

Tentative Schedule
Eight Days National Workshop on Research Methodology & Statistical Analysis Using IBM SPSS

Date	Session-I	Session-II	T e a	Session-III
	1.30-3.00	3.00-4.30		4.45-6.15
2 July 2014	Inaugural Session	<u>Research Methodology : Conceptual Framework</u> <ul style="list-style-type: none"> • Meaning, Objectives, Purpose of Research • Types of Research 		<u>Research Process</u> <ul style="list-style-type: none"> • Primary Stages of Research Process • Steps in Research Process: Problem identification, Essentials of Review of literature, Development of hypothesis etc • Types of Hypothesis, Level of Significance
3 July 2014	<u>Sampling Design</u> <ul style="list-style-type: none"> • Meaning, Steps in Sampling Process • Sampling Methods • Sampling Error • Standard Error • Sampling Distribution 	<u>Attitude Measurement & Scaling Techniques-I</u> <ul style="list-style-type: none"> • Meaning, Nature & Importance of attitude • Attitude measurement • Measurement Scales • Test of Good Measurement • Scale Construction Techniques • Classification of Scaling Techniques 		<u>Attitude Measurement & Scaling Techniques-II</u> <ul style="list-style-type: none"> • Comparative Scaling Techniques (eg: Pair-wise, Rasch Model, Rank Order, Bogardus Social Distance Scale, Q-Sort, Guttman, Constant Sum Scale, Magnitude Estimation etc.) • Non Comparative Scaling Techniques (eg: Continuous Rating Scale, Likert Scale, Phrase Completion Scale, Semantic Differential Scale, Staple Scale, Thurstone Scale, etc.)
4 July 2014	<u>Methods of Data Collection</u> <ul style="list-style-type: none"> • Types of Data • Secondary Data Collection Methods • Primary Data Collection 	<u>Editing, Coding and Classification of Data</u> <ul style="list-style-type: none"> • Meaning, regions and Objectives of Data Editing • Editing Rules • Types of Data Editing 		<u>Descriptive Statistics, Tabulation & Presentation of data Using SPSS</u> <ul style="list-style-type: none"> • Descriptive Statics- Mean, Median, Variance, Range, Standard Deviation, Skewness, Kurtosis etc. • Types of Tabulation, Cross Tabulation, Testing Goodness of data

	<p>Methods</p> <ul style="list-style-type: none"> • Collection of Data through questionnaire • Questionnaire designing process • Structure of the questionnaire • Qualities of a good questionnaire • Preliminary decisions in good questionnaire design 	<ul style="list-style-type: none"> • Data Errors • Approaches to start coding & Coding Techniques • Data Classification in Research 	<ul style="list-style-type: none"> • Graphical presentation of data • Types of graphs • Data Management using SPSS
5 July 2014	<p><u>Testing of Hypothesis- Parametric Tests (Using SPSS)</u></p> <ul style="list-style-type: none"> • Basic Concepts of Hypothesis Testing • One Sample t Test • Independent Sample t Test • Paired Sample t Test • One Way Anova 	<p><u>Testing of Hypothesis- Non- Parametric Tests (Using SPSS)</u></p> <ul style="list-style-type: none"> • Chi-Square Test • Wilcoxon Signed Rank Test • Run Test • Mann-Whitney U Test • Median Test etc. 	<p><u>Multivariate Analysis-I</u></p> <ul style="list-style-type: none"> • Correlation Analysis • Regression Analysis <p>Correlation and Regression Analysis using SPSS</p>
6 July 2014	<p><u>Multivariate Analysis-II</u></p> <ul style="list-style-type: none"> • Correlation and Regression Analysis using SPSS • Identification of Multicollinearity, Corrections. • Identification of Autocorrelation Problem 	<p><u>Multivariate Analysis-III</u></p> <p>Dummy Variable Regression Analysis-I</p> <ul style="list-style-type: none"> • Concept of Dummy Variable • Need of Dummy Variables • Application of Dummy Variable regression analysis • Dummy Variable Trap 	<p><u>Multivariate Analysis-IV</u></p> <p>Dummy Variable Regression Analysis-II</p> <p>Dummy Variable Regression Analysis using STATA/SPSS-AMOS/Eviews- Some Special Cases</p>
7 July 2014	<p><u>Factor Analysis I</u></p> <ul style="list-style-type: none"> • Factor Analysis: Basic Concepts • Factor Analysis & Cluster Analysis using SPSS-AMOS 	<p><u>Factor Analysis II</u></p> <p>Factor Analysis Using SPSS-AMOS - Special Cases</p>	<p><u>Factor Analysis III</u></p> <p>Factor Analysis Using SPSS-AMOS - Special Cases</p>

8 July 2014	<p><u>Introduction to some other Multivariate Models using SPSS- I</u></p> <ul style="list-style-type: none"> • Multivariate Analysis of Variance (MANOVA) • Multidimensional Scaling 	<p><u>Introduction to some other Multivariate Models using SPSS- II</u></p> <ul style="list-style-type: none"> • Conjoint Analysis • Canonical Correlation 	<p><u>Academic Writing</u></p> <ul style="list-style-type: none"> • Meaning and types of academic writing • Challenges in Academic Writing • Papers for Journals & Preparation of Reports
9 July 2014	<p><u>Elements of writing</u></p> <ul style="list-style-type: none"> • Introduction, Literature Review, Methods • Organising and Presenting an Argument • Discussion, Conclusions, Abstract (for papers) • Differences between papers, reports and books in above • Quantitative: Data presentation, analyses and discussion • Analysis of Data and results, discussion and conclusion. 	<p><u>Ethics in Academic Writing</u></p> <ul style="list-style-type: none"> • Meaning and Seriousness of Plagiarism • Different Types of Plagiarism • How to Prevent Plagiarism • Importance of adhering to rules for Referencing / Citation 	<p><u>Valediction</u></p>