



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 :

<b>X :</b>	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70	70 - 80
<b>F :</b>	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 ?

<b>Daily wages ₹</b>	:	50 - 60	60 - 70	70 - 80	80 - 90	90 - 100
<b>No. of workers</b>	:					
<b>Factory X</b>	:	30	60	90	40	20
<b>Factory Y</b>	:	40	70	100	20	10

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

<b>Items</b>	:	M	N	O	P	Q
<b>2015</b>						
<b>Price ₹</b>	:	20	50	40	60	10
<b>Quantity</b>	:	8	10	5	20	6
<b>2016</b>						
<b>Price ₹</b>	:	30	40	50	60	40
<b>Quantity</b>	:	10	8	12	16	10

11. Calculate Median and Mode of the following data :

<b>X :</b>	less than	10	20	30	40	50	60	70	80
<b>F :</b>		4	16	40	76	96	112	120	125