Code: 17E00105

MBA & MBA (Finance) I Semester Supplementary Examinations June 2019
## STATISTICS FOR MANAGERS
(For students admitted in 2017 & 2018 only)

Time: 3 hours                                                                 Max. Marks: 60

All questions carry equal marks
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## SECTION – A
(Answer the following: 05 X 10 = 50 Marks)

1   Explain the nature and significance of statistics. Discuss the application of statistics in business.

**OR**

2   Calculate the arithmetic mean and median of the frequency distribution given below. Hence calculate the mode using the empirical relation between the three:

| Height (in cms) | No. of students | Height (in cms) | No. of students |
|---|---|---|---|
| 130-134 | 5 | 150-154 | 17 |
| 135-139 | 15 | 155-159 | 10 |
| 140-144 | 28 | 160-164 | 1 |
| 145-149 | 24 | | |

3   Calculate Karl Pearson's coefficient of correlation between price and supply of a commodity from the following data:

| Price (Rs.) | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|---|---|---|
| Supply (kg.) | 38 | 37 | 38 | 33 | 32 | 33 | 34 | 29 | 26 | 23 |

**OR**

4   Differentiate between correlation and regression.

5   Discuss the properties of a binomial distribution.

**OR**

6   Discuss the theorems of probability.

7   What is a hypothesis? Explain the types of hypothesis used in research.

**OR**

8   Explain the uses of T-test and F-test.

9   Discuss the applications of Chi-square test in detail.

**OR**

10   What is a one sample sign test? Explain its significance.

## SECTION – B
(Compulsory question, 01 X 10 = 10 Marks)

11   **Case Study:**
     Find the value of the correlation coefficient from the following table:

| Subject | Age X | Glucose level Y |
|---|---|---|
| 1 | 43 | 99 |
| 2 | 21 | 65 |
| 3 | 25 | 79 |
| 4 | 42 | 75 |
| 5 | 57 | 87 |
| 6 | 59 | 81 |