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.Com. ISM - END SEMESTER EXAMINATIONS - NOV'2024
SEMESTER - III
20UBIAT3003 - Business Mathematics and Statistics - I

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

Section B

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

1. Explain 'Relation and Function of Sets'.

2. Classify the terms:
   (a) Primary Data (b) Secondary Data

3. Compute the coefficient of Range for the following data:

Wages (in Rs.)	35-45	45-55	55-65	65-75	75-85
No. of Workers	18	22	30	6	4

4. The following are the ranks obtained by 10 students in Statistics and Mathematics:

Statistics	1	2	3	4	5	6	7	8	9	10
Mathematics	1	4	2	5	3	9	7	10	6	8

   To what extent is the knowledge of students in the two subjects related?

5. Find the simple interest on Rs.5,000 at 10% for 3 years, find also the amount.

6. Find the median of the following frequency distribution:

Daily wages in Rs.	5	10	15	20	25	30
No. of Person's	7	12	37	25	22	11

7. Compute the mean deviation about the mean for the following data.

Value (x)	10	11	12	13	14	30
Frequency (f)	3	12	18	12	3	11

8. Solve the line of regression of y on x:

x	1	2	3	4	5	8	10
y	9	8	10	12	14	16	15

Section C

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

9. Explain the different types of Function with suitable example.

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10. Compute the interest on Rs.1,000 for 10 years at 4% per annum, the interest being paid annually.

11. Solve the Mean, Median and Mode for the following data.

Class	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100
Frequency	3	7	13	17	12	10	8	8	6	6

12. Compute the mean deviation about the median for the following data.

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	18	16	15	12	10	5	2	2

13. Determine the coefficient correlation for the following data.

x	65	66	67	67	69	70	72
y	67	68	65	68	72	69	71

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