

Department of Statistics
Institute of Social Sciences
Dr. Bhimrao Ambedkar University, Agra

Value Added Course: Fundamental Data Analysis using SPSS

Course Duration: 30 hours

Maximum Marks: 100

Course Objectives

Unit	Objectives	Mode of Teaching
I	Understanding of Data and Data preparation using SPSS	Theory & Practical
II	Exploration, visualization and basic analysis of data using SPSS	Theory & Practical
III	Understanding concept of Correlation and Regression using SPSS	Theory & Practical

Course Content

Unit	Content	Time
I	Data Management and Introduction of SPSS:: <ul style="list-style-type: none"> • Types of Data, Metric and Nonmetric Data, Variables, Attributes, Mutually Exclusive Attributes, Independent and Dependent Variable, Extraneous Variable, Primary and Secondary Data. • Introduction and history of SPSS • Data Preparation in SPSS: Defining Variables and their Properties, Defining Variables for a Data File, Entering the Data, Importing Data in SPSS. • Graphical representation of Data using SPSS 	
II	Descriptive Analysis: <ul style="list-style-type: none"> • Measures of Central Tendency, Mean, Median, Mode and their interpretation • Measures of Variability, Range, Interquartile Range, Standard Deviation, Variance, The Index of Qualitative Variation, Standard Error, Coefficient of Variation (CV), Moments, Skewness, Kurtosis, Percentiles, • Computation of Descriptive Statistics and Measures of Variability using SPSS, Interpretation of the Outputs. 	
III	Corelation and Regression Analysis: <ul style="list-style-type: none"> • Correlation, Karl Pearson Correlation Coefficient • Calculating and testing the significance of Correlation Coefficient using SPSS • Regression Analysis, Test of significance of Regression Parameters, Goodness of fit of Regression Equation, Uses of Regression Analysis in Prediction • Use of SPSS in the Simple Regression Model 	

Course Outcomes

- The students will be able to install and use SPSS Software.
- Students will be able to apply various SPSS techniques in order to solve real life problems.
- Students will be able to process and analyse the data in order to extract information.
- From this course students will come to know how to analyse statistical data using SPSS software.