

**BONAM VENKATA CHALAMAYYA INSTITUTE OF TECHNOLOGY & SCIENCE  
(AUTONOMOUS)**

***I-BBA I-Semester Supplementary Examinations (BR24), Jul - 2025***

**BUSINESS STATISTICS AND LOGIC (BBA)**

Time: 3 hours

Max. Marks: 70

*Question Paper consists of Part-A and Part-B  
Answer ALL the question in Part-A and Part-B*

PART-A (10X2 = 20M)

	Marks	CO	BL
1.a) Define Statistics	(2M)	CO1	BL1
b) Define primary and secondary data	(2M)	CO1	BL1
c) Define concept of central tendency	(2M)	CO2	BL1
d) Find Harmonic mean for the data: 8, 10, 40, 26 .	(2M)	CO2	BL1
e) Calculate the range of the data set: 25, 30, 35, 40, 45	(2M)	CO3	BL1
f) Write any one formula for measuring degree of skewness	(2M)	CO3	BL1
g) What is a scatter diagram? Mention its uses	(2M)	CO4	BL1
h) Write formula for rank correlation with tie	(2M)	CO4	BL1
i) Find the missing value in the given series: 37, 39, 42, 47, 54, --- 78	(2M)	CO5	BL3
j) In a certain code "DANGER" is written as "OBESFH". How is "OPPOSITE" written in that code?	(2M)	CO5	BL3

PART-B (5X10 = 50M)

2. a) Explain rules of tabulation (5M) CO1 BL2
- b) Explain significance of Diagrams and Graphs (5M) CO1
- (OR)
- 3 Draw histogram and find average for the following data (10M) CO1 BL3
- |                    |       |       |       |       |       |       |
|--------------------|-------|-------|-------|-------|-------|-------|
| Marks              | 0 -10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
| Number of students | 15    | 25    | 60    | 40    | 35    | 25    |
4. Calculate the lower and upper quartiles from the following data (10M) CO2 BL3
- |           |      |      |       |       |       |
|-----------|------|------|-------|-------|-------|
| Class     | 0 -5 | 5-10 | 10-15 | 15-20 | 20-25 |
| Frequency | 7    | 25   | 50    | 80    | 100   |
- (OR)
5. Compute mode of the following data (10M) CO2 BL3
- |           |       |       |       |       |       |       |       |       |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
| Class     | 0 -10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 |
| Frequency | 5     | 8     | 7     | 12    | 28    | 20    | 10    | 10    |
6. Explain Measure of Dispersion? Write about range, quartile deviation, Mean deviation , standard deviation (10M) CO3 BL2
- (OR)

- 7 Calculate Karl Pearson's coefficient of skewness for the following data (10M)

Class	0 -5	5-10	10-15	15-20	20-25	25-30	30-35	35-40
Frequency	2	5	7	13	21	16	8	3

CO3 BL3

8. Compute correlation coefficient between supply and price of commodity using following data. (10M)

Supply	152	158	169	182	160	166	182
Price	198	178	167	152	180	170	162

CO4 BL3

(OR)

9. Define correlation coefficient. Calculate Rank correlation coefficient for the following data. (10M)

Marks in Maths	35	54	80	95	73	73	44	91	77	81
Marks in English	39	55	78	49	67	55	62	71	56	69

CO4 BL3

- 10 i) Five friends P,Q,R,S and T travelled to five different cities of Chennai, Calcutta, Delhi, Bangalore and Hyderabad by five different modes of transport of Bus, Train, Aero plane, Car, and Boat from Mumbai (ii) The person who travelled to Delhi did not travel by boat.(iii) R went to Bangalore by car and Q went to Calcutta by aero plane.(iv) S travelled by boat whereas T travelled by train.(v) Mumbai is not connected by bus to Delhi and Chennai. Then find (5x2= 10M)
- 1) What is the mode of transport by P? 2) Who travelled by Train?
- 3) Which city is travelled by S? 4) In which city is travelled by Bus?
- 5) Who travelled to Delhi?

CO5 BL3

(OR)

- 11 What do you know about direction sense test and explain? (10M)

CO5 BL1

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