



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	

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	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:

- 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