

ST. PIUS X COLLEGE RAJAPURAM
Department of Management Studies
Certificate Course in Research Methodology and Statistical Data Analysis

Syllabus

Module I

10 Hours

Research Process: Research problem identification – understanding the Background of the problem - problem formulation – determination of unit of analysis – determine the relevant variables - research questions – hypothesis and research objectives. Questionnaire – Questionnaire design process – Pre-construction phase – Construction phase – decision regarding question format - - Question wording – Question sequencing – Question response choice – Questionnaire layout – Post-Construction phase

Module II

10 Hours

Measurement and Scaling: Scales of measurement – Nominal – Ordinal – Interval – Ratio scales – Measurement scales – Single item scales – Multi-Item scales – Continues scales –Criteria for good measurement. Introduction to SPSS – Application window – data view window – variable view window – output window – menu bar items – variable setting in SPSS.

Module III

15 Hours

Data Processing: processing stages – editing – coding and data entry – descriptive analysis under different types of measurements – percentages, frequency table – contingency table –graphs – interpretation – Hypothesis testing for categorical data (Chi-Square test) – t Test –ANOVA – Non Parametric Tests