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-2022
SEMESTER - III
20UBCCT3008 - Statistics - I

Total Duration : 3 Hrs. **Total Marks : 60**

Section A

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

1. Bring out the origin and meaning of statistics.

2. Differentiate between questionnaire and interview schedule as a major primary source of data.

3. In a city of 50 families were surveyed as to how many domestic appliances they have. Their replies were recorded as given below:

1	3	2	2	2	2	1	1	2	1
2	3	3	3	3	3	3	3	3	2
3	2	2	6	1	6	1	2	1	5
1	5	3	2	4	2	3	7	4	2
1	3	4	2	0	3	2	4	4	3

   Prepare a discrete series.

4. During 2019-20 to 2021-22 the number of students admitted in Madras University are as follows:

Year	Art	Science	Law	Total
2019-20	20,000	10,000	5,000	35,000
2020-21	26,000	9,000	7,000	42,000
2021-22	31,000	9,500	7,500	48,000

   Represent the data by a suitable diagram.

5. A person purchases one kilogram of tomatoes from each of the 4 places at the rate of 1kg., 2kg., 3kg., and 4kg., per 100 rupee respectively. On the average, how many kilograms of tomatoes has he purchased per 100 rupee?

6. Compute first and third quartile from the following data:

X	10-20	20-30	30-40	40-50	50-60	60-70	70-80	Total
f	12	19	5	10	9	6	6	67

7. What are the absolute and relative measures of dispersion? Brief.

Contd...

8. Calculate the Bowley's Coefficient of Skewness for the following data:

Roll No.	1	2	3	4	5	6	7	Total
Marks	20	28	40	12	30	15	50	195

Section B

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

9. Classify and present the different tools for collecting the primary and secondary data.

10. The following table gives the distribution of the wages of 65 employees in a company:

Wages (in Rs.)	50	60	70	80	90	100	110	120
No. of employees	65	57	47	31	17	7	2	0

Draw a 'less than' curve from the above data.

11. Calculate the geometric mean of the following data:

   1 7 29 9 2 115 375

12. A panel of two judges P and O graded seven dramatic performances by independently awarding marks as follows:

Performance	1	2	3	4	5	6	7
Marks by P	46	42	44	40	43	41	45
Marks by O	40	38	36	35	39	37	41

Find out the coefficient of variation in the marks awarded by two judges and interpret the result.

13. Find the Karl Pearson's Coefficient of Skewness by using Mode for the following data:

Value	6	12	18	24	30	36	42
Frequency	4	7	9	18	15	10	5

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