## 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.

 $(3 \times 6 = 18)$ 

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	

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 <sub>0</sub>	p <sub>1</sub>	W
Α	2	4	.2
В	4	6	4
С	6	6	3
D	2	3	1
E 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



Ω	Compute Quartile Deviation and i	ts co-efficient	t from the	following	data:
Ο.	Compute Quartic Deviation and				

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:

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