

उत्तर प्रदेश राजर्षि टण्डन मुक्त विश्वविद्यालय,इलाहाबाद

सांख्यिकी (स्नातक) कार्यक्रम अधिन्यास सत्र 2020–2021

**Course Code: UGSTAT-101**

**Course Title : Statistical Methods**

**Maximum Marks : 30**

**Section -A**

Long Answer Questions

**Note:** Attempt any three questions. Each question should be answered in 800 to 1000 Words.

Maximum Marks: 18

1. Discuss in detail about the measures of central tendency with its all measurements.
2. Explain about mean deviation and standard deviation. Also show the effect of change of change of origin and scale on S.D.
3. Define moments. Also state the first four central moments and first four factorial moments.

**Section - B**

Short Answer Questions

Maximum Marks: 12

**Note:** Attempt any four questions. Answer should be given in 200 to 300 Words.

1. Write short notes on :
  - a. Karl Pearson's Correlation coefficient
  - b. Spearman's Correlation coefficient
2. Define Coefficient of variation and partition values.
3. Discuss about the Kurtosis.
4. Write a note on both 'X on Y' and 'Y on X' regression lines.

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सांख्यिकी (स्नातक) कार्यक्रम अधिन्यास सत्र 2020–2021

<i>Course Code: UGSTAT-102</i>	<i>Course Title: Probability, Distribution &amp; Statistical Inference</i>	<i>Maximum Marks : 30</i>
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**Section - A**  
Long Answer Questions

**Note:** Attempt any three questions. Each question should be answered in 800 to 1000 Words.

Maximum Marks: 18

1. State and prove Baye's theorem.
2. Discuss about the area property of the normal distribution.
3. State and prove Chebyshev's Inequality.

**Section - B**  
Short Answer Questions

Maximum Marks: 12

**Note:** Attempt any four questions. Answer should be given in 200 to 300 Words.

1. Define lack of memory property.
2. Discuss about the moment generating function of Poisson distribution.
3. Write a note on probability mass function and probability distribution function.
4. State and prove Cauchy-Schwartz Inequality.