UUCMS No. $\square$

# B.M.S COLLEGE FOR WOMEN, AUTONOMOUS <br> BENGALURU - 560004 <br> SEMESTER END EXAMINATION - MARCH/APRIL- 2023 

## B.Com. - III Semester

BUSINESS STATISTICS
(NEP Scheme 2021-22 onwards)

## Course Code: COM3DSC08

Duration: $21 / 2$ Hours

QP Code: 3022
Max. Marks: 60

## SECTION-A

I. Answer any FIVE sub-questions. Each question carries TWO marks.
a. What is Tabulation?
b. Mention any four types of Statistical Averages.
c. Compute Mode, if Median=25 and Mean=20
d. What is "Dispersion"?
e. Define the term Regression?
f. Calculate Range and its coefficient from the following data:

53, 46, 18, 16, 75, 84, 28
g. Define correlation.

## SECTION-B

## Answer any FOUR questions. Each question carries FIVE marks

(4X5=20)
2. In the house of Lokasabha, there were 600 members present. During the discussion on a motion put to vote, 400 members voted in favour of the resolution. The government members in the house were 380.65 members belonging to the opposition voted for the resolution. All the members were belonging to either of the two groups and there were no absentees. Tabulate the information.
3. Calculate Arithmetic Mean.

| Marks | $0-5$ | $5-10$ | $10-15$ | $15-20$ | $20-25$ | $25-30$ | $30-35$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of Students | 2 | 4 | 5 | 3 | 2 | 4 | 5 |

4. Find Correlation Co-efficient for the given value under Karl Pearson's Method.

| X | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| Y | 4 | 5 | 6 | 7 | 8 |
| :--- | :--- | :--- | :--- | :--- | :--- |

5. Compute Standard Deviation from the following

| X | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| f | 3 | 9 | 11 | 14 | 12 | 7 | 4 |

6. Calculate Quartile Deviation and its Co-efficient for the following data:

| X | 20 | 40 | 60 | 80 | 100 | 120 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| f | 3 | 5 | 10 | 12 | 6 | 4 |

## SECTION-C

Answer any TWO questions. Each question carries TWELVE marks.
(2X12=24)
7. Calculate Mean, Median and Mode of the following data:

| X less than | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F | 4 | 16 | 40 | 76 | 96 | 112 | 120 | 125 |

8. Following are the marks scored by two students named C and D. Find;
a. Who is better scorer?
b. Who is more consistent?

| C | 70 | 35 | 50 | 83 | 90 | 50 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| D | 60 | 90 | 80 | 62 | 53 | 45 |

9. Formulate Two Regression line from the following data. Predict Y when $\mathrm{X}=50$ and X when $\mathrm{Y}=25$

| X | 40 | 32 | 38 | 42 | 36 | 46 |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Y | 30 | 35 | 40 | 36 | 28 | 35 |

## SECTION-D

## Answer any ONE of the following questions

10. Draft a blank Table and mention the parts of the table.
11. Draw a multiple bar diagram to represent the number of students in Arts, Commerce and Science stream in two Colleges in a city.
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