**QP CODE** **Enrollment Number: ……**

**A4052** **Name: ……**

**B.B.A. DEGREE EXAMINATIONS, DECEMBER 2024**
**Second Semester**
**B.B.A**
**B21BB04DC – Business Statistics**
**(2023 July Admissions)**

**Time: 3 Hours** **Max Marks: 70**

## Section A

**Answer any ten of the following questions in a word or sentence each. Each question carries 1 mark.**

1. Define correlation.
2. What is median?
3. What is GM?
4. What is census?
5. What is SD?
6. What do you mean by mode?
7. What is regression?
8. What is time series?
9. Define tabulation.
10. What is primary data?
11. What is probable error?
12. What is seasonal variation?
13. What do you mean by range?
14. Define CV.
15. What is an index number?

**(1X10=10)**

## Section B

**Answer any five of the following questions in two or three sentences each. Each question carries 2 marks.**

16. Define mean deviation.
17. Differentiate between primary and secondary data.

18. Discuss any 3 merits of median.
19. Explain scatter diagram.
20. Explain sampling.
21. Find median from the given data.

    X: 130 140 80 120 100
22. Find mode from the given data.

    X: 10 20 30 40 50
23. What is price index number?
24. Write any two limitation of mean.
25. What is stratified sampling?

**(2X5=10)**

## Section C

**Answer any four of the following questions in one page each. Each question carries 5 marks.**

26. From the following, calculate mean.

| class | 0-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30-35 | 35-40 |
|---|---|---|---|---|---|---|---|---|
| F | 4 | 6 | 7 | 10 | 3 | 5 | 9 | 12 |

27. What are the differences between correlation and regression?
28. Discuss the different types of regression.
29. What are the different types of price index?
30. Calculate SD & CV from the following:

| Class | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
|---|---|---|---|---|---|---|
| F | 4 | 3 | 8 | 10 | 9 | 5 |

31. Calculate median:

| Class | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
|---|---|---|---|---|---|---|
| F | 10 | 14 | 8 | 6 | 4 | 11 |

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32. Calculate Quartile deviation.

| Class | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 |
|---|---|---|---|---|---|---|---|---|
| F | 5 | 8 | 9 | 7 | 10 | 12 | 2 | 4 |

33. Find MD from mean and its coefficient.

| X | 1 | 3 | 5 | 2 | 8 | 4 | 6 |
|---|---|---|---|---|---|---|---|
| F | 20 | 15 | 10 | 6 | 4 | 13 | 5 |

**(5X4=20)**

## Section D

**Answer any two of the following questions in four pages each. Each question carries 15 marks.**

34. Calculate Karl Pearson's Correlation Coefficient.

| X | 15 | 11 | 10 | 13 | 14 | 12 |
|---|---|---|---|---|---|---|
| Y | 8 | 10 | 15 | 9 | 16 | 18 |

35. Calculate price index number under Laspeyres, Paasches, and Fishers methods.

| Articles | Price (2010) | Quantity (2010) | Price (2016) | Quantity (2016) |
|---|---|---|---|---|
| A | 5 | 4 | 12 | 20 |
| B | 8 | 3 | 20 | 15 |
| C | 3 | 10 | 14 | 12 |
| D | 14 | 11 | 15 | 10 |

36. Explain time series and it's components.

37. Explain Sampling and its types.

**(15X2=30)**