WEST BENGAL STATE UNIVERSITY

B.Sc. Honours/Programme 4th Semester Examination, 2022

STSHGEC04T/STSGCOR04T-Statistics (GE4/DSC4)

Time Allotted: 2 Hours   Full Marks: 40

The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.

Answer any *four* questions from question nos. 1-6   5×4 = 20

1. Discuss two measures of population growth.   5

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* questions from question nos. 7-9   10×2 = 20

7. (a) Show that Fisher's ideal index number satisfies time reversal and factor reversal tests.   5+5

   (b) What choices of weight in the arithmetic mean of price relatives gives the Laspeyres' formula?

8. (a) Describe merits and demerits of moving average method compared to mathematical curve fitting method in determining trend.   5+5

   (b) How to obtain monthly trend equation from annual data? Illustrate.

9. Describe the columns of a complete life table explaining their significance.   10

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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