**B.Sc. DEGREE EXAMINATION, NOVEMBER 2016.**

**II YEAR — III SEMESTER**

**Allied — STATISTICAL METHODS AND   
 ITS APPLICATIONS — I**

**Time : 3 hours Max. Marks : 60**

**SECTION A — (10 × 1 = 10 marks)**

**Answer any *TEN* questions.**

1. Define Statistics.
2. State any two limitations of Statistics.
3. Define Median.
4. State any two merits of mode.
5. Define Dispersion.
6. Write the formula for quartile deviation.
7. Define an Event.
8. Define conditional probability.
9. Write the probability function of Normal distribution.
10. Write the probability function of Poisson distribution.
11. What are commonly used graphs?
12. Write the different measures of dispension.

**SECTION B — (5 × 4 = 20 marks)**

**Answer any *FIVE* questions.**

1. Explain simple and multiple bar diagram with an example.
2. State the properties of Arithmetic mean.
3. Explain characteristic of Dispersion and Skewness.
4. State and prove Addition theorem of probability.
5. Derive the mean and variance of Binomial distribution.
6. State the merits of median.
7. State and prove multiplication theorem of Expectation.

**SECTION C — (3 × 10 = 30 marks)**

**Answer any *THREE* questions.**

1. Explain different parts of table.
2. State merits and demerits of arithmetic mean.
3. Define Standard deviation and write the mathematical properties of standard deviation.
4. State and prove Baye’s theorem.
5. Write the characteristics of the Normal distribution.

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