

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

17UBCCT3A08 - Statistics - I

Total Duration : 3 Hrs.

Total Marks : 60

**Section A**

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

1. Bring out the characteristics of statistics.
2. Differentiate between e-questionnaire and e-magazine as a source of data.
3. Describe the importance of classification and tabulation in statistical analysis.
4. Represent the following data by a simple bar diagram:

Countries	Production of Sugar (in Lakhs of quintals)
China	38
Japan	40
Indonesia	25
India	20
Pakistan	8
Sri Lanka	8

5. Calculate Median income from the following data:

Employee ID	1	2	3	4	5	6	7	8	9	10
Income (Rs.)	891	884	991	907	1072	922	1277	1153	2488	1490

6. Calculate Range and Coefficient of Range from the following data:

Marks	10-20	20-30	30-40	40-50	50-60	Total
No. of Students	8	10	12	8	4	42

7. Calculate the value of quartile deviation from the following data:

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

8. For a set of frequency distribution, the Mean = 25.32; Mode = 24; and Standard Deviation = 9.48. Calculate the Karl Pearson's Coefficient of Skewness.

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## Section B

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

9. Explain the uses and limitations of statistics.

10. The weights in pounds of 50 students of a class are given below:

110	160	150	105	172	172	125	120	136	163
100	178	170	118	168	154	110	127	124	149
120	90	165	126	108	136	95	155	112	156
125	130	85	137	128	128	88	164	128	175
140	80	95	149	135	140	102	168	148	87

(i) Arrange the above data in a frequency distribution consisting of 10 class intervals.

(ii) Write down the percentage frequency in each class interval.

11. Find the Arithmetic Mean and Median for the following data:

Marks	Frequency	Marks	Frequency
Below 10	5	Below 60	115
Below 20	9	Below 70	125
Below 30	48	Below 80	132
Below 40	69	Below 90	147
Below 50	94	Below 100	150

12. The scores of two batsman A and B in ten innings during a certain season are:

<b>A</b>	32	28	47	63	71	39	10	60	96	14
<b>B</b>	19	31	48	53	67	90	10	62	40	80

Find (using coefficient of variation) which of the two batsman A, B is more consistent in scoring.

13. Following figures related to the size of capital of companies:

Capital in Lakhs of Rs.	1-5	6-10	11-15	16-20	21-25	26-30	31-35
No. of Companies	20	27	29	38	48	53	70

Find out the coefficient of Skewness with the help of Bowley's measure of Skewness. What conclusion do you draw from the Skewness measured by you?

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