

WEST BENGAL STATE UNIVERSITY
CBCS General 4th Semester Examinations, 2022
STSHGEC04T/ STSGCOR04T- STATISTICS (GE4/DSC4)
Applied Statistics

Time Alloted: 2 Hours

Full Marks : 40

Answer any *four* questions from the following:

$5 \times 4 = 20$

- (1) Discuss two measures of population growth.
- (2) Discuss with examples, different components of a time series. How can they be combined? $3 + 2$
- (3) Discuss standardised death rate. What is the main purpose of its construction? $3 + 2$
- (4) What is purchasing power of money? Define real wage? What are their uses? $2 + 2 + 1$
- (5) What is consumer's price index number? What are the use of it? $3 + 2$
- (6) What is a chain index number? Discuss its advantages and disadvantages over fixed-based index number. $2 + 3$

Answer any *two* from the following questions:

$2 \times 10 = 20$

- (7) (i) Show that Fisher's ideal index number satisfies time reversal and factor reversal tests.
(ii) What choices of weight in the arithmetic mean of price relatives gives the Laspeyres' formula? $5 + 5$
- (8) Discuss all the steps for determination of seasonal indices by method of ratio to trend. 10
- (9) (i) Describe merits and demerits of moving average method compared to mathematical curve fitting method in determining trend.
(ii) How to obtain monthly trend equation from annual data? Illustrate. $5 + 5$
- (10) Describe the columns of a complete life table explaining their significance. 10