



US - 462

**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. (3×6=18)

2. 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 | |

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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 | A | B |
|-----------|----------|---------|
| 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 |
|-----------|-------|-------|-----|
| A | 2 | 4 | 2 |
| B | 4 | 6 | 4 |
| C | 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 |

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

- Which factory pays higher average wages ?
- Which factory pays more total wages ?
- 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