| X | 35 | 25 | 29 | 31 | 27 | 24 | 33 | 36 |
|---|----|----|----|----|----|----|----|----|
| Y | 23 | 27 | 26 | 21 | 24 | 20 | 29 | 30 |

#### Section-C

### Long Answer Type Questions

Note: Attempt any two questions from the following. Each question carries 12.5 marks. [2×12.5=25]

- 6. What is Index Number? What are the methods to calculate the Index Number?
- 7. Prepare a histogram, frequency polygon and frequency curve from the following data:

| 0-10 | 10-20 | 20 - 30 | 30 -40 | 40 -60 |
|------|-------|---------|--------|--------|
| 13   | 17    | 15      | 13     | 10     |

8. Determine the median value for the following data by using less than curve and greater than curve:

| 100 - 200 | 200 - 300 | 300 - 400 | 400 -500 | 500 - 600 | 600 - 700 |
|-----------|-----------|-----------|----------|-----------|-----------|
| 12        | 18        | 30        | 42       | 60        | 78        |

Find the missing frequency for the following data by using A.M. = 50, N = 120

| 0 - 20 | 20 - 40        | 40 - 60 | 60 - 80        | 80 -100 |
|--------|----------------|---------|----------------|---------|
| 17     | F <sub>1</sub> | 32      | F <sub>2</sub> | 19      |

Roll No. : .....

Total No. of Questions: 9]

[Total No. of Printed Pages: 4

# F010102T(A)

BBA (Sem.-I) (NEP) Examination, 2024-25

(Major)

#### **BUSINESS STATISTICS**

Time: 11/2 Hours

[Maximum Marks: 75

Note: 1. Attempt questions from all sections as directed.

- 2. The candidates are required to answer only in serial order. If there are many parts of a question, answer them in continuation. Simple calculator is allowed.
- 3. "B" copy will not be provided.

#### Section-A

(Short Answer Type Questions)

Note: Attempt any four questions. Each question carries 6.25  $[4 \times 6.25 = 25]$ marks.

Turn Over

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- 1. (a) What is Statistics? Discuss its limitations.
  - (b) Differentiate between correlation and regression.
  - (c) What is Hypothesis? Discuss Type I and Type II error.
  - (d) Briefly discuss Kurtosis.
  - (e) Distinguish between mean deviation and standard deviation.
  - (f) Explain the conditional probability.
  - (g) Calculate the median from the following data:

| Price     | 60 | 65  | 62  | 63  | 66  | 61  | 64 |
|-----------|----|-----|-----|-----|-----|-----|----|
| Frequency | 25 | 105 | 400 | 375 | 101 | 140 | 22 |

- (h) What is Tabulation? What are the steps involved in Tabulation?
- (i) What is Scheduling? Write its advantages and disadvantages.

#### Section-B

## (Long Answer Type Questions)

**Note:** Attempt **any two** questions from the following. Each question carries **12.5** marks. [2×12.5=25]

- 2. From the following data, calculate:
  - (a) Mean
  - (b) Median
  - (c) Mode
  - (d) Variance
  - (e) Standard Deviation

| Marks   | No. Of Students |
|---------|-----------------|
| 0 - 10  | 5               |
| 10 - 20 | 12              |
| 20 -30  | 30              |
| 30 - 40 | 45              |
| 40 - 50 | 50              |
| 50 - 60 | 37              |
| 60 - 70 | 21              |

- 3. Differentiate between mean, median and mode.

  Discuss the steps involved in calculation of mean for individual, discrete and continuous series data.
- 4. Discuss probability and non-probability sampling methods in detail.
- 5. By using the following data, find out the two lines of regression:

(3)

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