

M.Com - I
Semester No. II
0901204 Research Methodology

Course Content:

Module No.	Topics / Chapters Name
I	<p>Introduction to Research:</p> <ul style="list-style-type: none"> • Meaning • Nature and Scope of Business Research • Types of Research: Basic Research, Pure Research, Applied Research, Modern Scientific approach to Research, Research in Business • Research process • Structuring a Research proposal • Research Design: Sampling Design, Survey Design, Statistical design, Operational Design • Research Report • Evaluation of a Research study.
II	<p>Data Collection and Description:</p> <ul style="list-style-type: none"> • Types of Data : Primary Vs. Secondary Data ,Time series Vs. Cross sectional Data , Panel Data • Sources of secondary data • Methods of Primary data collection , • Editing Coding , Identifying missing observations and outliers • Classification and Tabulation of data • Sample Study , Features of a Good sample, Determination of sample size , Sampling and Non-sampling errors • Probability sampling methods : SRSWR , SRSWOR, Systematic sampling, Proportionate and disproportionate stratified sampling, Cluster sampling, Area Sampling , Two stage sampling ,Multistage sampling , PPS Sampling , Sequential Sampling • Non-probability sampling methods: Conveyance Sampling , Purposive sampling , Statistical judgment, Quota Sampling, Snowball sampling (Only description of the methods and their applications to practical situations)

III	<p>Techniques of Data Analysis:</p> <ul style="list-style-type: none"> • Overview of probability theory • Concept of a Frequency distribution and a probability distribution • Characterizing a frequency distribution and a probability distribution : Concept of Raw and Central Moments, Basic concepts and applications of the measures of Central Tendency, Dispersion, Skewness and Kurtosis • Measures of Association : Bivariate correlation analysis , Rank Correlation, Probable Error of Correlation Coefficient, Simple Linear Regression, Concept of Coefficient of Determination and its interpretation • Concepts of Point and Interval estimation, Confidence level, Confidence Interval, Level of significance, Statistical Testing of Hypothesis, Power of the test, Type-I and Type- II Errors, Null and Alternate Hypotheses, One Tailed andv Two Tailed tests, Properties of Normal Distribution and their applications in hypothesis testing, Large and Small Sample Tests.
IV	<p>Business Forecasting</p> <ul style="list-style-type: none"> • Need of Forecasting • History of Forecasting, • Types of Forecasts, Forecasting Process • Time-Series Forecasting : Components and models of time series • Methods of determination of Long-term trend : Method of Moving Averages, Simple Exponential Smoothing and Linear Least Squares Trend, Holt's and Winter's exponential Smoothing methods • Forecasting with multiple predictor variables : Multiple Regression model, Interpretation of Computer Output for Multiple Regression Analysis, Co-efficient of Determination and its interpretation, Measuring forecasting error, Choice of an appropriate forecasting technique.