

ITM(SLS) Baroda University
School of Computer Science, Engineering, and Technology
B. Tech Computer Science and Information Technology
Semester-VII
Course Name: Probability and Statistical Modelling for Computer Science
Course Type: C2710D4

Unit	Syllabus
1	Introduction to Statistics- Origin, Meaning, and Purpose of Statistics, Scope, and Limitations of Statistics. Collection and Presentation of Data, Frequency Distributions Continuous Frequency Distribution, Graphical representation of data. Measures of Central Tendency- Mean, Median, Mode, Merits, and Demerits. Average of positions, Measures of Dispersion- Range, Quartile, Mean Deviation, Standard Deviation, Coefficient of Variations, Standard Deviation. Skewness, Kurtosis.
3	Correlation - Introduction of Correlation, Correlation Analysis- Significance and Types of Correlation- Positive, Negative, No Correlation, Linear & Non-Linear Correlation, Measure of Correlation- Scatter Diagram, Karl Pearson's Correlation, Spearman's Co-efficient Correlations. Regression Analysis- Introduction of Regressions, Lines of Regressions, Properties of Regression Lines, Regression Co-efficient and their properties.

% Syllabus completion: 50%