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-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. Distinguish between Primary and Secondary data.
2. Calculate Harmonic mean from the following data.

X	6	7	8	9	10	11
F	4	6	9	5	2	8

3. Calculate Standard Deviation from the following data.

MARKS	10	20	30	40	50	60
F	8	12	20	10	7	3

4. In a frequency distribution the coefficient of skewness based on quartiles is 0.6. If the sum of the upper and lower quartiles is 100 and the median is 38, find the value of the upper quartiles.
5. Represent the following data draw a pie diagram.

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

6. Calculate combined Arithmetic mean of the following data:

Particulars	**Section A**	**Section B**
Average marks	72	73
Number of students	150	250

7. Calculate Mean deviation about median and mode from the following data.

X	7	4	10	8	15	12	7	9	7

Contd...

8. From a moderately skewed distribution of retail prices for men's shoes,it is found that the mean price is Rs.20 and the median price Rs.17. If the coefficient of variation is 20%, find the pearson's coefficient of skewness of distribution.

Section C

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

9. Elucidate the uses of statistics in commerce and business applications.
10. Draw an ogive by less than method and determine the number of companies getting profits between Rs.45 crores and Rs.75 crores.

Profits (Rs. crores)	**No. of Companies**
10-20	8
20-30	12
30-40	20
40-50	24
50-60	15
60-70	10
70-80	7
80-90	3
90-100	1

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

Marks Below	10	20	30	40	50
Frequency	3	8	17	20	22

12. Calculate S.D from the following data.

Scores	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	8	12	17	14	9	7	4

13. Calculate Karl Pearson's Coefficient of skewness from the following distributions.

Class Interval	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	6	12	22	48	56	32	18	6

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