

# Savitribai Phule Pune University

(Formerly University of Pune)

## Syllabus for M.Phil./Ph.D. (PET) Entrance Exam : Commerce

### Research Methodology

#### **1. Foundations of Research:**

**Research:** Definition, Objectives of Business Research, Characteristics of good research, Research applications in functional areas of Business.

**Concept of Scientific Enquiry:** - Formulation of Research Problem, Research Question, Investigation Question.

**Steps in Research Process.**

**Research Proposal:** Elements of a Research Proposal, Drafting a Research Proposal, Evaluating a research proposal.

#### **2. Research Design:**

Concept, Features of a good research design.

Qualitative research and Quantitative research approaches, Comparison of both approaches.

**Exploratory Research Design:** Concept, Types: Qualitative techniques -Projective Techniques, Depth Interview, Experience Survey, Focus Groups, Observation.

**Descriptive Research Designs:** Concept, types and uses. Concept of Cross-sectional and Longitudinal Research.

**Experimental Design:** Concept of Cause and effect, Causal relationships, Concept of Independent & Dependent variables, Concomitant variable, Extraneous variable, Treatment, Control group.

**Hypothesis:** Qualities of a good hypothesis, types of hypotheses, framing Null Hypothesis & Alternative Hypothesis. Concept of Hypothesis Testing.

#### **3. Measurement & Data:**

**Concept of Measurement:** Problems in measurement in research - Validity and Reliability. Levels of measurement - Nominal, Ordinal, Interval, Ratio.

**Attitude Scaling Techniques:** Concept of Scale, Rating Scales: Likert Scales, Semantic Differential Scales, Constant Sum Scales, Graphic Rating Scales. Ranking Scales: Paired Comparison & Forced Ranking.

**Types of Data - Secondary Data:** Definition, Sources, Characteristics, Issues to be considered for secondary data, sufficiency, adequacy, reliability, consistency; Data mining, Big data.

**Types of Data - Primary Data:** Definition, advantages and disadvantages over secondary data,

**Data collection Methods:** Questionnaire, Schedule, Personal Interviews, Telephonic survey, Email/Internet survey, Focus group study.

#### **4. Sampling:**

**Basic Concepts:** Defining the Universe, Concepts of Statistical Population, Sample, Characteristics of a good sample. Sampling Frame, Sampling errors, Non Sampling errors, Methods to reduce the errors.

**Probability Sample:** Simple Random Sample, Systematic Sample, Stratified Random Sample, Area Sampling & Cluster Sampling.

**Non Probability Sample:** Judgment Sampling, Convenience Sampling, Purposive Sampling, Quota Sampling & Snowballing Sampling methods. Determining size of the sample - considerations in sampling and sample size.

### **5. Data Analysis and Interpretation & Report Writing:**

**Data Analysis :** Editing, Coding, Univariate analysis – Tabular representation of data, frequency tables, Construction of frequency distributions and their analysis in the form of measures of central tendency ,Mean, Median and Mode; their relative merits and demerits.

**Graphical Representation of Data:** Appropriate Usage of Bar charts, Pie charts, Histogram, Leaf and stem, Candle stick, Box plots.

**Bivariate Analysis:** Cross tabulations, Use of percentages, Bivariate Correlation Analysis - meaning & types of correlation, .Karl Pearson’s coefficient of correlation and Spearman’s Rank Correlation: Scatter plots, Chi-square test including testing hypothesis of association, association of attributes.

**Linear Regression Analysis:** Meaning and two lines of regression; relationship between correlation and regression co-efficient.

**Test of Significance:** Small sample tests: t (Mean, proportion) and F tests, Z test, Non parametric tests: Binomial test of proportion, Randomness test; Analysis of Variance: One way and two□way Classifications.

**Research Report:** Research Ethics, Structure of Research report, Report writing and Presentation. Referencing styles and citation.

## **Subject Concerned Syllabus Commerce**

### **1. Business Administration-**

- Principles of Management
- Functions of management: Planning, Organizing, Staffing, controlling, Communication,Leadership, Motivation
- Corporate Governance
- Corporate Social Responsibilities

### **2. Marketing –**

- Marketing Task, Concept, Tools
- Marketing Environment
- Consumer Behaviour and Market Segmentation
- Product and Pricing Decisions
- Direct and Online Marketing

### **3. Business Environment-**

- Legal, Political and Economic Environment
- E-Commerce
- E-Governance
- Corporate Governance
- Social Responsibilities of Business
- Public and Private Partnership (PPP)
- Knowledge Management

#### 4. **Accountancy-**

- Accounting Concepts
- Accounting Conventions
- Financial Statements
- Accounts of Non Trading Concerns
- Company Accounts – Issue of Shares
- Management Accounting – Ratio Analysis
- Income Tax – Concepts, Computation and Tax Planning by individuals

#### 5. **Cost and Works Accounting -**

- Elements of Cost
- Classification of Cost
- Cost Unit
- Cost Centre
- Methods of Costing
- Techniques of Costing
- Cost Audit

#### 6. **Indian Companies Act-**

- Formation and Incorporation of Companies
- Memorandum of Association
- Articles of Association
- Prospectus
- Consumer Protection Act
- Negotiable instrument Act
- Sale of Goods Act

#### 7. **Insurance and Transport-**

##### *Insurance*

- Introduction
- Types of Insurance
- Principles
- Actuarial
- Role of IRDA

##### *Transport-*

- Transport
- Transport system in India
- Documentation in Transit and Transport
- Role of Transport in Indian Economic Growth

#### 8. **Business Economics-**

- Nature and uses of Business Economics
- Concept of Profit and Wealth Maximisation
- Demand Analysis
- Elasticity of Demand
- Curve Analysis

- Law of Demand
- Cost Revenue
- Price
- Determination in Different Market Situation
- Pricing Strategy

#### **9. Banking-**

- Importance of Banking to Business
- Types of Banks and their functions
- Role and functions of RBI

#### **10. Co-operation and Rural Development**

##### *Co-operation*

- Concept and Principles of Co-operation
- Co-operative Credit System
- Co-operative Banks

##### *Rural Development*

- Rural Devolvement
- Concepts and Approaches
- Role of Govt. agencies in Rural Development