

II Semester B.Com. Examination, May 2017 (CBCS) (Freshers + Repeaters) (2014-15 and Onwards) COMMERCE

Paper - 2.6 : Quantitative Analysis for Business Decisions - I

Time: 3 Hours

Max. Marks: 70

Instruction: Answer should be written either completely in English or Kannada.

SECTION - A

Answer any five sub-questions from this Section. Each sub-question carries two marks. (5×2=10)

- 1. a) State any two limitations of statistics.
 - b) What is a histogram?
 - c) Write any two objectives of tabulation.
 - d) What is meant by skewness?
 - e) How do you calculate 'Mode' in case it is ill-defined?
 - f) If variance = 36, $\sum x = 150$, N = 10, find c.v.
 - g) What do you mean by Time Reversal Test (TRT)?

SECTION-B

Answer any three of the following. Each question carries six marks.

 $(3 \times 6 = 18)$

Form a continuous frequency table. The marks scored by 50 students in an examination are given below, taking class interval of 10-20, 20-30 etc. Prepare frequency table and calculate Median:

| 48 | 30 | 31 | 39 | 18 | 54 | 33 | 10 | 29 |
|----|----|----|----|----|----|----|----|----|
| 62 | 38 | 41 | 43 | 51 | 37 | 71 | 62 | 34 |
| 55 | 29 | 43 | 64 | 43 | 52 | 64 | 44 | |
| 55 | 45 | 22 | 32 | 21 | 59 | 61 | 22 | |
| 74 | 19 | 46 | 73 | 33 | 85 | 85 | 51 | |
| 63 | 58 | 27 | 44 | 32 | 31 | 47 | 18 | |

P.T.O.



3. Compute Mean Deviation and its co-efficient about mean from the following data:

45 110 78 70 52 75 83 64 98

4. Calculate Arithmetic Mean.

Marks: 0-10 10-30 30-60 60-100

Students: 7 13 22 8

5. The Mean and Standard Deviation of two brands of bulbs are given below:

| Brand | Α | В | |
|-----------|----------|---------|--|
| Mean life | 1000 hrs | 820 hrs | |
| S.D. | 100 hrs | 65 hrs | |

Which category of bulb has more consistency in its life?

6. Calculate Consumer Price Index from the following data:

| Commodity | p_0 | p ₁ | W | |
|-----------|-------|----------------|---|--|
| Α | 2 | 4 | 2 | |
| В | 4 | 6 | 4 | |
| С | 6 | 6 | 3 | |
| D | 2 | 3 | 1 | |
| E | 1 | 1 | 1 | |

SECTION-C

Answer any three questions. Each question carries fourteen marks.

(3×14=42

7. Draw an ogives (lessthan and morethan), calculate and locate median from the following data:

Marks: 0-10 10-20 20-30 30-40 40-50 50-60 60-70

No. of Students: 3 8 12 20 24 12 7

8. Compute Quartile Deviation and its co-efficient from the following data:

X: 10-20 20-30 30-40 40-50 50-60 60-70 70-80

F: 12 25 55 120 60 30 13

You are given below the daily wages paid to workers in two factories X and Y. Find:

a) Which factory pays higher average wages?

b) Which factory pays more total wages?

c) In which factory are wages more variable?

Daily wages₹ : 50-60 60-70 70-80 80-90 90-100

No. of workers

Factory X : 30 60 90 40 20 Factory Y : 40 70 100 20 10

10. Determine the Fisher's ideal index and show how it satisfies the TRT and FRT:

Items : M N O P Q

2015

Price ₹ : 20 50 40 60 10

Quantity : 8 10 5 20 6

2016

Price ₹ : 30 40 50 60 40 Quantity : 10 8 12 16 10

11. Calculate Median and Mode of the following data:

X: less than 10 20 30 40 50 60 70 80

F: 4 16 40 76 96 112 120 125