I> Course Content:

Semester	II
Subject	Business Research Methods
Course Code	MMSC201
Credits	4
Duration	60 hours

Module (Syllabus as per new Syllabus):

Sr. No.	Content	Course Outcomes	Content Delivery
1	**Introduction to Research:** What is research, objectives of research, types of research, difference between basic and applied research, research approaches, criteria for good research, research methods vs research methodology, Social research, social research approaches. Research applications in social and business sciences, and research process.	MMSC201.1	Lecture and Interactive Teaching Research Paper Workshop
2	**Research Problem, Literature review and Formulation of Research Hypotheses:** What is research problem, problem selection, necessity of defining the problem, Management Decision Problem vs Management Research Problem; Problem identification process; Components of the research problem; Objectives of literature review, Use of literature review, search for related literature, reading the literature, importance of literature review, sources of literature, literature review gaps, Types of Research hypothesis, and important terms. Writing research proposal- Contents of a research proposal.	MMSC201.1	Lecture and Interactive Teaching Group Activity E-Learning Workshop
3	**Research Design:** Nature and Classification of Research Designs, need for research design, features of a good design, research design frame work, Induction and deduction, Dependent, independent variables. Exploratory research design, descriptive, diagnostic research design, Experimental research design.	MMSC201.1	Lecture and Interactive Teaching Workshop

4	**Sampling:** Sample design, Sampling design process, sampling and non-sampling errors, types of sampling (probability and non-probability), sample vs census, sample size decision. Determination of Sample size- Sample size for estimating population mean, Determination of sample size for estimating the population proportion	MMSC201.2, MMSC201.3	Lecture and Interactive Teaching Demonstration Workshop
5	**Attitude Measurement and Scaling:** Quantitative and qualitative data, classification of measurement scale, goodness of measurement scale, types of scale, scale classification base, scaling techniques (comparative vs non comparative scaling techniques), and criteria for good measurement.	MMSC201.2	Lecture and Interactive Teaching Workshop
6	**Data collection and Data processing:** Data collection: Primary Data; Observation methods, survey methods, questionnaire, process of questionnaire, Types of Questionnaires, Process of Questionnaire Designing; Advantages and Disadvantages of Questionnaire Method. Pilot survey, sample questionnaire, difference between questionnaire and schedule. Interviews: types of interviews. Secondary data; classification of data(internal and external data), research authentication(Methodology check and accuracy check) Data processing: Editing Field Editing (centralized in house editing) Coding- Coding Closed ended structured Questions, Coding open ended structured Questions; Classification and Tabulation of data. Data cleaning, data adjusting. [**Use of SPSS/EXCEL/JASP in Activity Based Learning is encouraged**]	MMSC201.2, MMSC201.3	Lecture and Interactive Teaching Workshop
7	**Univariate and Bivariate Analysis of Data:** Descriptive vs inferential analysis, descriptive analysis of univariate data (Missing data, analysis of multiple responses, grouping large data), descriptive analysis of bivariate data (cross-tabulation), calculating rank order, data transformation. Microsoft EXCEL: Working in the spreadsheet, creating a worksheet **Reliability test-Cronbach alpha** [**Use of SPSS/EXCEL/JASP in Activity Based Learning is encouraged**]	MMSC201.4	Lecture and Interactive Teaching Workshop
8	**Testing of Hypothesis:** Concepts in Testing of Hypothesis – Steps in testing of hypothesis, Test Statistic for testing hypothesis about population mean; Tests concerning Means- the case of single population; Tests for Difference between two population means; Use of SPSS in testing Hypothesis. Parametric and non-parametric test Z-test, t-test, f-test, One sample test, Two independent sample tests, two related samples test.	MMSC201.4	Lecture and Interactive Teaching Workshop

	[**Use of SPSS/EXCEL/JASP in Activity Based Learning is encouraged**]		
9	**Analysis of variance:** The ANOVA techniques, basic principles, one way ANOVA, Two way ANOVA, ANOCOVA, MANCOVA [**Use of SPSS/EXCEL/JASP in Activity Based Learning is encouraged**]	MMSC201.4	Lecture and Interactive Teaching Workshop
10	**Chi-Square Tests:** Chi square test for the Goodness of Fit; Chi square test for the independence of variables; Chi square test for the equality of more than two population proportions [**Use of SPSS/EXCEL/JASP in Activity Based Learning is encouraged**]	MMSC201.4	Lecture and Interactive Teaching Workshop
11	**Data analysis:** Statistical analysis, multivariate analysis, correlation analysis, regression analysis, Principal component analysis. Cluster Analysis [**Use of SPSS/EXCEL/JASP in Activity Based Learning is encouraged**]	MMSC201.4	Lecture and Interactive Teaching Workshop
12	**Research Report Writing and Ethics in research:** Need for effective documentation, types of research report, report preparation and presentation, report structure, general tips for writing research report, presentation of data, bibliography and references. Guidelines for presenting tabular data, Guidelines for visual Representations. Meaning of Research Ethics; Clients Ethical code; Researchers Ethical code; Ethical Codes related to respondents; Responsibility of ethics in research Plagiarism check and understanding consequences of unethical practices [Suggested Activity **Research paper writing; Use of Plagiarism software**]	MMSC201.5	Lecture and Interactive Teaching Workshop
13.	Research Theme Based Research Papers / Presentation	MMSC201.5	Group Activity

II> Course Outcomes

Course Code	Course Outcomes Students will be able to….	Cognition
MMSC201.1	Identify research problem and develop research hypothesis on the basis of review of literature and research design	APPLY
MMSC201.2	Construct the research process which includes research flow charts and organize the various attitude & measurement scales, Questionnaire design, and various sampling techniques	APPLY
MMSC201.3	Understand the methods of data collection with application in different research designs and demonstrate knowledge for proper sampling design and data processing methods	APPLY
MMSC201.4	Apply modern statistical tools as univariate & bivariate analysis, Chi-square, and ANOVA to analyse and to evaluate the data applying critical thinking abilities for given research problems/questions	APPLY
MMSC201.5	Prepare and Analyse/Evaluate various research reports maintaining ethical practices to solve business problems.	CREATE

Program Outcomes

PO1: Apply knowledge of management theories and practices to solve business problems

PO2: Foster Analytical and critical thinking abilities for data-based decision making

PO3: Ability to develop Value based Leadership ability.

PO4: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.

PO5: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.

Text Books

Sr. No.	Books
1.	Business Research Methods – Cooper Schindler
2.	Research Methodology Methods & Techniques – C.R. Kothari
3.	Statistics for Management – Richard L Levin
4.	Research Methods for Business: A Skill Building Approach - Uma Sekaran, Roger Bougie

Reference Books

Sr. No.	Books
1.	D. K. Bhattacharya: Research Methodology (Excel)
2.	P. C. Tripathy: A text book of Research Methodology in Social Science
3.	Sultan Chand Saunder: Research Methods for business students (Pearson)
4.	Marketing Research –Hair, Bush, Ortinau (2nd edition Tata McGraw Hill)
5.	Business Research Methods – Alan Bryman& Emma Bell – Oxford Publications
6.	Business Research Methods – Naval Bajpai – Pearson Publication
7.	Business Research Methods- S N Murthy and U Bhojanna, Excel books
8.	Research Methodology Methods & Techniques – C.R.Kothari and Gaurav Garg, New age international limited
9.	Research Methodology- S.S.Vinod Chandra, S.Anand Hareendran,-Pearson
10.	Research Methodology-Dr.Prasant Sarangi-Taxmann Publications pvt.ltd.
11.	Business Research Methods- Cooper Schindler, JK sharma-McGraw Hill