

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.(CS) END SEMESTER EXAMINATIONS NOVEMBER -2023

SEMESTER - III

**21UBCCT3008 - Statistics-I**

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

### Section B

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

1. Explain the characteristics of statistics.
2. Describe the secondary data collection methods.
3. From the following find out the mean profits.

Profit per shops (Rs.)	Number of shops
100-200	10
200-300	18
300-400	20
400-500	26
500-600	30
600-700	28
700-800	18

4. From the following data calculate the median marks.

Marks	Frequency
10-19	7
20-29	15
30-39	18
40-49	25
50-59	30
60-69	20
70-79	16
80-89	7
90-99	2

5. Find out the value of quartile deviation and co-efficient of quartile deviation.

Marks	25	30	40	50	60	70	80	90
No of Students	4	7	12	8	9	15	7	3

**Contd...**

6. Calculate mean deviation and co-efficient of mean deviation from the following data.

<b>X</b>	<b>f</b>
0-20	4
20-40	8
40-60	10
60-80	15
80-100	20
100-120	8
120-140	9
140-160	11

7. The marks obtained by 100 students of a class are given below.

<b>Marks</b>	30	32	37	42	55	67	69	75
<b>No. of Students</b>	9	11	17	20	10	13	9	11

Calculate Karl Pearson's co-efficient of skewness.

8. Represent the following data in a suitable bar diagram.

<b>Year</b>	<b>Sales (Rs. in '0000)</b>	<b>Profit / Loss (Rs. in '0000)</b>
1993	44	15
1994	55	-8
1995	65	12
1996	79	-10
1997	87	6
1998	94	11

### Section C

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

9. Examine the various methods of collecting primary data.
10. Represent the following data in a histogram and frequency polygon.

<b>Daily Income</b>	<b>No. of people</b>
0-10	5
10-20	8
20-30	15
30-40	27
40-50	35
50-60	43
60-70	24
70-80	16
80-90	10
90-100	4

11. Calculate the Mean, Median and Mode for the data given below.

<b>Daily Earnings (Rs.)</b>	<b>No. of Persons</b>
50-53	3
53-56	8
56-59	14
59-62	30
62-65	36
65-68	28
68-71	16
71-74	10
74-77	5

12. Calculate standard deviation and co-efficient of variation from the data given below.

<b>Class Intervals</b>	<b>Frequency</b>
0-5	14
5-10	26
10-15	32
15-20	45
20-25	39
25-30	12
30-35	9
35-40	2

13. Calculate Bowley's co-efficient of skewness from the following data.

<b>Expenses (Rs.)</b>	0-20	20-40	40-60	60-80	80-100	100-120
<b>No. of Families</b>	4	21	18	27	37	5

\*\*\*\*\*