SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)
(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai - 600 044.
B.B.A - END SEMESTER EXAMINATIONS - APRIL 2025
SEMESTER - III
20UBACT3007 - Business Statistics - I

Total Duration : 2 Hrs.30 Mins. Total Marks : 60

Section B

Answer any **SIX** questions $(6 \times 5 = 30$ Marks)

1. Explain the scope of statistics in different fields such as economics, business and social sciences.

2. Compute median from the following data:

x	110-120	120-130	130-140	140-150	150-160	160-170	170-180	180-190	190-200
f	6	25	48	72	116	60	38	22	3

3. Calculate the range from the following values.

Marks	10-20	20-30	30-40	40-50
No.of students	5	8	10	7

4. Seven methods of imparting business education were ranked by the MBA students of two universities as follows:

Methods of teaching:	I	II	III	IV	V	VI	VII
Rank of students of university A	2	1	5	3	4	7	6
Rank of students of university B	1	3	2	4	7	5	6

Calculate rank correlation coefficient and comment on its values.

5. A shoe dealer records the sizes of 40 pairs of shoes sold by him during a particular week. Obtain a frequency table for the following

3	7	4	5	1	9	3	6	5	4
1	7	5	3	2	5	6	2	8	9
5	8	9	8	4	1	2	9	7	4
3	4	6	8	6	4	7	9	1	2

6. Calculate the mode of the following distribution:

X	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45
F	3	6	10	20	15	5	4	2

7. From the under mentioned details, calculate standard deviation:

Marks	10	20	30	40	50	60
No of students	8	12	20	10	7	3

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8. From the following data find the most likely production corresponding to the rainfall of 40cm.

	Rainfall (in cm)	**Production (tonnes)**
Mean	35	50
Standard deviation	5	8

Coefficient of correlation equation = 0.8

Section C

Answer any **THREE** questions $(3 \times 10 = 30$ Marks)

9. Compare the advantages and limitations of statistics in research.
10. Define data collection and explain the different methods of collecting data.
11. Find the H.M from the data given below:

Marks	15-25	25-35	35-45	45-55	55-65	65-75
No of students	4	11	19	14	0	2

12. Find the quartile deviation for the following distribution.

Marks	0-10	10-20	20-30	30-40	40-50	50-60
Frequency	8	20	25	30	12	5

13. Calculate Karl Pearson's coefficient of correlation from the following data.

X	10	12	18	24	23	27
Y	13	18	12	25	30	10

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