

2019

B.Sc.

4th Semester Examination

STATISTICS (Honours)

Paper - GE4P

(Applied Statistics Lab)

[Practical]

Full Marks : 20

Time : 3 Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Answer all questions.

1. The following table gives the prices and quantities of a number of commodities in a certain city. Calculate price index numbers for 2010 with 2000 as base year using (i) Laspeyre's (ii) Pasche's (iii) Marshall-Edgeworth and (iv) Fisher's formulae :

[Turn Over]

| Commodities | 2000 | | 2010 | |
|-------------|-------|----------|-------|----------|
| | Price | Quantity | Price | Quantity |
| A | 20 | 8 | 40 | 6 |
| B | 50 | 10 | 60 | 5 |
| C | 40 | 15 | 50 | 15 |
| D | 20 | 20 | 20 | 25 |

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2. A part of life table is given here with most of the entries missing. On the basis of the available figures, supply the missing ones.

| Age(x) | e_x | dx | q_x | L_x | T_x | e_x^o |
|--------|--------|------|--------|-------|-------|---------|
| 10 | 74.600 | | .00350 | | | |
| 11 | | | .00338 | | | |
| 12 | | | .00361 | | | |
| 13 | | | .00420 | | | |
| 14 | | | .00517 | | | |
| 15 | | | .00530 | | | |

(3)

| | | | | | | |
|----|--|--|--------|--|-----------|--|
| 16 | | | .00538 | | | |
| 17 | | | .00544 | | | |
| 18 | | | .00549 | | | |
| 19 | | | .00554 | | 2,607,040 | |

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3. Laboratory Note Book.

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4. Viva-voce.

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