



71224

II Semester B.C.L.S. Examination, Sept./Oct. 2023
(CBCS)
COMMERCE
Quantitative Analysis for Business Decisions – I

Time : 3 Hours

Max. Marks : 70

Instruction : Answers should be written only in **English**.

SECTION – A

Answer **any 5** sub-questions. **Each** sub-question carries **2** marks : **(5×2=10)**

1. a) Define statistics in singular sense.
- b) What is tabulation ?
- c) Define mode.
- d) If variance = 64, $\sum x = 160$ and $N = 20$, find CV.
- e) State any two uses of index numbers.
- f) Mention any two objectives of statistics.
- g) If Mean = 24, Mode = 26, find median.

SECTION – B

Answer **any three** questions. **Each** question carries **6** marks : **(3×6=18)**

2. In a sample study about reading newspaper of people of a city, the following information was received. Present the data in a tabular form :

Male : 65%, Female : 35%, Female not reading newspaper : 25% and people reading newspaper : 70%.

3. Calculate Median from the following data :

Marks	50	40	30	20	10
Frequency	10	40	20	12	16

P.T.O.



4. From the following information find :
- Which factory wages are more stable ?
 - Which of the factory pays larger wage bill ?

	Factory A	Factory B
Number of wage earners	500	400
Mean wages in Rs.	80	90
Variance	200	450

5. Calculate standard deviation from the following data, using step deviation method.

Wages (in Rs.)	10	20	30	40	50	60
No. of Workers	8	12	20	10	7	3

6. Construct the consumer price index number for 2023 taking 2018 as base from the following data using family budget method.

Commodity	A	B	C	D	E	F
Commodity Consumed in 2018.	24	16	8	18	10	4
Price in Rs.						
2018	100	80	140	140	40	400
2023	120	90	160	180	80	400

SECTION – C

Answer **any three** questions. **Each** question carries **14** marks : **(3×14=42)**

7. Find out the mean, median and mode for the following data :

X (Less than) :	10	20	30	40	50	60
F :	4	20	35	55	62	67

8. From the following data of the wages of 122 workers, determine the modal wages with the help of grouping table and analysis table.

Wages (Rs.)	100–110	110–120	120–130	130–140	140–150	150–160	160–170	170–180
No. of Workers	4	6	20	32	33	17	8	2

9. The score of the two batsman A and B in ten cricket matches in given below.

A	32	28	47	63	71	39	10	60	96	14
B	19	31	48	53	67	90	10	62	40	80

Find whether batsman A or B is more consistent in scoring.



10. Compute Fisher's ideal index from the following and show how it satisfies TRT and FRT.

Commodities	Price in 2022	Quantity in 2022	Price in 2023	Quantity in 2023
M	8	80	10	110
N	10	90	12	108
O	16	256	20	340
P	20	420	24	456
Q	25	550	32	704

11. From the following data calculate co-efficient of skewness.

Age	0-10	10-20	20-30	30-40	40-50	50-60	60-70
No. of Persons	10	12	24	32	28	11	3
