

**BBA / BIM / BBM / Third Semester / STT 201: Business Statistics**

*Candidates are required to answer all the questions using MS-Excel. The figures in the margin indicate full marks.*

**Important instructions**

1. Write your name and roll number in question paper.
2. Create new folder on the **Desktop** and rename it with your symbol number.
3. Open a new Excel spreadsheet, click on **Page Layout** on the **Ribbon**, then click on **Print** ☐ **Print** ☐ of **Gridlines** and **Heading**. Set up **Scale** ☐ **Scale:** 100% at 75%.
4. Place the cursor on the middle icon **Page Layout** of right bottom near **Zoom Tool**, click on it and again click on **Add header** and type your symbol number in header, so that answer sheet won't be misplaced.
5. Before typing your answer, press **Ctrl + S**, save your spreadsheet (your file) in the folder renamed with symbol number.
6. Make sure that you should not type beyond the last column of active spreadsheet.
7. For each and every calculation, don't forget to press **Ctrl + S** to save your essential work.
8. You should submit your hard copy (print) with your signature.

**Practical Exam Questions Using MS-Excel**

- 1) Draw a simple bar diagram from the following data: [4]

| Year     | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|----------|------|------|------|------|------|------|
| Students | 200  | 250  | 215  | 230  | 240  | 265  |

- 2) The following table shows the marks in English and Economics of 10 students of a campus: [5]

| English   | 75 | 78 | 52 | 65 | 52 | 55 | 60 | 62 | 67 | 65 |
|-----------|----|----|----|----|----|----|----|----|----|----|
| Economics | 82 | 72 | 58 | 67 | 59 | 51 | 56 | 64 | 72 | 62 |

Find correlation coefficient between marks in English and Economics.

- 3) Fit Poisson distribution to the following data : [5]

| Values of X | 0   | 1   | 2  | 3  | 4 |
|-------------|-----|-----|----|----|---|
| Frequency   | 146 | 132 | 59 | 17 | 1 |

- 4) A random sample of 200 students obtained a mean marks 55 and standard deviation of 5. Find 95% confidence limits for the population mean. [5]
- 5) Find the coefficient of variation of the distribution: [5]

|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 33 | 34 | 37 | 38 | 39 | 41 | 43 | 44 | 45 | 46 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|

- 6) Find the value of mode and median from the following distribution:

[5]

|    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 34 | 37 | 46 | 58 | 62 | 62 | 64 | 65 | 68 | 70 | 75 | 80 | 85 |
|----|----|----|----|----|----|----|----|----|----|----|----|----|

- 7) Calculate percentile coefficient of kurtosis and interpret the data:

[5]

|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 34 |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|

- 8) A random sample of 200 male students is found to have a mean height of 172.48 cm. Test hypothesis that the mean height of population 172.19 cm with standard deviation 4.50 cm at 5% level of significance.

[6]

