**Sylhet Cadet College**

**1st Term Syllabus- 2025**

**Department: Statistics**

**Class: XI**

|  |  |  |  |
| --- | --- | --- | --- |
| S/L | Chapter | Topics for lesson | Remarks |
| 1 | Five | **Moments, Skewness, and Kurtosis**   1. Types of Moments 2. Conversion to an from raw and central moments 3. Applications of moments 4. Skewness and its types 5. Measures of skewness 6. Kurtosis and its types 7. Five number summary and its uses 8. Presenting data with box and whisker plot 9. Determining first four moments from data   **Practical**   1. Determining skewness and kurtosis and interpretation 2. Making box and whisker plot and five number summary and their analyses |  |
| 2 | Six | **Correlation and Regression**   1. Bivariate data 2. Simple correlation and its nature 3. Measures of simple correlation 4. Scatter plot 5. Covariance and correlation 6. Properties, proof, and uses of correlation 7. Properties of correlation (origin, scale, range, r and b) 8. Regression and its coefficient 9. Determining regression line with formula and prediction   **Practical**   1. Determination of correlation from ungrouped data 2. Simple ranked correlation 3. Drawing scatter plot 4. Determining regression line 5. Various functions |  |
| 3 | Seven | **Time Series**   1. Bivariate data 2. Components of time series 3. Techniques of fiding general trend 4. Application of time series   **Practical**  1. Determination of general trend and prediction |  |
| 4 | Eight | **Published Statistics in Bangladesh**   1. Sources of statistics in Bangladesh 2. Classificaton of published Statistics in Bangladesh 3. Limitations of published Statistics in Bangladesh and ways to improve 4. Published information based on latest census |  |

------------------------------------

**Signature: Head of the Department**