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 APRIL - 2024 SEMESTER - III 21UBCCT3008 - Statistics-I

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

Section B

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

- 1. Define primary data and write the various methods for collecting primary data.
- 2. Calculate the harmonic mean for the following data

X	10	12	14	16	18	20
f	5	18	20	10	6	1

3. Calculate the range and the coefficient of range

Marks	10-20	20-30	30-40	40-50
No.of.students	5	8	10	7

4. Find the Bowley's co-efficient of skewness for the following frequency distribution

No.of.children							
(per family)	0	1	2	3	4	5	6
No.of.families	7	10	16	25	18	11	8

5. Following table shows the monthly expenditure of a firm

ltem	Rent	Salary to the staff	Electricity and water	Miscellaneous
Expenditure	3,000	10,000	2,000	5,000

Represent the above data by a simple bar diagram.

6. Find the mean, median, mode for the following data

Roll No	1	2	3	4	5	6	7	8	9	10
Marks	40	50	30	60	70	80	40	50	60	90

7. Calculate the mean deviation and co-efficient of mean deviation about the mean for the following data

No.of.Calls	2	3	4	5	6	7
frequency	1	5	8	4	2	1

8. Explain skewness and types of skewness and also write the formula for Karl Pearson's coefficient and Bowley's co-efficient of skewness.

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Section C

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

- 9. Define statistics, write the uses and limitations of statistics.
- 10. Determine the median for the following data graphically by less than and more than ogives

Weight	30-34	35-39	40-44	45-49	50-54
No.of.students	6	8	12	9	5

11. Compute the Geometric mean for the following data

Class	0-10	10-20	20-30	30-40	40-50
Frequency	5	7	15	25	8

12. Find the standard deviation for the following data

Age	20-25	25-30	30-35	35-40	40-45	45-50
No.of.Persons	170	110	80	45	40	35

13. Find out the Karl Pearson's co-efficient of skewness

Measurement	11	12	13	14	15
Frequency	3	9	6	4	3
