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.AI - END SEMESTER EXAMINATIONS - NOV'2024
SEMESTER - III
22UAIAT3003 - 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 how the sample survey differ from complete enumeration.
2. Compute Median for the following data:

Marks	No.of Students
10 - 25	6
25 - 40	20
40 - 55	44
55 - 70	26
70 - 85	3
85 - 100	1

3. Compute Standard Deviation for the following data:

X	Frequency
10	8
20	12
30	20
40	10
50	7
60	3

4. Explain Scatter diagram method of finding correlation.
5. Sketch a Pie chart for the following information:

Items	Expenditure (in Rs.)
Food	87
Clothing	24
Recreation	11
Education	13
Rent	25
Miscellaneous	20

Contd...

6. In a moderately asymmetrical frequency distribution, the value of mean and median are 15.6 and 15.73 respectively. Compute the value of mode.

7. Explain the requisites of a good measures of dispersion.

8. Two judges in a beauty competition assign the following ranks to 9 finalists. Compute Spearman's Rank Correlation Coefficient.

Rank Assigned by Judge I	**Rank Assigned by Judge II**
1	2
3	3
9	8
6	5
4	1
8	9
2	4
5	6
7	7

Section C

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

9. Explain in detail about primary and secondary data and also classify the methods of getting primary data.

10. Explain Diagrammatic Representation of Statistical data. Illustrate with an example.

11. Calculate Mean, Median and Mode for the following data and infer the result.

Class Interval	**Frequency**
0- 8	8
8- 16	7
16- 24	16
24- 32	24
32- 40	15
40 -48	7

Contd...

12. The runs scored by two batsman A and B in 9 consecutive matches are given below:

Runs Scored by Batsman A	Runs Scored by Batsman B
85	72
20	4
62	15
28	30
74	59
5	15
69	49
4	27
13	26

Compute Coefficient of Variation and predict which Batsman plays a consistent role

13. Evaluate Karl Pearson Coefficient of Correlation and draw your conclusion:

X	Y
12	14
9	8
8	6
10	9
11	11
13	12
7	3

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