

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.Sc.(DS) END SEMESTER EXAMINATIONS NOVEMBER -2023

SEMESTER - III

22UDSAT3003 - Allied Statistics - I

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

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

1. Explain nominal, ordinal and scale data with example.
2. Draw histogram and frequency polygon for the following data:

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70
f	6	8	10	15	13	8	5

3. Compute mean and mode from the given data:

Marks	0-20	20-40	40-60	60-80	80-100
No of students	3	17	27	20	9

4. Compute coefficient of variation from the following: $\sum X = 250$, $N = 10$, $\sigma = 8$
5. What are different types of Bar Diagram. Give example.
6. Find mean deviation about median from the data given below:
4000, 4200, 4400, 4600, 4800
7. If co-variance between X and Y variables is 10 and the variances of X and Y are respectively 16 and 9, find the coefficient of correlation.
8. From the following data, examine whether the data are consistent or not:
(A) = 100, (B) = 150, (AB) = 140, N = 500.

Section C

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

9. Describe the different methods of collecting secondary data in detail.
10. Draw "less than" ogive curve from the following and locate the median:

size	10-20	20-30	30-40	40-50	50-60
f	20	60	100	150	75

11. Determine mean, median and mode from the following data:

No of students	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Marks	8	19	29	36	25	13	4

Contd...

12. Compute quartile deviation and its coefficient for the following data:

Wages	0-10	10-20	20-30	30-40	40-50
No of workers	22	38	46	35	20

13. Ten students obtained the following marks in Statistics (X) and Accountancy (Y):

X	92	89	86	87	83	71	77	63	53	50
Y	86	86	77	91	68	52	85	82	57	57

Compute the Correlation coefficient.
