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 NOVEMBER -2023
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. State the importance of statistics.
2. Find out the mode from the following data showing frequency with which profits are made:

Profits in thousands:	3-4	4-5	5-6	6-7	7-8	8-9	9-10
Frequency	83	27	25	50	75	38	18

3. Compute mean deviation and mean coefficient of dispersion from the following data:

Marks	10	15	20	30	40	50
Frequency	8	12	15	10	3	2

4. A random sample of 5 college students is selected and their grade in Mathematics and Statistics are found to be:

	1	2	3	4	5
Mathematics	85	60	73	40	90
Statistics	93	75	65	50	80

Compute pearman's rank correlation coefficient.

5. Draw a pie diagram to represent the following population in a town:

Males	2,000
Females	1,800
Boys	2,000
Girls	4,200
Total	10,000

6. Compute geometric mean from the following data:

50	72	54	82	93

7. A sample of size 15 has mean 3.5 and S.D 3.0. Another sample size 22 has mean 4.7 and S.D 4.0. If the two samples are plotted together, find the mean and S.D. of the combined.

Contd...

8. The following information given below, compute the expected value of Y when X = 12.

	X	Y
Average	7.6	14.8
Standard Deviation	3.6	2.5
r= 0.99		

Section C

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

9. Explain in detail about scope and limitation of statistics.

10. Represent the following data by a simple bar diagram.

Year	Production (In tonnes)	Year	Production (In tonnes)
1974	45	1978	49
1975	40	1979	42
1976	44	1980	55
1977	41	1981	50

11. Compute mean, median and mode from the following data.

Scores	0-10	10-20	20-30	30-40	40-50
Frequency	3	5	9	3	2

12. Find the Standard deviation and coefficient of skewness for the given distribution.

Variables	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

13. Compute coefficient of correlation for the following data.

Fertilizer	15	18	20	24	30	35	40	50
Productivity	85	93	95	105	120	130	150	160

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