classroom, e-learning classroom
 - 1
- d) Laboratories:** 2

31. Number of students receiving financial assistance from college, university,

Government or other agencies:

Academic Session	Students receiving financial assistance from college			Students Receiving aids from Government
	Full free	Half Free	Stipend	
2014-15	3	0	0	
2013-14	0	1	0	
2012-13	0	3	0	
2011-12	1	5	0	
2010-11	0	4	1	

32. Details on student enrichment programmes(special lectures/workshops/ seminar) with external experts



Place of visit	Date of journey and return	Organizer and associated members of the department	Nature of survey and field study
Waltair and adjoining areas (Andhra Pradesh)	9.2.2011-15.2.2011	Dr.Sanjib Chattopadhyay(organizer) Dr. Bidisha Ghosh Dastidar and Smt. Debashree Golder (Participated)	Coastal aquaculture and visit to aquarium
Bakkhali (West Bengal)	15.3.2012 – 18.3.12	Dr.Paritosh Kumar Roy (organizer) Dr. Subhendu Bikash Patra (Participated)	Biodiversity of coastal fauna
Bakkhali (West Bengal)	30.11.12 – 2.12.12	Dr.Paritosh Kumar Roy (organizer) Dr. Subhendu Bikash Patra (Participated)	Ecological study of fiddler crab
Chandipur (Orissa)	14.2.14 – 17.2.14	Dr. Subhendu Bikash Patra(organizer) Dr.Paritosh Kumar Roy (Participated)	Biodiversity of coastal fauna
Chandipur (Orissa)	24.3.15 – 27.3.15	Dr. Subhendu Bikash Patra(organizer) Dr.Paritosh Kumar Roy (Participated)	Crab hole characteristics and density study

33. Teaching methods adopted to improve student learning

Type of classes	Methods implemented
-----------------	---------------------



Theoretical	<ul style="list-style-type: none">• Seminar, Project work, Lectures delivered via Digital board , Smart Class room.
Practical	<ul style="list-style-type: none">• Excursion, Local field trip, Specimen preserved and maintained in museum, Dissection chart, Books, graphs, statistical programmes in computer

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Blood Donation camp
- Medical Health check up camp
- Participation in Science fair organized by W.B Youth Welfare Department Govt. of West Bengal dated on 23.09.15
- Participation in Pen and paper test by NIIT for Vabisyajyoti Scholarship, dated 1.09.15

35. SWOC analysis of the department and Future plans:

Strength:

- Full faculty strength for U.G Study Programme.
- Ample Numbers of students
- Two laboratory assistant to assist classes
- Two separate laboratories for Honours and general students.
- Digital smart classroom for audio-visual classes
- Separate staff room for faculty members.
- Enriched and well maintained Departmental Museum
- Computer for the use of faculty members and students.

Weakness

- Scarcity of classroom.



- No space within the department for establishing research laboratories for faculty research projects.
- More enriched seminar library should be there.
- Fund scarcity for departmental maintenance and annual contingency.
- Seminar library has to be more enriched for that funds required.
- Renovation of the existing Honours laboratory has to be done at earliest

Opportunities

- Organised theory and practical classes for students.
- Audiovisual classes.
- Laboratory demonstration
- Students projects.
- Students extension programmes.
- Departmental study tours.
- Seminar library.
- Students' seminar presentation.
- Student evaluation system

Challenges

- ⊙ Formation of a departmental journal committee for paper publication for both students and faculty
- ⊙ Promote research facility for both Faculty and Students.
- ⊙ Development of departmental infrastructure for opening P.G course

Future Plans

- Introduction of Courses in collaboration with other universities and institutes.
- Introduction of P,G Course
- More departmental Research projects.
- Involving students in departmental research projects.
- Development of infrastructures to facilitate faculty research programmes.



Evaluative Report of the Department of Molecular Biology

1. **Name of the department:** Molecular Biology
2. **Year of Establishment:** 1986 (department was functional from the academic year 1987-88)
3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG (General)
4. **Names of Interdisciplinary courses and the departments/units involved:** Nil
5. **Annual/semester/choice based credit system (programme wise):** Annual Year wise exam conducted by the University.
6. **Participation of the department in the courses offered by other departments:** Molecular Biology as General Subject with Honours in (i) Zoology, (ii) Botany)
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses/programmes discontinued (if any) with reasons:** Nil
9. **Number of Teaching posts**

Academic Session	Faculty	Sanctioned	Filled
2014 – 2015	Professors	NA	NA
	Associate Professors	CAS	1
	Assistant Professors	1	1
2013 – 2014	Professors	NA	NA
	Associate Professors	CAS	1
	Assistant Professors	1	1
2012 – 2013	Professors	NA	NA
	Associate Professors	CAS	1
	Assistant Professors	1	1



Academic Session	Faculty	Sanctioned	Filled
2011 – 2012	Professors	NA	NA
	Associate Professors	CAS	1
	Assistant Professors	1	1
2010 – 2011	Professors	NA	NA
	Associate Professors	CAS	1
	Assistant Professors	1	1

*At the entry level, only Assistant Professor posts are available. They are promoted to the post of Associate Professor through Career Advancement Scheme.

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. /M. Phil.etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students Guided for the Last 4 years
Dr. Gangabrata Mukherjee	M.Sc, Ph.D	Associate Prof	Biophysics	28 yrs	Nil
Kalpataru Halder	M. Sc	Asst. Prof	Biochemistry	5 yrs	Nil

11. List of senior visiting faculty: Nil
12. Percentage of lectures delivered and practical classes handled (programme-wise) By temporary faculty: Nil
13. Student-Teacher Ratio (programme-wise):

Academic Session	No of Students	No of Teachers	Total Students / Teacher ratio
2014-15	54	2	27:1



Academic Session	No of Students	No of Teachers	Total Students / Teacher ratio
2013-14	47	2	24:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Academic Session	Technical Staff	
	Sanctioned	Filled
2014-15	1	1
2013-14	1	1
2012-13	1	1
2011-12	1	1
2010-11	1	1

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.:

Among present faculties Ph.D. : 1; P.G. : 1

16. Number of faculty with ongoing projects from a) National b)

International funding agencies and grants received: Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc.

and total grants received: Nil

18. Research Centre/facility recognized by the University: Nil

19. Publications:

- a) Publication per faculty
- b) Number of papers published in peer reviewed journals (national/international) by faculty and students : **3**
- c) Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory,



- EBSCOhost,etc.)
- d) Monographs
 - e) Chapter in Books
 - f) Books Edited
 - g) Books with ISBN/ISSN numbers with details of publishers
 - h) Citation Index
 - i) SNIP
 - j) SJR
 - k) Impact factor
 - l) h-index
- 20. Areas of consultancy and income generated: Nil**
- 21. Faculty as members in**
- a) National committees
 - b) International Committees
 - c) Editorial Boards: Nil
- 22. Student projects**
- a) Percentage of students who have done in-house projects including inter departmental/programme
 - b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies: Nil
- 23. Awards/Recognitions received by faculty and students: Nil**
- 24. List of eminent academicians and scientists/visitors to the department: Nil**
- 25. Seminars/Conferences/Workshops organized & the source of funding**
- a) National: Nil
 - b) International: Nil
- 26. Student profile programme/course wise:**



Name of the Course/programme (refer question no. 4)	I st year	II nd year	III rd year	Pass percentage
Molecular Biology (Gen.)				
2014-15	37	7	10	Data not available
2013-14	17	16	14	
2012-13	32	22	12	
2011-12	36	20	13	
2010-11	50	19	10	

It is observed that there is a trend among 1st year students to shift to engineering colleges next year by appearing in JEE. This explains the abrupt fall in the number of students in 2nd year.

27. **Diversity of Students:** All the students are from West Bengal. There are few students whose original homeland is in some other state but they reside in West Bengal from childhood.
28. **How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?** - Data not available
29. **Student progression** – Data not available
30. **Details of Infrastructural facilities**
- Library:** No departmental library
 - Internet facilities for Staff & Students:** Students can avail the facility at the Library and staff can avail the facility at the general Staff Room
 - Class rooms with ICT facility:** Yes
 - Laboratories:** The laboratory is well equipped with multiple numbers of instruments corresponding to each experiment to suffice the need of general students.
31. **Number of students receiving financial assistance from college, university, Government or other agencies:** Data not available



32. Details on student enrichment programmes (special lectures/workshops/Seminar) with external experts: Very Soon we are going to conduct a special lecture.

33. Teaching methods adopted to improve student learning:

- We download various special lectures available on internet in video as well as in PDF format
- Video is used for audio visual teaching
- PDF print is supplied to the students as class notes

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- Our students attend various social awareness program conducted by the college authority
- Dr Gangabrata Mukhopadhyay had taught in M.Sc curriculum in the chemistry department in Scottish Church College during academic year 2013-14 and 2014-15.
- Dr Gangabrata Mukhopadhyay teaches Physics Honours course in Brahmananda Keshab Chandra College

35. SWOC analysis of the department and Future plans:

Strength	We are motivating the students to enhance their capacity of independent thinking at the same time encourage them to study independently which will help them to shine in future. The faculty is open-minded to criticism and this helps in the improvement of the teaching methods.
Weakness	Absence of Honours curriculum in the college.
Opportunities	The laboratory is equipped with the following technical processes (i) detection of colour blindness, (ii) estimation of blood sugar (iii) determination of blood groups Our students will do these tests as part of their extra-curricular activity.
Challenges	Our biggest challenge is to bring the students in the classroom as the student attendance is diminishing now-a-days

Future Plans: (1) To launch a Honours course in Molecular Biology
(2) To request government for funds for future infrastructural development



Evaluative Report of Economics Department

1. **Name of the department:** Economics
2. **Year of Establishment:** 1956
3. **Names of Programmes/Courses offered (UG,PG,M.Phil.,Ph.D.,Integrated Masters;Integrated Ph.D.,etc.):**UG
 - i. Economics Honours (started in the academic year 1961)
 - ii. Economics General (started from the beginning, i.e 1956)

4. **Names of Interdisciplinary courses and the departments/units involved:**

No Interdisciplinary courses are offered by the university apart from the fact that Economics honours students can take up Mathematics along with Statistics/Computer Science/Political Sciences as general papers, and honours students of Political Science/ History/ English departments can take up Economics as a general combination.

5. **Annual/semester/choicebased credit system(programmewise):**
Annual
Students are required to take three examinations conducted by the University, one at the end of each year – Part I, Part II and Part III

6. **Participation of the department in the courses offered by other departments:**
 - Students studying Economics honours are required to take up two other subjects referred to as general papers. Economics honours students are offered Mathematics along with Statistics/Computer Science/Political Science.
 - BA General Students can take up Economics as a combination (general) subject along with two other subjects offered by the college. Students of other honours departments like English, Political Science and History can also take up Economics as a general subject.



7. Courses in collaboration with other universities, industries, foreign institutions, etc.: Nil

8. Details of courses/programmes discontinued (if any) with reasons: No

9. Number of Teaching posts

Academic Session	Faculty	Sanctioned	Filled
2014 – 2015	Professors	NA	NA
	Associate Professors	2 (CAS)	2
	Assistant Professors	2	2
2013 – 2014	Professors	NA	NA
	Associate Professors	2 (CAS)	2
	Assistant Professors	2	2
2012 – 2013	Professors	NA	NA
	Associate Professors	2 (CAS)	2
	Assistant Professors	2	1
2011 – 2012	Professors	NA	NA
	Associate Professors	2 (CAS)	2
	Assistant Professors	2	1
2010 – 2011	Professors	NA	NA
	Associate Professors	1 (CAS)	1
	Assistant Professors	3	2

*At the entry level, only Assistant Professor posts are available. They are promoted to the post of Associate Professor through Career Advancement Scheme.

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil.etc.) from 2010 onwards

Name	Qualification	Designation	Specialization	Years of Experience	Ph.D. Students guided for the last 4 years
------	---------------	-------------	----------------	---------------------	--



Name	Qualification	Designation	Specialization	Years of Experience	Ph.D. Student guided for the last 4 years
Nayna Guha Majumder	M. A.	Associate Professor	Economics and optimization technique	21 years	NIL
Jayanta Kumar Dwivedi	M. Sc., Ph. D.	Associate Professor	Trade and Development	16 years	NIL
Susmita Halder	M. Sc., M. Phil., Registered for Ph.D. programme	Assistant Professor	Political Economy and Agricultural Economics	13 years	NIL
Rathindra Nath Mallick	M. A., Registered for Ph.D. programme	Assistant Professor	Econometrics	10 years	NIL

11. List of senior visiting faculty: NIL

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: NIL

13. Student-Teacher Ratio (programme-wise)

Academic Session	No. of Teachers including Guest Lecturers	No. of honours students	Student: Teacher	No. of general students	Student : Teacher
2014-15	4	5	1:1	56	14:1
2013-14	4	7	2:1	61	15:1

14. Number of academic support staff (technical) and administrative staff sanctioned and filled: Not Applicable



15. **Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.:**
Ph. D.: 1; M. Phil. : 1, PG : 2
16. **Number of faculty with ongoing projects from a)National
b)International funding agencies and grants received: One**
- One of the faculty members (Jayanta Kumar Dwibedi) currently working with a collaborative project (with a faculty from Jadavpur University).
 - Funding support from Centre for Training and Research in Public Finance and Policy (CTRFPF), Centre for Studies in Social Sciences, Calcutta (CSSSC). Grants allotted: Rs. 30000/- (For appointment of a Research Assistant).
17. **Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: NIL**
18. **Research Centre/facility recognized by the University: NIL**
19. **Publications:**
Total no of Publication by the faculty members: 10
(Details of research activities of the faculty members of the department is provided in *Annexure: Economics*)
- **Publication per faculty: 2.5**
 - **Number of papers published in peer reviewed journals (national/ international) by faculty and students: 8** (National : 4, International : 4)
 - **Number of publications listed in International Database** (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.):
 - Most of the published papers are listed in International Databases like SSRN and MPRA RePEc Archive.
 - Apart from published papers, 4 papers (by Jayanta K. Dwibedi) are in International databases like SSRN and MPRA RePEc Archive as working papers.
 - Monographs



- Chapter in Books
- Books Edited
- Books with ISBN/ISSN numbers with details of publishers:
- Citation Index
- SNIP
- SJR
- Impact factor
- h-index

20. **Areas of consultancy and income generated:** NIL

21. **Faculty as members in**

- a) **National committees**
- b) **International Committee**
- c) **Editorial Board:**

Jayanta Kumar Dwibedi,

Member: Society for Economic Research in Bengali (SERB)

Editorial Board Member of:

1. ARTHABISLESHON, A bi-annual journal of Economics in Bengali(ISSN: 2321-1903), Published by SERB and Dey's Publishing, Kolkata (from 2012 till date).
2. Athens Journal of Business and Economics, The Athens Institute of Education and Research (ATINER), Greece (from 2012 till date).

22. **Student projects:** NIL

- a) Percentage of students who have done in-house projects including interdepartmental/programme
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies.

23. **Awards/Recognitions received by faculty and students:** NIL

24. **List of eminent academicians and scientists/visitors to the department:**

Sl No	Name	Affiliation
1	Professor Debasis Majumder	Associate Professor, Bangabasi



	(2013)	College
2	Professor Mousumi Manna (2004)	Associate Professor, Scotch Church Collège

25. Seminars/Conferences/Workshops organized & the source of funding

a) National b)International

No	Topic	Date	Source of funding
1.	A Seminar Lecture by Professor Debasis Majumder on “ Structural Change in Indian Economy: An Overview of Service Led Growth”	6.8.2013	College
2.	Students’ seminar on “Environment and Development”	2005	College
3.	A Seminar Lecture by Professor Mousumi Manna on “ Macroeconomics of Population”	2004	College
4.	UGC sponsored seminar on “India in a Globalized World: Issues and Challenges”	2004	UGC
5.	Students’ seminar on “Relevance of Green Revolution”	2003	College

26. Student profile programme/course-wise:

Session	Applications received for Ist year admission	Admitted - 1st Year			Admitted - 2nd Year			Admitted - 3rd Year		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
2014-15	9	4	0	4	0	1	1	0	0	0
2013-14	9	4	2	6	0	1	1	0	0	0



Session	Applications received for 1st year admission	Admitted - 1st Year			Admitted - 2nd Year			Admitted - 3rd Year		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
2012-13	9	1	0	1	0	0	0	0	0	0
2011-12	12	1	1	2	0	0	0	0	0	0
2010-11	2	2	0	2	1	0	1	0	0	0

27. **Diversity of Students:** No Student from other States/Country

28. **How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**

As the college offers only undergraduate courses, students do not appear in the national level competitions just after leaving the college. Some students, however, cleared state and national level competitive examinations and are placed in different government and non-government services. We provide a list of recent alumnus students for that purpose in Criterion-V.

29. **Student progression:** NIL (During the last five years)

30. **Details of Infrastructural facilities**

- a) **Library:** Seminar Library with 120 books
- b) **Internet facilities for Staff & Students:** Internet facilities
- c) **Class rooms with ICT facility:** ICT rooms of the college
- d) **Laboratories:** Not Applicable

31. **Number of students receiving financial assistance from college, university, Government or other agencies:** NIL

32. **Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts:**



SI No	Topic	Date
1.	A Seminar Lecture by Professor Debasis Majumder on “ Structural Change in Indian Economy: An Overview of Service Led Growth”	6.8.2013
2.	A Seminar Lecture by Professor Mousumi Manna on “ Macroeconomics of Population””	2004

33. Teaching method adopted to improve student learning

Type of classes	Methods implemented
Theoretical	<ul style="list-style-type: none"> • Board – Chalk • Power point presentation • Interactive discussions • Problem solving from question papers • Home assignments and regular class tests

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- ✓ Students of the department actively participate in awareness and outreach programmes organized by the college.
- ✓ The department has organized study tours and excursions in the past as below.

SI No	Event	Year
1.	An Excursion to Kalyani	2005
2.	An Economic Survey in Rajarhat	2004



3.	Study trip to Kolaghat	2003
----	------------------------	------

35. SWOC analysis of the department and Future plans

Strength

- Dedicated faculty with engagement in active research work
- A well-equipped departmental library with 120 books
- Internet resources

Weakness

- Inadequate number of students
- Inadequate number of students makes it difficult to organize any departmental activities like students' seminar, extension activities etc.

Opportunities

- More inter-disciplinary interactions are expected to improve the quality of teaching and research activities of the department
- Leverage of ISI research facilities and Infrastructure

Challenges

- Poor verbal and writing skill of majority of students
- Motivating the students to pursue non technical general courses.

Future Plans:

- Planning to visit local Higher Secondary schools to inform students about the courses offered by the department and job opportunities associated with them.
- Trying to mobilize resources to fund research at the departmental level
- Planning to engage students in more interactive learning process organising students' seminar more frequently.



Annexure - Economics:

Research activities of the faculties of the Department

Name of the Faculty: Nayna Guha Majumder			
Research Projects			
Type of Research Project	Funding Agency	Title	Duration
Minor Research Project	UGC	Cost Benefit Analysis of Arsenic	2009-11

Name of the Faculty: Jayanta Kumar Dwibedi			
A. Research Projects			
Type of Research Project	Funding Agency	Title	Duration
Minor Research Project	UGC	Revisiting the Link between Child Labour and Economic Growth: A Reconciliation of Conflicting Views.	2009-11
Collaborative Project (with Centre for Studies in Social Sciences, Calcutta)	State Finance Commission	Evaluation of State Finance: West Bengal	2014-15
Collaborative Project (with Centre for Studies in Social Sciences, Calcutta)	Central Finance Commission	Evaluation of State Finance	2013-14
Collaborative Project (with Centre for Training and research in Public Finance and Policy)	Centre for Training and research in Public Finance and Policy and Jadavpur	Efficient Utilization of funds at rural local governments: The case of West Bengal	Ongoing



and Jadavpur University)	University		
--------------------------	------------	--	--

B. Journal Publications						
No	Title	Journal	ISSN/ ISBN No.	Whether peer reviewed and Impact factor	No. of co-authors	Name the International Database, if any.
1.	Nobel Shanti O Shisusram (in Bengali).	Arthabisleshon, Vol 2 (2), 2014.	ISSN 2321-1903	Yes	0	
2	Agricultural Subsidy Policies Fail to Deal with Child Labour under Agricultural Dualism: What could be the Alternative Policies?	Research in Economics(Elsevier), Vol. 68 (3), September 2014	ISSN 1090-9443	Peer reviewed Impact Factor:3.602 (By IDEAS, RePEc)	1	IDEAS, RePEc,
3	Foreign Capital Inflow and Child Labour: A Theoretical Analysis (in Bengali).	Arthabisleshon, Vol. 1(1), 2013	ISSN 2321-1903	Yes	1	
4	Foreign Capital, Return to Education and Child Labour	International Review of Economics and Finance (Elsevier), Vol. 19, Issue 2. 2010.	ISSN 1059-0560	Peer reviewed Impact Factor:2.885 (By IDEAS, RePEc)	1	IDEAS, RePEc, SSRN,
5	Foreign Capital Inflow, Fiscal Policies and	The Manchester School (Wiley-	ISSN 1463-	Peer	1	IDEAS, RePEc,



B. Journal Publications						
No	Title	Journal	ISSN/ ISBN No.	Whether peer reviewed and Impact factor	No. of co- autho rs	Name the Internatio nal Database, if any.
	Incidence of Child Labour in a Developing Economy	<i>Blackwell</i>), Vol. 75 (1), 2007	6786	reviewed Impact Factor:3.775 (By IDEAS, RePEc)		SSRN,
6	Trade Liberalization in Agriculture in Developed Nations and Incidence of Child Labour in a Developing Economy	<i>Bulletin of Economic Research (Wiley-Blackwell)</i> , Vol. 58 (2), 2006	ISSN 0307-3378	Peer reviewed Impact Factor:2.566 (By IDEAS, RePEc)	1	IDEAS, RePEc, SSRN,
7.	“Child Labour in Developing Countries: Issues and Challenges”	Mahishadal Journal of Economics, Annual Number 2004	NO	NO	NO	
8	Horizontal and Vertical Linkages between Formal and Informal Credit Markets in Backward Agriculture: A Theoretical Analysis	Indian Journal of Social Development(Serial Publication), Vol. 2(1), 2002	ISSN: 0972-3692	Peer reviewed	1	

C. Conference Proceedings						
Sl. No.	Title with page nos.	Details of Conference Publication	ISSN/ ISBN No	No. of co- autho rs	Whether you are the main author	National/ International/ Local



C. Conference Proceedings						
Sl. No.	Title with page nos.	Details of Conference Publication	ISSN/ ISBN No	No. of co-authors	Whether you are the main author	National/ International/ Local
1	Economic Prosperity and Child Labour: A General Equilibrium Approach. Proceedings of the UGC-Sponsored National Level Seminar on 'Indian Economy: The Last Two Decades'	Department of Economics, Ramakrishna Mission Vidyamandira, Belur Math, 2-3 March 2012	No	NIL	Yes	National

D. Papers presented in Conferences, Seminars, Workshops, Symposia etc
<ol style="list-style-type: none"> 1. Presentation at Dissemination Workshop organised by State Finance Commission (Govt. Of West Bengal), Indian Statistical Institute, May 18, 2015. 2. Presentation (Invited lecture) at Annual Seminar on “Good days through Resource Optimisation and Corporate Governance”. Organised by The Institute of Cost Accountants of India, Durgapur, 22 March 2015. 3. Paper Presented (Invited lecture) at “Workshop on General Equilibrium Theory and its Applications”, Centre for Advanced Studies, Jadavpur University, Feb 25, 2015. 4. Paper Presented at National Conference on Fiscal Issues, reforms and Development Policies, Centre for Training and Research in Public Finance and Policy (CTRPFP), CSSSC, Kolkata, 19-20 February, 2015. 5. Paper Presented at 4th West Bengal Growth Workshop, ISI, Kolkata in Collaboration with IGC, London School of Economics, 26-27 December, 2014. 6. Presentation (Invited lecture) at Research Retreat organised by CTRPFP, CSSSC at Diamond Harbour 19-10 December 2014 7. Paper Presented (Invited lecture) at UGC Sponsored National Seminar on “Human Rights and Human Development: The Current Scenario”, Organised by Nahata College and Netaji Subhas Open University, 30 November 2014. 8. Invited lecture in CTRPFP Training Programme, Organised by CTRPFP, CSSSC, 12 August, 2014. 9. Presentation at 1st Dissemination Workshop organised by State Finance Commission (Govt.



D. Papers presented in Conferences, Seminars, Workshops, Symposia etc

- Of West Bengal), **Indian Statistical Institute, July 31, 2014.**
10. Paper Presented (**Invited lecture**) at “Two day Workshop on Research in Economics in Bengali”, organised by Maynaguri Collage in collaboration with RBI Endowment for Research in Industrial Economics and CSSSC. Maynaguri college **11-12 February 2014** Maynaguri, Jalpaiguri.
 11. **Invited lecture** in Calcutta University Departmental Seminar organised by Department of Economics, **University of Calcutta, 19 May 2014.**
 12. Presentation (**Invited lecture**) at Research Retreat organised by CTRPFP, CSSSC at Itachuna, **28 February to 2 March 2014.**
 13. Presentation at Dissemination Workshop on Central Finance Commission Study organised by **CTRPFP , CSSSC, 21 September, 2013**
 14. UGC-Sponsored National Level Seminar on ‘Indian Economy: The Last Two Decades’, organised by the Department of Economics, **Ramakrishna Mission Vidya mandira, Belur Math**, West Bengal, 2-3 March 2012.
 15. National Conference on Foreign Direct Investment and Economic Development, organised by the Department of Economics, **University of Kalyani, Kalyani**, West Bengal, 17th February 2012.
 16. 6th Annual International Symposium on Economic Theory, Policy and Applications, organized by Athens Institute for Education and Research (**ATINER**), **Athens, Greece**, 25-28 July 2011.
 17. 6th Annual Conference on Economic Growth and Development, **ISI, Delhi**, 16-18 December 2010.
 18. International Conference on “Theory and Applied Theory in Economics”, **Centre For Studies in Social Sciences, Kolkata**, 3-4 August 2009.
 19. International Seminar on “Economics of Gender and Institutional Economics” **Department of Economics, University of Calcutta** in Collaboration with Department of Economics University of Sienna, Italy. Kolkata, February 7-8, 2008.
 20. International Conference on “Fifty Years of Development Paradigm: A Reappraisal with Special Emphasis on India”. **Department of Economics, University of Calcutta**, Kolkata, December 29-30, 2006.
 21. UGC-sponsored National Seminar on “Development and Disparity”. **Department of Economics, University of Calcutta**, Kolkata, March 23-24, 2006.
 22. International Conference on “75 Years of Development Research”. **Cornell University**,



D. Papers presented in Conferences, Seminars, Workshops, Symposia etc

Ithaca, New York, USA, May 7-9, 2004.

23. **Third Annual Conference on Models and Methods in Economics. Indian Statistical Institute, Kolkata, January 15-17, 2004.**

E. Chairing the session/ discussing or judging papers

1. **Paper discussed at “Second Centenary Research Scholars’ Workshop” Organised by Department of Economics, University of Calcutta, 28-29 July, 2015**
2. **Paper discussed at a conference on “Contemporary Issues in Development Economics” Organised by Department of Economics, Rabindra Bharati University, 26-27 February 2015**
3. **Paper discussed at “Centenary Research Scholars’ Workshop” Organised by Department of Economics, University of Calcutta, 8-9 July, 2014**
4. **Acted as a judge for the paper presentation on “ Wage gap in Developing Countries” in “Confluence 13” (Annual Economic Summit of St. Xavier’s College, Kolkata), 10 October, 2013**
5. **Chaired a session in 6th Annual International Symposium on Economic Theory, Policy and Applications, organized by Athens Institute for Education and Research (ATINER), Athens, Greece, 25-28 July 2011.**

F. Other Research Activities



Editorial Responsibilities

Editor, Arthabisleshon, Dey’s Publishing, Kolkata (From 2012 till date)

Editorial board member: Athens Journal of Business & Economics,
The Athens Institute for Education and Research, Greece , (From 2012 till date)

Reviewer for:

Journal of Socio Economics (Elsevier); Arthabisleshon; Athens Journal of Business & Economics; IGI Global (USA); South Asian Journal of Macro Economics and Public Finance (Sage)

Newspaper Article:

1. Shishu sram bandha kara darker, kintu kibhabe ?, **Ananda Bazar Patrika**, 25 November, 2014

Name of the Faculty: Susmita Haldar

A. Conference Proceedings

Sl. No.	Title with page nos.	Details of Conference Publication	ISSN/ ISBN No	No. of co-authors	Whether you are the main author	National/ International/ Local
1.	Corporation and Globalisation- A Marxist Perspective, pp81-90.	Contemporary Economics: issues and Relevance ed by Subikash Mookherjee, 2013.	978-81-924660-1-9		Yes	National

Name of the Faculty: Rathindra Nath Mallick

Pursuing Doctoral Research



Evaluative Report of Statistics Department

1. **Name of the department:** Statistics
2. **Year of Establishment:** 1989-90 (C/1883/10-Affl.dt.5.07.1989 1.C, C.U)
3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG Statistics General
4. **Names of Interdisciplinary courses and the departments/units involved:** In 2015-16 academic year Probability part of the syllabus of the Physics department is being taken care of by the department.
5. **Annual/semester/choice based credit system (programme wise):**
Annual
Students are required to take three examinations conducted by the University, one at the end of each year – Part I, Part II and Part III
6. **Participation of the department in the courses offered by other departments:**
Statistics as general subject with i) Mathematics Honours, ii) Economics Honours, iii) Physics Honours
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** None
8. **Details of courses/programmes discontinued (if any) with reasons:** NA
9. **Number of teaching posts**

Academic Session	Faculty	Sanctioned	Filled
2014 – 2015	Professors	NA	NA
	Associate Professors	0	0
	Assistant Professors	1	1
2013 – 2014	Professors	NA	NA
	Associate Professors	0	0
	Assistant Professors	1	0
2012 – 2013	Professors	NA	NA



Academic Session	Faculty	Sanctioned	Filled
	Associate Professors	0	0
	Assistant Professors	1	0
2011 – 2012	Professors	NA	NA
	Associate Professors	0	0
	Assistant Professors	0	0
2010 – 2011	Professors	NA	NA
	Associate Professors	CAS	1
	Assistant Professors	0	0

*At the entry level, only Assistant Professor posts are available. They are promoted to the post of Associate Professor through Career Advancement Scheme.

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./ M.Phil. etc.)

Name	Qualification	Designation	Specialization	Years of Experience
Munmun Biswas	M.STAT., Submitted Ph.D. thesis	Head and Assistant Professor	Nonparametric Testing	1

11. List of senior visiting faculty: None



12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

Academic Session	Temporary Faculty	Percentage of lectures by temporary faculty
2013 – 2014	Pramit Kumar Bera	50%
	Sanjay Majumder (from July 2013)	50%
2012 – 2013	Subhankar Saha (from July 2012)	50%
	Pramit Kumar Bera (from Sep 2012)	50%
2011 – 2012	Ranjit Kumar Mitra	100%

13. Student-Teacher Ratio (programme wise)

Academic Session	No of general students	Student : Teacher
2014-15	09	9:1
2013-14	05	5:1

14. Number of academic support staff (technical) and administrative staff; sanctioned: One and filled: One (upto August, 2015)

**15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG. :
P.G - one**



16. Number of faculty with ongoing projects from a)National b)International funding agencies and grants received: One (National, UGC-MRP)

Nature of the Project	Duration Year From To	Title of the project	Name of the funding agency	Total Grant		Total grant received till date
				Sanctioned	Received	
Minor projects	2015 2014 Etc.	Exact Distribution-free Two Sample Test Applicable to High Dimensional Data	UGC-MRP	400000/-	325000/-	325000/-

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received : None

18. Research Centre/facility recognized by the University: NA

19. Publications:

a) Publication per faculty:

#	Title with page no.	Journal	ISSN/ ISBN No.	Whether peer reviewed. Impact factor, if any	No. of co-authors	Whether you are the main author	Name the International Database, if any.
1	On some exact distribution-free one-sample tests for high dimension low sample size data	Statistica Sinica	2015	Peer reviewed	2	Yes	
2	On high dimensional two-sample tests based on nearest neighbors.	Journal of Multivariate Analysis	2015 ISSN 0047- 259X	-do-	2	2 nd author	



3	Distribution-free high dimensional two-sample tests based on discriminating hyperplanes.	Test (Accepted)	2015	-do-	1	2 nd author	
4	Bayesian nonparametric estimation of Milky Way parameters using matrix-variate data, in a new Gaussian Process based method	Electronic Journal of Statistics , Vol. 9, No. 0, 1378-1403	2015 ISSN 1935-7524	-do-	2	2 nd author	
5	A nonparametric two-sample test applicable to high dimensional data.	Journal of Multivariate Analysis	2014	-do- (Im.Fac. 0.934)	1	Yes	
6	A distribution-free two-sample run test applicable to high-dimensional data.	Biometrika	2014	-do- (Im.Fac. 1.418)	2	Yes	

20. **Areas of consultancy and income generated:** None

21. **Faculty as members in**

- a) **National Committees:** None
- b) **International Committees:** None
- c) **Editorial Boards:** None



22. **Student projects:** None
23. **Awards/Recognitions received by faculty and students:** None
24. **List of eminent academicians and scientists/visitors to the department:** None
25. **Seminars/Conferences/Workshops organized & the source of funding:**
None
26. **Student profile programme/course wise:** Not applicable as the department is a general department.
27. **Diversity of Students:** Not known
28. **How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?** - Not known
29. **Student progression:** NA
30. **Details of Infrastructural facilities**
 - a) Library
 - b) Internet facilities for Staff & Students
31. **Number of students receiving financial assistance from college, university, Government or other agencies:** Not known
32. **Details on student enrichment programmes (special lectures/workshops/seminar) with external experts:** None
33. **Teaching methods adopted to improve student learning**
Students are encouraged to use internet resources. Charts are used for script learning and online data and materials are also used for teaching.
34. **Participation in Institutional Social Responsibility (ISR) and Extension activities:**
Students of the department actively participate in awareness programmes organized regularly by the college.
35. **SWOC analysis of the department and Future plans**



Strength

- Student - faculty interaction is highly commendable.
- Student participation in all events of the college is imminently noticeable.
- Students are encouraged to use internet resources as study aids

Weakness

- Number of students is often insufficient to plan for any departmental activity.
- Absence of seminar library.
- Absence of departmental magazine.

Opportunities:

- Statistics has huge modern areas of application in any other scientific disciplines.
- Good future (academic as well as job) prospects.
- Highly scoring subject.

Challenges

- Often it is primarily difficult for the students to get into the subject, but can easily be overcome with regular guidance.

Future Plans :

- Student seminar on regular basis.
- Departmental projects.
- Taking collaborative activities with Indian Statistical Institute, Kolkata



Evaluative Report of the Department of Computer Science

1. **Name of the department:** Computer Science
2. **Year of Establishment:** 2002 (Sanction letter no. C/2237/10-Affli. Dated 17.09.2002)
3. **Names of Programmes/Courses offered (UG, PG, M.Phil. ,Ph.D., Integrated Masters;IntegratedPh.D.,etc.):** UG General
4. **Names of Interdisciplinary courses and the departments/units involved:**
At present there is no inter-disciplinary course in the Department.
5. **Annual/semester/choice based credit system (programmewise):** Annual
Students are required to take three examinations conducted by the University, one at the end of each year – Part I, Part II and Part III
6. **Participation of the department in the courses offered by other Departments:** Computer Science as general subject with i) Mathematics Honours ii) Physics Honours
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses/programmes discontinued (ifany)withreasons:**Nil
9. **Number of Teaching posts:** No permanent post is sanctioned so far.
10. **Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./Ph.D./M.Phil.etc.,) from 2010 onwards**

Name	Qualification	Designation	Specialization	Years of Experience	Ph.D.Student guidedforth elast4years
------	---------------	-------------	----------------	---------------------	--------------------------------------



Name	Qualification	Designation	Specialization	Years of Experience	Ph.D.Student sguidedforth elast4years
Manas Kumar Roy (2015-)	Ph.D	Coordinator (Addl. Charge)	Material Science	5	Nil
Bhabani Prasad Roy (2014-)	M.Sc. in Computer Science	Contractual Whole Time Lecturer	Algorithms	2	Nil
Shyamal Sen (2013-2015)	Ph.D	Head(Addl. Charge)	Operation Research	15	Nil
Nirupam Das (2012-2014)	M.C.A	Contractual Whole Time Lecturer	Information not available	2	Information not available
Swarup Kumar Ghosh (2011-2012)	PG	Contractual Whole Time Lecturer	Information not available	6 months	Information not available
Basudev Saha (2011-2012)	PG	Contractual Whole Time Lecturer	Information not available	6 months	Information not available
Tanmoy Singha (2010-2011)	PG	Contractual Whole Time Lecturer	Information not available	1	Information not available

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled



(programme wise) by temporary faculty: Theory: 100% Practical: 100%

Academic Session	Name of the guest faculty	Percentage of classes taken	
		Theory	Practical
2014-15	Bhabani Prasad Roy	100%	100%
2013-14	Nirupam Das	100%	100%
2012-13	Nirupam Das	100%	100%
2011-12	Swarup Kumar Ghosh, BasudevSaha	100%	100%
2010-11	Tanmoy Singha	100%	100%

13. Student-Teacher Ratio (programme wise):

Academic Session	No of students	Student: Teacher
2014-15	22	22:1
2013-14	24	24:1
2012-13	33	33:1
2011-12	24	12:1
2010-11	19	19:1

14. Number of academic support staff (technical) and administrative staff sanctioned and filled: No permanent post is sanctioned so far.

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.:

Among present faculties PhD: 1; PG: 1

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: One

17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc.



and total grants received: Nil

18. **Research Centre/facility recognized by the University:** Nil

19. **Publications:** Nil

20. **Areas of consultancy and income generated:** Nil

21. **Faculty as members in:** Nil

a) National committees b) International Committees c) Editorial Boards

22. **Student projects**

a) **Percentage of students who have done in-house projects including interdepartmental /programme:** In-house projects are not in the University curriculum.

b) **Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies:** Not applicable for an undergraduate degree college

23. **Awards/Recognitions received by faculty and students:** Nil

24. **List of eminent academicians and scientists/visitors to the department:**

No	Name	Affiliation
1.	Dr. Kuntal Ghosh	Machine Intelligence Unit, ISI, Kolkata

25. **Seminars/Conferences/Workshops organized & the source of funding**

a) **National:** Nil

b) **International:** Nil



26. Student profile programme / course wise:

(a) Student Admission in Computer Science Course

Session	Admitted- 1 st Year	Admitted- 2 nd Year	Admitted- 3 rd Year
2014-15	17	2	3
2013-14	6	7	11
2012-13	17	12	4
2011-12	12	9	3
2010-11	6	10	3

(b) Student Performance in the Part III examination

Session	Students appeared in Part - III	Pass percentage
2014-15	3	100%
2013-14	11	100%
2012-13	4	100%
2011-12	3	100%
2010-11	3	100%

27. Diversity of Students: All the students are from West Bengal.

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.: Not applicable

29. Student progression (only Honours students): Not Applicable

30. Details of Infrastructural facilities

a) **Library:** Students use College Library

b) **Internet facilities for Staff and Students:** Broad Band Internet facilities

c) **Class rooms with ICT facility:** Nil

d) **Laboratories:** The Computer laboratories are well equipped with



multiple numbers of Computers With necessary programming compilers.

31. Number of students receiving financial assistance from College, University, Government or other agencies: Self-financed Course, there is hardly any provision for financial assistance but we offer Computational facility and sufficient reference books.

32. Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts:

Sl. No.	Topic	Date
1.	“The Psychophysics of vision” by Dr Kuntal Ghosh, Machine intelligence Unit, ISI Kolkata. (with Department of Physics)	12.12.14

33. Teaching methods adopted to improve student learning:

Type of classes	Methods implemented
Theoretical	<ul style="list-style-type: none"> • Board – Chalk • Power point presentation • Interactive discussions • Problem solving from question papers • Home assignments and regular class tests • Internet facility
Practical	<ul style="list-style-type: none"> • Demonstration of computation with proper theoretical background • Executing programs (hands-on) • Viva or oral interactions regarding programming.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities: E-waste management



35. SWOC analysis of the department and Future plans:

Strength:

- Qualified and energetic teachers engaged in teaching.
- Versatile Numerical facility.
- Teachers of this department are available for the students of Physics and Mathematics Department.

Weakness:

- There is no permanent faculty.
- Lack of space.
- Lack of Computational facility, e.g. Parallel computation.

Challenge:

- Motivating the students to engage in research activities and pursue higher studies in Computer Science.
- Most of the students are first generation learners.

Opportunity:

- Research work is also lucrative for them.
- They can join software companies.

Future Plan:

- To open Honours and PG Course.
- To install Workstation and central Computational facility.
- Organize International, National and State Level Seminars with collaboration Computer Science department of Indian Statistical Institute.



Evaluative Report of the IFF Department

1. **Name of the Department:** Industrial Fish and Fisheries (IFF)
2. **Year of Establishment:** 1997
3. **Names of Programmes/Courses offered (UG, PG, M. Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG
 - i. B.Sc (Major) Industrial Fish and Fisheries

4. **Names of Interdisciplinary courses and the Departments/units involved:**

No Interdisciplinary courses offered by the University apart from the fact that Industrial Fish and Fisheries students can take up other two subjects as general papers.

Industrial fish and fisheries cover a vast field that is associated with Scientific and Technological approach to commercial utilization of fish and related components. Subjects studied under this degree course are Biology of Fishes and shellfishes; Marine and Inland Fisheries, Aquaculture; Ornamental Fisheries, their Management and culture; Fisheries Marketing, Economics and Management; Harvest and Post-Harvest Technology of Fishes; Fishery Microbiology and Seafood Quality Control; Fish and Shellfish processing technology and Bio-statistics.

5. **Annual/semester/choice based credit system (programme wise):**
Annual

Students are required to appear three examinations conducted by the University, one at the end of each year – Part I, Part II and Part III

6. **Participation of the department in the courses offered by other Departments:**

Students studying Industrial Fish and Fisheries are required to take up two other subjects referred to as general papers, Zoology and Chemistry.

7. **Courses in collaboration with other Universities, industries, foreign institutions, etc.:** Students studying Industrial Fish and Fisheries are required to take up a Unit of the Course ‘On Job Training’ in



collaboration with other Universities, Scientific Institutions and Industries.

8. **Details of courses/programmes discontinued (if any) with reasons:** No
9. **Number of Teaching posts:** No Sanctioned Post. Faculties of Zoology department and guest lecturers take the classes.
10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D./ M. Phil. etc.,) from 2010 onwards**

Name	Qualification	Designation	Specialization	Years of Experience	Ph.D. Students guided for the last 4 years
Dr. Bidisha Ghosh Dastidar (on lien)	M.Sc, Ph.D	Associate Professor		19 years	NIL
Dr. Sanjib Chattopadhyay (on lien)	M.Sc, Ph.D	Associate Professor		19 years	NIL
Dr. Paritosh Kumar Ray	M.Sc, Ph.D	Associate Professor	Fishery	19 years	NIL
Dr. Subhendu Bikash Patra	M.Sc, Ph.D	Assistant Professor	Entomology	10 years*	NIL
Smt. Debashree Golder	M.Sc,	Assistant Professor		5 years	NIL

* Including all experiences

11. **List of senior visiting faculty:** NIL
12. **Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:** 100%
13. **Student-Teacher Ratio (programme wise)**



Academic Session	No of Students	No of Teachers	Total Students / Teacher ratio
2014-15	37	5	37:5
2013-14	38	5	38:5

14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled:** NIL
15. **Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/MPhil/PG. :**
Among present faculties Ph. D.: 4, PG: 1
16. **Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:** NA
17. **Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:** NIL
18. **Research Centre/facility recognized by the University:** NIL
19. **Publications:** NA
 - Publication per faculty:
 - Number of papers published in peer reviewed journals (national/ international) by faculty and students:
 - international) by faculty and students:
 - Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database-
 - International Social Sciences Directory, EBSCO host, etc.):
 - Monographs
 - Chapter in Books
 - Books Edited
 - Books with ISBN/ISSN numbers with details of publishers:
 - Citation Index
 - SNIP
 - SJR
 - Impact factor
 - h-index



20. **Areas of consultancy and income generated:** NIL

21. **Faculty as members in**

- a) National committees b) International Committees c) Editorial Board:

Dr. Subhendu Bikash Patra

Life Member -

- **Indian Science Congress Association**, 14, Biresh Guha Street, Kolkata - 700017.
- **National Environmental Science Academy**, 206, Raj Tower-I, Alaknanda Centre, New Delhi – 110019.
- **The Zoological Society**, 35, Ballygunge Circular Road, Kolkata - 700 019.
- **Bangio Bignan Parishad**, P-23, Raja Raj Krishna Street, Kolkata - 700 006.

Member -

- **Asian Marine Conservation Association**, 42/1, Feeder Road, Kolkata – 700056.

Dr. Paritosh Kumar Ray

Life Member

- **The Zoological Society**, 35, Ballygunge Circular Road, Kolkata - 700 019.
- **Bangio Bignan Parishad**, P-23, Raja Raj Krishna Street, Kolkata - 700 006.
- **Indian Science News Association**, 92, A. P.C. Road, Kolkata-700009
Fishing Chimes, Chimes House, Andhra Pradesh.

22. **Student projects:**

- a) **Percentage of students who have done in-house projects including interdepartmental/programme:** 100% (As per curriculum)
- b) **Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/**



other agencies: 100% (As per curriculum)

23. Awards/Recognitions received by faculty and students: NIL

24. List of eminent academicians and scientists/visitors to the Department:

Sl No	Name	Affiliation
1	Prof. N. C. Datta	Head of the Department (Retd.), Dept. of Zoology, University of Calcutta.
2	Dr. Samir Chattopadhyay	Assistant Director (Retd.) Dept. of Fisheries, Govt. of West Bengal
3	Sri Bhabananda Chatterjee	Assistant Director (Retd.) Dept. of Fisheries, Govt. of West Bengal
4	Dr. A. K. Ghosh	Ex Director, CICFRI (ICAR), Barrackpore.
5	Dr. B.K.Mahapatra	Center in Charge, Central Institute of Fisheries Education (Deemed University), Kolkata Center

25. Seminars/Conferences/Workshops organized & the source of funding

a) National b) International NIL

26. Student profile programme/course wise:

(a) Admission related record for last five year (Session 2010-11 to 2014-15)

Session	Applications received for	Admitted - 1st Year	Admitted - 2nd Year	Admitted - 3rd Year
---------	---------------------------	---------------------	---------------------	---------------------



	Ist year admission	Male	Female	Total	Male	Female	Total	Male	Female	Total
2014-15	13	7	3	10	7	3	10	17	0	17
2013-14	17	8	6	14	18	0	18	6	0	6
2012-13	30	22	0	22	8	0	8	7	4	11
2011-12	42	20	1	21	7	4	11	2	1	3
2010-11	32	15	4	19	3	1	4	2	1	3

It is observed that there is a trend among 1st year students to shift to engineering colleges next year by appearing in JEE. This explains the abrupt fall in the number of students in 2nd year.

(b) Result of Final Year Student

Session	Students appeared in Part – III	Pass percentage	First Class
2014-15	17	94	3
2013-14	6	100	3
2012-13	11	100	5
2011-12	3	67	0
2010-11	4	100	1

*The result is of those students who appeared in the final examination with honours in academic year 2010-11 and so on.

#Students who have cleared honours but failed in general subject in that year is reflected here.

The number of students who appeared in the part III examination may differ than those admitted as there are casual students each year.



Pass percentage reflects those students who have cleared the Part III honours examination but has not cleared any general paper in Part II and Part III.

27. **Diversity of Students:** No Students from other States/Country

Name of the Course	%of students from the same state	% of students from other States	%of students from abroad
B.Sc.(Major) IFF Part-I	100%		
B.Sc.(Major) IFF Part-II	100%		
B.Sc.(Major) IFF Part-III	100%		

28. **How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**



As the college offers only undergraduate courses, students do not appear in the national level competitions just after leaving the college. Some students, however, cleared state and national level competitive examinations and are placed in different government and non-government services.

29. Student progression: Data not found

30. Details of Infrastructural facilities

a) **Library:** Seminar Library with sufficient books

b) **Internet facilities for Staff & Students:** Internet facilities present

c) **Class rooms with ICT facility:** ICT rooms of the college

d) **Laboratories:** One well furnished laboratory

31. Number of students receiving financial assistance from college, university,

Government or other agencies:

Academic Session	Students receiving financial assistance from college			Students Receiving aids from Government
	Full free	Half Free	Stipend	
2014-15	2	2		
2013-14	1	2		
2012-13		1		
2011-12	1	1		
2010-11		1		

32. Details on student enrichment programmes (special lectures/workshops/

seminar) with external experts: Nil

33. Teaching methods adopted to improve student learning



Type of classes	Methods implemented
Theoretical	<ul style="list-style-type: none"> • Board – Chalk • Power point presentation • Interactive discussions • Problem solving from question papers • Home assignments and regular class tests

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- ✓ Students of the department actively participate in awareness and outreach programmes organized by the college.
- ✓ The department has organized study tours and excursions in the past as below.
- ✓ III year Students of the department actively participate in on –job training programme organized by different institute.

No	Event	Year
1.	An Excursion to Waltair and adjoining areas (Andhra Pradesh)	2011
2.	An Excursion to Puri and Chilka (Orissa)	2013
3.	An Excursion to Digha (West Bengal)	2014
4	Fish processing technology, Ornamental Fish Breeding and Culture	2014
5	Management of soil, water and fish Disease in Aquaculture	2013
6	Fish Processing and Value Added Fish Products	2012

35. SWOC analysis of the department and Future plans

Strength

- Dedicated faculty with engagement in active research work
- A well equipped departmental library with sufficient books
- Internet resources
- Ample resource and facility for Field activity

Weakness

- Inadequate number of students



- Inadequate number of students makes it difficult to organize any departmental activities like students' seminar, extension activities etc.
- Inadequate space

Opportunities

- More inter-disciplinary interactions are expected to improve the quality of teaching and research activities of the department
- Being an Applied subject enough self employment facilities are expected.

Challenges

- Poor verbal and writing skill of majority of students
- Arranging more practical field exposure with limited fund facility.



Certificate of Declaration

 Phone : 2577-5878
BRAHMANANDA KESHAB CHANDRA COLLEGE
(GOVT .SPONSORED DEGREE COLLEGE)
111/2, BARRACKPORE TRUNK ROAD, BON-HOOGHLY
KOLKATA - 700108

REF. 428/SSR/NAAE/3/2015 DATE 15.12.15

Declaration by the Principal

I certify that the data included in this Self Study Report (SSR) are true to the best of my knowledge

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provide in this SSR during the peer team visit.

Place: Kolkata
Date: 15-12-2015

Papia Chakrabarti
Dr. Papia Chakrabarti
Principal
Brahmananda Keshab Chandra College
111/2, B.T. Road, Kolkata-700 108



Annexures

Annexure 1.4.2

Student's name: *Suchismita Chatterjee*

Class: *3rd year* Hons. / Gen.

Questionnaire

Section 1: Academic

a) How long have you been studying in this college? *2 years 3 months*

b) Why did you get admitted to this college? Give some reasons.

- Standard Science department and laboratory*
- facilities*
-

c) Are the classes held regularly here? Yes/No
If not, what may be the reasons for it, according to you?

d) Do the teachers help you in your study? Yes/No.
If yes how do they do so?
They teaches us sincerely and supply us with many information about our studies.

e) Do the teachers take any measures to improve the standard of study? Yes/No.
If yes, how? *By showing various presentations and by encouraging us to participate in seminars, and doing field trips and collections.*

f) Give the idea about the behavior of the teachers towards the students – very good/good/bad/very bad/don't know/won't express.

g) Do you get help from the teachers in your difficulties other than your studies? Yes/No.
If yes what type of help you receive.
Teachers are really co-operative and they help us in other difficulties.

h) Do the teachers encourage you in matters other than study (sports/cultural activities)? Yes/No.
If yes then how? *They encourage us in other cultural activities. They encourage us to participate in various functions/Programme held in our college.*

i) Do the teachers take part in different programs of the college? Yes/No.
If yes then how?
They participate in sports, debate, cultural programmes, etc.



Section 2: Library

- a) Is there a library in this college? Yes/No.
- b) Do you get books regularly from this library? Yes/No.
- c) Are the rules to take books simple? Yes/No.
If not, would you explain why?
- d) Do you want to change this rules? Yes/ No.
If yes, then what should be the rules so that the books can be taken easily?
- e) Do the library staffs help you to receive books? Yes/No.
- f) What is your comment on the behavior of library staffs to you?
Very good/ Good / Bad/ Very bad/ no idea

Section 3: Office

- a) Do you have any knowledge about the college office? Yes/No.
If yes, state what you know about it.
- b) What service do you receive from the college office?
 - i) *They help in ^{all} sort of official work.*
 - ii)
 - iii)
 - iv)
- c) Does the office staff help you? Yes/No.
If yes, state how do they help?
- d) How is the behavior of the office staff towards the students?
Very good / good/ very bad/ bad/ no idea



Section 4: Student Amenities

- a) Is there any canteen in this college? Yes/No. ✓
If yes, what is the standard of food of the canteen?
All the food are standard.
- b) What is your opinion about the infrastructure of the canteen?
Somehow it is unhygienic.
- c) Are you in favour of changing it?
Yes, It should be hygienic.
- d) Is there any arrangement for drinking water in the college? Yes/No. ✓
If yes, is it satisfactory? Yes/No.
If not what substitute do you want?
- e) What is the condition of the college toilet?
Do you suggest any change in it? Yes/No. ✓
If yes, what type of change do you want?
*It needs proper maintainance and washing.
Cleaning should be done regularly.*

Section 5: General Perception

- a) How do you feel to study in this college?
Good.
- b) Do you find the reasons true for which you took admission in this college? Yes/No. ✓
If not, then where in lies the difficulty?
- c) Do you have any complaint against the college? Yes/No. ✓
If yes state them.
- d) What is your future vision of your college?
We can hope for better tomorrow.

Sangita Gangopadhyay
15.09.15.
Department of Botany



Annexure 2.1.4

Values and Ethics

A. Attitude towards teachers

1. Do you show decency and courtesy to teachers inside and outside the classroom? (1) (2) (3) ✓
2. Are you positive about learning your subject? (1) (2) (3) ✓
3. Do you take suggestion and criticism in the right spirit? (1) (2) (3) ✓
4. Do you communicate your thought with teachers? (1) (2) (3) ✓
5. Are you helpful to the teachers? (1) (2) (3) ✓

B. Attitude towards fellow mates

1. Are you friendly with your classmates? (1) (2) (3) ✓
2. Do you express ideas and opinions freely in a group? (1) (2) (3) ✓
3. Do you treat classmates as equals without any sense of superiority or inferiority? (1) (2) (3) ✓
4. Do you respect opposite gender and are comfortable in their company? (1) (2) (3) ✓
5. Do you show aggressiveness towards your peers? (1) (2) (3) ✓

C. Attitude towards college

1. Do you participate in college activities? (1) (2) (3) ✓
2. Do you shoulder responsibility happily? (1) (2) (3) ✓
3. Do you confront one who criticizes college in college programme? (1) (2) (3) ✓
4. Do you prevent others from destroying property? (1) (2) (3) ✓
5. Do you come up with new idea for college development? (1) (2) (3) ✓



D. Attitude towards environment

- | | | | |
|--|----------|-------|-------|
| 1. Are you aware of environmental degradation? | (1) | (2) | (3) ✓ |
| 2. Do you actively take part in Eco club program me? | (1) | (2) | (3) ✓ |
| 3. Do you actively take part in spreading awareness in public? | ✓
(1) | (2) | (3) |
| 4. Do you take active interest in maintaining the flora and fauna of the campus? | (1) | (2) ✓ | (3) |
| 5. Do you maintain and take care of the cleanliness of your class room? | (1) | (2) | (3) ✓ |

E. Attitude towards Community

- | | | | |
|---|-----|-------|-------|
| 1. Do you respect Indian diversity? | (1) | (2) | (3) ✓ |
| 2. Do you actively participate in celebration of Republic Day and Independence Day? | (1) | (2) | (3) ✓ |
| 3. Do you understand the meaning of Tricolor and Ashok Chakra of our National Flag? | (1) | (2) | (3) ✓ |
| 4. Do you actively participate in Community Development Program ? | (1) | (2) ✓ | (3) |
| 5. Are you helpful towards the disadvantaged section of the society? | (1) | (2) | (3) ✓ |

TOTAL SCORE

64.

Sangita Gangopadhyay
15/9/15
Department of Botany



Self Evaluation Form

Name: BHUMIKA PAL.

Class: 1st (B.Sc) Year: 2015-16

Subject: Botany (H).

Mother's Name: Chandana Pal.

Father's Name: Bholanath Pal.

No. of Family Members: Three.

Category: General.

Age: 19.

Blood Group: A+

Ailments: NO.

Special training (if any):

Achievements in :

- a. Art Education 3rd year certificate in art education.
- b. Visual & Performing Arts 3rd year certificate in music (classical).
- c. Scholastic
- d. Physical Education
- e. Health Education



Life Skills – Social & Emotional- Part A

1. Who do you love the most in your family? Why? *My parents.*
2. Who inspires you the most? Why? *Swami Vivekananda. His meaning for development of human and dictum to the society.*
3. What do you like of yourself? *I like my ~~innocence~~ and innocence. ^{challenging attitude}*
4. What do you hate of yourself? *To believe everyone.*
5. Which IT equipment and gadgets can you use? *Mobile, Tab, computer, I-pod, calculator.*
6. Which activity in college like Festivals, Environment Day, Seminar, Quiz, etc. do you like the most? *Festivals, Seminar, Quiz all.*
7. What are your favourite subjects? *Physics, Botany.*
8. How can you help your college? *By helping department in every activities for education.*
9. What is your aim in life? *To be a perfect human being and to become an investigating officer.*
10. How do you want to serve the society? *By helping poor people, senior citizen and help environment by plantation.*

Life Skills - Part B

- | | | | |
|--|-----|---|---|
| 1. Do you actively listen & pay attention to others point of view? | (1) | (2) | (3) <input checked="" type="checkbox"/> |
| 2. Do you help fellow mates in case of difficulties in academic and personal issues? | (1) | (2) <input checked="" type="checkbox"/> | (3) <input checked="" type="checkbox"/> |
| 3. Are you sensitive to the needs of differently-abled students? | (1) | (2) <input checked="" type="checkbox"/> | (3) <input checked="" type="checkbox"/> |
| 4. Can you manage scholastics, Co-scholastics and personal challenges? | (1) | (2) <input checked="" type="checkbox"/> | (3) <input checked="" type="checkbox"/> |
| 5. Are you curious about latest scientific developments? | (1) | (2) | (3) <input checked="" type="checkbox"/> |

TOTAL SCORE

13



Student's name: *Suchismita Chatterjee*

Class: *3rd year*

Hons. / Gen.

Questionnaire

Section 1: Academic

- a) How long have you been studying in this college? *2 years 3 months*
- b) Why did you get admitted to this college? Give some reasons
- Standard Science department and laboratory*
 - facilities*
 -
- c) Are the classes held regularly here? Yes/ No
If not, what may be the reasons for it, according to you?
- d) Do the teachers help you in your study? Yes/ No.
If yes how do they do so?
They teach us sincerely and supply us with many information about our studies.
- e) Do the teachers take any measures to improve the standard of study? Yes/ No.
If yes, how? *by showing various presentations and by encouraging us to participate in seminars, and doing field trips and collections.*
- f) Give the idea about the behavior of the teachers towards the students – very good/ good/ bad/ very bad/ don't know/ won't express.
- g) Do you get help from the teachers in your difficulties other than your studies? Yes/ No.
If yes what type of help you receive.
Teachers are really co-operative and they help us in other difficulties.
- h) Do the teachers encourage you in matters other than study (sports/cultural activities)?
 Yes/ No.
If yes then how? *They encourage us in other cultural activities. They encourage us to participate in various functions/programme held in our college.*
- i) Do the teachers take part in different programs of the college? Yes/ No.
If yes then how?
They participate in sports, debate, cultural programmes, etc.



Annexure 6.3.3

Received Leave Application From Dr. Sangita Gangopadhyay
 For the period from 29.8.15 to _____
 Nature of Leave applied for: CL / EL / ML / DL / Others (Specify) C.L.
 Date: 31.8.15 S. K. P. 29/8/15
Office Assistant

Sl. No.	No. of classes affected	No. of classes taken	No. of classes not held	Reasons for holding of classes	Additional work done (if any)	Remarks	Total of Period
17.	—	—	—				
18.	—	—	—				
19.	1	1	—	Collecting things of Department of July 15. Also 15 pages of work done. Submitted the same of this paper to the principal's office.		subject	
20.	1	1	—				
21.	1	1	—				
22.	1	1	—				
23.	—	—	—	Sunday			
24.	—	—	—	Working out of University			
25.	—	—	—				
26.	1	1	—	Working out of University			
27.	1	1	—	Working out of University			
28.	1	1	—	Working out of University			
29.	1	1	—	Working out of University			
30.	—	—	—	Sunday			
31.	—	—	—				

MONTHLY LEAVE ACCOUNT

Leave taken	Casual Leave	Earned Leave	Medical Leave	Special Leave	Others

SELF APPRAISAL REPORT

Name Dr. Sangita Gangopadhyay
 Designation Associate Prof., Dept. of Botany
 Month Sept Year 2015

Sl. No.	No. of classes affected	No. of classes taken	No. of classes not held	Reasons for non-taking of classes	Additional work done (if any)	Remarks	Total of Period
1.	—	—	—			Class Test for Part II Botany	
2.	—	—	—	P.D.		Suppl. of P.D. given to the college in place of Botany	
3.	1	1	—				
4.	1	1	—			Departmental Parent Teachers Meeting	
5.	—	—	—	Holiday (Jeehanvi Day)			
6.	—	—	—	Sunday			
7.	—	—	—				
8.	—	—	—			Judging of instruments of Bot. Dept.	
9.	—	—	—			Day for academic work	
10.	1	1	—			IGAC dept. meeting	
11.	1	1	—				
12.	—	—	—			Classes suspended due to part II (G) Exam. Exam.	
13.	—	—	—	Sunday			
14.	—	—	—			On duty to Birkoh Phawan	
15.	5	5	—				
16.	—	—	—			Day for academic work	

Sangita Gangopadhyay
Signature



Annexure 6.3.4

Part B: Academic Performance Indicators (API)
(Please see detailed instruction of the PBAS-I proforma before filling out this section)

CATEGORY 1: TEACHING, LEARNING AND EVALUATION RELATED ACTIVITIES

(ia) Lectures, seminars, tutorials, practical, contact hours undertaken taken as percentage of lectures allocated.

Sl. No.	Course	Paper	Level	Mode of teaching	Class allotted as per schedule	% of classes taken	API Score
DETAILS IN ANNEXURE-13 Category-1 SESSION: 2012-13							
						Total	50
Allotted Total Classes in the session 2012-13: 380; Taken = 380 Classes (Pr-218 & Th-162) [100%]							

*Lecture (L), Seminar (S), Tutorial(T),Practical(P), Contact Hours(C).
(ib) Lectures and other Teaching Duties in excess of UGC norms:

CALCULATION OF API SCORE (I) ABOVE		API Score
(a)	Classes taken (Maximum 50 for 100% performance & proportionate score up to 80% performance, below which no score may be given)	50
(b)	Teaching load in excess of UGC norms/ Special Lectures/Classes taken at the study centre located in the District other than Kolkata (Max score - 10)	

(ii) Reading/Instructional Material Consulted And Additional Knowledge Resources Provided To Students:

Sl. No	Course/Paper	Consulted	Prescribed	Additional Resource Provided	API Score
ANNEXURE-14 Category-1 2013-14					
API score based on preparation and Imparting of knowledge/instruction as per curriculum and syllabus enrichment by providing additional resources to students (Max. score: 20)					15

(ii) Use of Participatory and Innovative Teaching-Learning Methodologies, Updating of Subject Content, Course Improvement etc.

- (a) Updating of Courses/Curriculum Design: 5 per course - Max 10
- (b) Participation/Innovative – Interactive courses: 5
- (c) Participn./Innovative – Learning Modules: 5 Max 10
- (d) Participn./Innovative – Case Studies prepared: 5
- (e) Use of ICT or Computer-aided methods – ppt: 5
- (f) Use of ICT – Multi-media/Simulation etc: 5 Max 10
- (g) Dev/Teaching Remedial/Bridge Courses: 5 each Max 10
- (h) Dev/Teaching Soft skill/Communication/Personality Dev: 5 each Max 10
- (i) Special Programs in Phys.Edn./Library: 5 each Max 10
- (j) Innovative Composition/Creation in Music, Fine Arts, Perf Arts: 5 each; Max 10
- (k) Organizing & cond. of popul. Prog. /Teaching Web-based/E-Library/IT-asst teaching: Workshop/Training - 10 points, Popularization program - 5 points

Sl. No.	Short Description	API Score
DETAILS IN ANNEXURE-15 Category-1 2012-13		
(Max API Score : 20) TOTAL SCORE :		15

(iv) Examination Duties Assigned & Performed:[PI See Exam. Records ANNEXURE-2].

- (a) Invigil - 10, Evalua. - 5, Q. paper setting/ Moderation- 5, Max : 20 [100% compliance]
- (b) Internal/Continuous Assessment work as allotted-10 [100% compliance].
- (c) Exam Coordination Cell/Outstation or Flying Squad. 10 [100% compliance]

Sl. No.	Type of Examination Duty	Duties Assigned	Extent to which carried out (%)	API Score
ANNEXURE-16 Category-1 				
[Maximum API Score - 25]			TOTAL SCORE	25



CATEGORY 2: CO-CURRICULAR, EXTENSION AND PROFESSIONAL DEVELOPMENT RELATED ACTIVITIES.

Please mention your contribution to any of the following:

Sl. No	Type of Activity	Average Hrs per week	API Score
(I) Extension, Co-curricular & field based Activities (5 points each)			
1	a) Field Study/Ed. Tours/ Placement: 5 each ; Max 10	<u>ANNEXURE-17 Category-2 </u>	05
	b) NSS/NCC/NSO etc: Each activity 10 points; Max 10	...	00
2	c) Student/Staff Sports ; Campus Publication etc: (dept level 2 points, Instn level 5 points) Max 10	<u>ANNEXURE-17 Category-2 </u>	10
	(Max API Score : 20)		15
(II) Contribution to Corporate Life and Management of the Institution		Yearly/Semester wise responsibilities	API Score
	a) Governance Responsibility (PG/IQAC/NAAC coordinator/Bursar / Warden etc.): Max 10		00
1	b) Academic/Administrative Committees like Admission /Campus Dev/ Library Comm: 5 each Max 10	<u>ANNEXURE-17 Category-2 </u>	10
2	c) Student Welfare/Placement / Counseling/ Discipline 5 each Max 10	<u>ANNEXURE-17 Category-2 </u>	05
	d) Conf Organization/Chair Secretary/Treasurer (I) International: 10 ; (II) National/Reg: 5 (III) Member: 1 each		
	(Max API Score : 15)		15
(III) Professional Development Activities			API Score
1	a) Member in Professional Committees (I) National 3 (II) State 2 ; Max 10	<u>ANNEXURE-17 Category-2 </u>	09
2	b) Participation in Conf/Seminars Without paper: 2 each ; Max 10	<u>ANNEXURE-17 Category-2 </u>	02
	c) Short-term Courses/ Training less than a week: 5 each Max 10		00
	(Max API Score : 15)		11
Total Score (I + II +III) (Max : 50)			41
Minimum API Score required - 15			



CATEGORY-3: RESEARCH, PUBLICATIONS AND ACADEMIC CONTRIBUTIONS

A. (i) Published Papers in Journals

API Score-Category 1-Refereed-15/publication: Category 2- Non-Refereed-10/publication

Sl. No.	Title with page no.	Journal	ISSN/ISBN No.	Whether reviewed. peer Impact factor, if any	No. of co-authors	Whether you are the main author	API Score

A) (ii) Public Displays/Exhibitions/Performances with or without outputs in CD/DVD/Online/E-form/E-book [for Art/Music College]

API Score – Category 1 – 15 ; Category 2 – 10:

[NA]

B. (i) Articles/Chapters Published in Books

API Score (Per Art/Chap) Category 1: International Publisher-10
 Category 2: National/State/Central/Societies Publisher-5
 Category 3: Subject books by other/Local Publisher-3
 Category 4: Chapters in Knowledge based Volumes-5

Sl. No.	Title with page nos.	Book Title, Editor & Publisher	ISSN/ISBN No. [or Renowned publishers]	Whether peer reviewed.	No. of co-authors	Whether you are the main author	API Score

(ii) Full Papers in Conference Proceedings:

Conf. proceedings as full paper: 1. International Conference-10/publication;
 2. National-7.5/each; 3. Regional/ State level-5/each
 4. Local-Univ./College level-3/each

Sl. No.	Title with page nos.	Details of Conference Publication	ISSN/ ISBN No	No. of co-authors	Whether you are the main author	API Score
TOTAL = 00						

(iii) Books published as single author/editor

API Score- Category 1 Text/Reference Books by International Publisher-50
 Category 2 Text/Reference Books by National/Soc/Univ Publ-25
 Category 3 Subject Books by Other/ Local Recognized Publ-15

Sl. No.	Title with page nos.	Type of Book and Authorship	Publisher and ISSN/ISBN No. [I. International II. National; III. Regional]	Whether peer reviewed	No. of co-author	Whether you are the main author	API Score

(iv) Solo Performance/Exhibition as an Artist on invitation

API Score – Cat. I /International – 50 ; Cat. II /National – 25 ; Cat. III /Regional –15:

[NA]

C) Ongoing and Completed Research Projects and Consultancies

API Score for projects:- Cat I: (Sc- Rs. 30 lakhs+ Non- Sc: Rs 5 lakhs+); 20
 Cat II: (Sc-Rs 5lakhs+, Non-Sc: Rs 3 lakhs+); 15; Cat III: (Sc-Rs 0.5 lakhs+, Non Sc: Rs0.25 lakhs+); 10
 Other approved projects of University/Other agencies: 5

(C) (i& ii) Ongoing Projects and Consultancies

Sl. No.	Title of the Project	Agency	Period	Grant/ Amount Mobilized (Rs. Lakh)	API Score
Total= 00					

C) (iii& iv) Completed Projects and Consultancies

Sl. No.	Title of the Project	Agency	Period	Grant/ Amount Mobilized (Rs. Lakh)	Whether policy document /Patent etc.	API Score
ANNEXURE-18 [Category-3]						
Total = 10						

D) Research Guidance :

- (i) Degree-oriented: API Score – Ph.D. awarded – 10; Ph.D. Submitted – 7; M.Phil. awarded – 3;
- (ii) Non-Degree Products: API Score- Post-Doctoral -7; National Scholar -5; Guidance to Scholars & Master's level – 3;
- iii) Evaluation of Research Paper/ Thesis - 3



Sl. No.	Number Enrolled	Thesis submitted	Degree awarded	API score
Non-Degree products	ANNEXURE-18 [Category-3]			3
M.Phil. or equivalent				
Ph.D. or equivalent				
TOTAL SCORE; 03				

(E) (i) Training Courses, Teaching-Learning-Evaluation technology Programmes, Faculty Development Programmes (not less than one week duration)

Cat I : (Not less than two week duration): 20 ; Cat II : (Not less than one week duration): 10

Sl. No.	Programme	Duration	Organised by	API Score
				Total =00

(E) (ii) Papers presented in Conferences, Seminars, Workshops, Symposia

API Score – Category 1 International – 10; Category 2 National – 7.5
Category 3 Regional – 5; Category 4 Local – 3

Sl. No.	Title of the Paper Presented	Title of Conference / Seminar	Organized by	Whether International/ National/ State/Regional /College/ University Level	API Score
ANNEXURE-18 [Category-3]					Total =57.5

(E) (iii) Invited lectures/ Chairing the session or presentation for conferences/symposia etc.

API Score – Category 1 International – 10; Category 2 National – 7.5

Category 3 Regional /State level – 5; Category 4 Univ/Endowment Lect – 3

Sl. No.	Title of Lecture/ Academic Session	Title of Conference/Seminar	Organised by	Whether international/ national/state/Regional/ college/university level	API Score
					TOTAL: 00

IV. SUMMARY OF API SCORES [I, II, III]:

	Criteria	Last 3 / 4 / 5 / 6 academic years						Total API score for Assessment Period	Annual Average API score for Assessment Period
I	Teaching, Learning and Evaluation related activities								
II	Co-curricular, Extension, Professional Development etc.								
	Total I+II								
III	Research and Academic Contributions								

Signature
Signature of the incumbent with Designation and date

Signature
Signature of the Coordinator IQAC with Seal

Signature
Signature of the Principal/ TIC With date and Seal

Coordinator
IQAC Cell
Brahmananda Keshab Chandra College
Kolkata- 700 108

Principal
Brahmananda Keshab Chandra College
111/2, B.T. Road, Kolkata-700 108



Annexure 6.4.2



S. Rudra & Co.

Chartered Accountants

285/B, B.B. Ganguly Street (2nd Floor), Kolkata - 700 012
Phone : 2234 7242, Fax : (033) 2221 5120
e-mail : s_rudra@vsnl.net, amit7242@gmail.com

Ref. No-SR/135/15-16

**AUDITOR'S REPORT ON THE ACCOUNTS
OF
BRAHMANANDA KESHAB CHANDRA COLLEGE, KOLKATA
FOR THE YEAR ENDED 31ST MARCH, 2014**

We have audited the attached Balance Sheet of BRAHMANANDA KESHAB CHANDRA COLLEGE, KOLKATA as at 31st March, 2014 and also Income & Expenditure Account and Receipts & Payments Account for the year ended on that date annexed thereto. These financial statements are the responsibility of the management. We have expressed our opinion on these financial statements based on our audit.

We have conducted our audit in accordance with auditing standards generally accepted in India. Those Standards requires that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit is also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our

Further to our comments made in the Annexure-A, we report that:

- (i) We have obtained all the information and explanations, which to best of our knowledge and belief necessary for the purpose of our audit.
- (ii) In our opinion proper books of accounts as required by law have been kept by the college so far as from our examination of these books.
- (iii) The balance Sheet and Income and Expenditure Account and Receipts & Payments Account dealt with report are in agreement with the books of account.

Place : Kolkata

Date : 9/12/15

For S.Rudra & Co
Chartered accountants
FRN:308162E


(CA A.K. Sarkar)

Partner
Membership No-53665





Income & Expenditure Account for the year ended 31st. March, 2014

111/73, T. Road, Kolkata-70013

EXPENDITURE		INCOME	
PARTICULARS	Amount (Rs)	PARTICULARS	Amount (Rs)
Indirect Expenses		Indirect Incomes	
To College Exam. Fees	740.00	By Casual Fees	84100.00
To Computer Science Fees	2,000.00	By Centre Charges	402641.00
To Examination Fees	87,870.00	By Centre Fees	13200.00
To Fine & Brekage	400.00	By College Exam. Fees	102200.00
To Laboratory Fees	90,500.00	By Computer Science Fees	154600.00
To Library Fees	900.00	By Examination Fees	86510.00
To Maintenance Fees	4,300.00	By Fine & Brekage	3500.00
To Miscellaneous Receipt	2,700.00	By Interest Received on- SIB/AC	82433.00
To Registration Fees	61,260.00	By Laboratory Fees	307000.00
To RTI Fees	2,070.00	By Library Fees	21760.00
To Session Fees	17,040.00	By Maintenance Fees	460750.00
To Tuition Fees	3,066,120.00	By Miscellaneous Receipt	192065.00
To University Other Fees	160.00	By Registration Fees	64440.00
To University Exam Fee	388,120.00	By RTI Fees	2100.00
To Xerox exp.	1,288.00	By Session Fees	451420.00
To Casual Fees	1,600.00	By Staff Quarters Rent	50544.00
To centre charges	295,245.00	By Tuition Fees	3427125.00
To Advertisement	4,360.00	By University Other Fees	35540.00
To centre fees	17,680.00	By University Exam Fee	424160.00
To Audit Fees	11,865.00	By Xerox Income	1790.00
To Bank Charges	3,239.00	By Electricity charges	32129.00
To Casual Admn. Remuneration	68,141.00	By General charges	888.00
To Cerimonials	64,379.00	By Guest Lecturer for Tutorial Classes	5200.00
To Contingency-Botany	34,420.00	By Practical exam. Expenses	1200.00
To Contingency-Chemistry	6,370.00	By Pay-packet	52439471.00
To Contingency-Computer Science	82,300.00		
To Contingency-General	380,501.00		
To Contingency-ITFV	24,197.00		
To Contingency-Moi. Biology	13,893.00		
To Contingency-Physics	5,055.00		
To Contingency-statistics	2,285.00		
To Conveyance	80,981.00		
To Electricity Charges	251,640.00		
To Extra Work Remuneration	6,620.00		
To Excursion	17,260.00		
			58,846,746.00

Pojin Chakrabarti
Principal
Brahmananda Keshab Chandra College
111/73, T. Road, Kolkata-70013





BRAHMANANDA KESHAB CHANDRA COLLEGE
11117, B.T. Road, Kolkata-700108

Income & Expenditure Account for the year ended 31st. March, 2014

	EXPENDITURE		INCOME	
PARTICULARS	Amount (Rs)	PARTICULARS	Amount (Rs)	
To Guest Lecturer for Tutorial Classes	329,450.00			
To General Charges	1,515.00			
To Library Contingency	2,371.00			
To Magazine (Lekhamonjuri)	38,000.00			
To NAAC Fees Paid	2,247.00			
To Newspaper & journals	811.00			
To Postage expenses	269.00			
To Practical exam. Expenses	126,355.00			
To Printing & Stationery	140,878.00			
To Rates & taxes	10,345.00			
To Repairs & Renewals	368,956.00			
To Salary	52,439,471.00			
To Sports & Games	21,440.00			
To Staff Quarters expenses	44,120.00			
To Students' Union Expenses	22,500.00			
To Telephone Expenses	21,769.00			
	58,695,005.00			
Excess of Income Over Expenditure	151,741.00			
			58,846,746.00	

For S.Rudra & Co.
Chartered Accountants
FNN-308162E
9.12.18

Papir Chakrabarti
Principal
Brahmananda Keshab Chandra College
11117, B.T. Road, Kolkata-700 108

CA A.K.Sarkar
Partner
Membership No.-053865