B.M.S COLLEGE FOR WOMEN
BENGALURU – 560004

III SEMESTER END EXAMINATION – JAN/FEB- 2024

B.Com.-BUSINESS STATISTICS
(NEP Scheme 2021-22 onwards F+R)

Course Code: COM3DSC08   **QP Code: 3022**
Duration: 2 ½ Hours   **Max. Marks: 60**

Instructions: 1. Answer all the sections.

SECTION-A

1. Answer any FIVE of the following. Each question carries TWO marks.   (5X2=10)

   a. Define the term 'Statistics'
   b. What is Tabulation?
   c. List any four methods of statistical averages.
   d. If AM = 12, Mode= 13, Calculate the Median.
   e. Mention any four methods of studying variation.
   f. What is meant by Skewness?
   g. Give the two differences between Correlation and Regression Analysis

SECTION-B

Answer any FOUR of the following. Each question carries FIVE marks.   (4X5=20)

2. Following is the data showing food grains production in different years. Draw a multiple bar diagram to represent the data.

Food grains	Productions (in tons)		
	2021	2022	2023
Rice	150	90	120
Ragi	120	150	140
Wheat	200	250	280

3. Calculate Median from the following data.

Marks	60	40	30	20	10
Frequency	10	40	20	12	16

4. From the following data compute Quartile Deviation (QD).

Marks	10-20	20-30	30-40	40-50	50-60
No. of Students	15	18	20	9	6

5. Find Correlation Coefficient under Pearson's Method.

X	1	2	3	4	5
Y	4	5	6	7	8

6. The correlation co-efficient between the variables X and Y is r = 0.60. If $\sigma X = 1.50$, $\sigma Y = 2$, $\bar{x} = 10$, $\bar{y} = 20$. Calculate two regression equations.

SECTION-C

Answer any TWO of the following. Each question carries TWELVE marks.   **(2X12=24)**

7. Find the value of Mean, Median and Mode from the following data.

Weights	71-75	76-80	81-85	86-90	91-95	96-100	101-105	106-110	111-115
No. of Students	3	10	15	18	25	19	14	9	2

8. Following are the marks obtained by two students Nikhil and Dhanush in tests of 100 marks each.

Test Marks obtained by both are given below

Test	1	2	3	4	5	6	7	8	9	10
Nikhil	40	80	76	48	52	72	68	56	60	56
Dhanush	48	75	54	60	63	69	72	51	72	60

Find who is the better scorer and if consistency is the criterion for awarding prize who should get the prize?

9. From the following table find out Karl Pearson's co-efficient of Correlation between Age and Reading habits of students and also calculate Probable error.

Age	15	16	17	18	19	20
No. of Students	250	200	150	120	100	80
Regular Readers	200	150	90	48	30	12

SECTION-D

Answer any ONE of the following. Question carries SIX marks.   **(1X06=6)**

   10. Draft a blank table and mention the parts of the table.

11. Identify the modal weight from the weights of 10 individuals using imaginary figures.

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