

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 - APRIL 2025
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. What is function and explain types of functions?
2. Find the Geometric mean for the following data

x	20	30	40	50	
f	5	6	7	8	

3. The following are wages (in Rs.) of 10 factory workers. Find the range of variation and also compute coefficient of range
1450,1370,1610,1540,1700,1345,1575,1495,1440,1380

4. Calculate Quartile deviation for the following data

value	12	13	14	25	26	27	38	40
frequency	2	3	5	8	7	3	2	1

5. Find the simple interest on Rs.5,000 for 3 years at 10% per annum, Find also the amount.
6. Find the median for the following data

wages	5	10	15	20	25	30
persons	9	12	39	24	22	15

7. Find the standard deviation for the following data
62,85,73,81,74,58,66,72,54,84

8. The following are the ranks obtained by 10 students in Tamil and English

Tamil	1	2	3	4	5	6	7	8	9	10
English	1	4	2	5	3	9	7	10	6	8

Section C

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

9. Out of a group of 50 teachers in a high school 30 teach mathematics, 20 teach English and 25 teach science, 10 teach both mathematics and science and none teach mathematics and English
 - i) How many teach science and English
 - ii) How many teach English only

Contd...

10. Find the rate of interest on the bill of Rs.3,887.50 due after 11 months, whose true present worth is Rs.3,750

11. Calculate mean, median and mode for the following data

C-I	0-10	10-20	20-30	30-40	40-50	50-60
f	5	15	30	20	12	8

12. What is Dispersion? Explain its types briefly.

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

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