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 - NOV'2024 SEMESTER - III **20UBACT3007 - Business Statistics - I**

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

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

- 1. Explain the Scope of Statistics.
- 2. Form a discrete frequency table from the following values are given below. 11,12,12,11,13,14,11,10,15,12,11,15,12,13,15,10,11,14,15,14,12,13,12
- 3. Use direct method to find out Arithmetic mean.

Income	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70
No. of persons	4	7	16	20	15	8

4. Calculate co-efficient of quartile deviation and co-efficient of variation from the following data :

Marks	Below 10	Below 20	Below 30	Below 40	Below 50
No. of students	4	18	48	68	78

5. Calculate coefficient of correlation and check whether it is significant.

							46
Y	66	59	63	68	75	86	68

- 6. Describe the Uses of Statistics.
- 7. Calculate Harmonic mean from the data given below:

Class	15-25	25-35	35-45	45-55	55-65	65-75
Frequency	4	11	19	14	0	2

8. In a correlation analysis between production and price of a commodity, the following constants were obtained :

	Production (X)	Price (Y)
Mean	110	98
Standard deviation	12	5

r = 0.4 (cor. coefficient)

Write down the two regression equations. Find Y when X = 116.

Section C

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

- 9. Describe the functions and limitations of statistics.
- 10. What are the various methods of classifying data?
- 11. Calculate mean, median and mode from the following data.

Wages	0-10	10-20	20-30	30-40	40-50	50-60
No. of Workers	12	17	23	39	16	3

12. Calculate Karl Pearson's Coefficient of Skewness from the following data :

Age in years	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60
No. of persons	18	20	30	22	10

13. Calculate the Rank correlation co-efficient for the following data:

		78						
Υ	12	13	14	14	14	16	15	17
