

# **SYLLABUS FOR PH.D. ENTRANCE EXAMINATION 2020-21**

(Common for both Management & Commerce)

# Faculty of Business Studies & M Com.

PART -A: Research Methodology (Weightage 50%)

### **UNIT - 1**

# **Research Methodology:**

Introduction, Meaning of Research, Objectives of Research, Types of Research, Research Approaches, Significance of Research, Research Methods versus Methodology, Research and Scientific Method, Research Process, Criteria of Good Research, Problems Encountered by Researchers in India. Defining the Research Problem: Research Problem, Selecting the Problem, Necessity of Defining the Problem, Technique Involved in Defining a Problem.

#### **UNIT - 2**

## **Reviewing the literature:**

Place of the literature review in research, Bringing clarity and focus to research problem, Improving research methodology, Broadening knowledge base in research area, Enabling contextual findings, Review of the literature, searching the existing literature, reviewing the selected literature, Developing a theoretical framework, Developing a conceptual framework, Writing about the literature reviewed. Research Design: Meaning of Research Design, Need for Research Design, Features of a Good Design, Important Concepts Relating to Research Design, Different Research Designs, Basic Principles of Experimental Designs, Important Experimental Designs.

## **UNIT - 3**

## **Design of Sample Surveys:**

Design of Sampling: Introduction, Sample Design, Sampling and Non-sampling Errors, Sample Survey versus Census Survey, Types of Sampling Designs. Measurement and Scaling: Qualitative and Quantitative Data, Classifications of Measurement Scales, Goodness of Measurement Scales, Sources of Error in Measurement, Techniques of Developing Measurement Tools, Scaling, Scale Classification Bases, Scaling Technics, Multidimensional Scaling, Deciding the Scale. Data Collection: Introduction, Experimental and Surveys, Collection of Primary Data, Collection of Secondary Data, Selection of Appropriate Method for Data Collection, Case Study Method.

## **UNIT - 4**

#### **Data Preparation:**

Data Preparation Process, Some Problems in Preparation Process, Missing Values and Outliers, Types of Analysis, Statistics in Research. Descriptive Statistics: Measures of Central Tendency, Measures of Dispersion, Measures of Skegness, Kurtosis, Measures of Relationship, Association in case of Attributes, Other Measures.

## **UNIT - 5**

## **Sampling and Statistical Inference:**

Parameters and Statistic, Sampling and Non- Sampling Errors, Sampling Distribution, Degree of Freedom, Standard Error, Central Limit Theorem, Finite Population Correction, Statistical Inference.

### **UNIT - 6**

# **Testing of Hypotheses:**

Hypothesis, Basic Concepts Concerning Testing of Hypotheses, Testing of Hypothesis, Test Statistics and Critical Region, Critical Value and Decision Rule, Procedure for Hypothesis Testing, Hypothesis Testing for Mean, Proportion, Variance, for Difference of Two Mean, for Difference of Two Proportions, for Difference of Two Variances, P-Value approach, Power of Test, Limitations of the Tests of Hypothesis. Chi-square Test: Test of Difference of more than Two Proportions, Test of Independence of Attributes, Test of Goodness of Fit, Caution in Using Chi Square Tests.

### **UNIT - 7**

## **Analysis of Variance (ANOVA):**

The ANOVA Technique, Basic Principle of ANOVA, One way ANOVA, Two way ANOVA, Latin – square Design, Analysis of Co- Variance, Assumptions in Co-Variance.

## UNIT - 8

# **Linear Regression Analysis:**

Dependent and Independent Variables, Simple Linear Regression Model, Multiple Linear Regression Model, Problem of Multicolinearity, Qualitative Explanatory Variables. Factor Analysis: The Mathematical Basis, Important Methods of Factor Analysis, Rotation in Factor Analysis, R – Type and Q – Type Factor Analysis, Merits and Demerits of Factor Analysis.

## **UNIT - 9**

## **Probability:**

Random Experiments, Sample Spaces, Events, The Concept of Probability, The Axioms of Probability, Theorems on Probability, Assignment of Probabilities, Conditional Probability, Theorems on Conditional Probability, Independent Events, Bayes'Theorem. Random Variables, Discrete Probability Distributions, Distribution Functions for Random Variables, Distribution Functions for Discrete Random Variables, Continuous Random Variables, Graphical Interpretations, Joint Distributions Independent Random Variables, Change of Variables, Probability Distributions of Functions of Random Variables, Convolutions, Conditional Distributions.

#### **UNIT - 10**

The Binomial Distribution, Properties of the Binomial Distribution, The Normal Distribution, Properties of the Normal Distribution, Relation Between Binomial and Normal Distributions, The Poisson Distribution, Properties of the Poisson Distribution, Relation Between the Binomial and Poisson Distributions, Relation Between the Poisson and Normal Distributions, The Hypergeometric Distribution.

#### **Reference Books:**

- (1) Research Methodology Methods and Techniques, C.R. Kothari, Gaurav Garg, New Age International Publishers,4th Edition, 2019.
- (2) Research Methodology a step-by-step guide for beginners, Ranjit Kumar, SAGE Publications Ltd, 3rd Edition, 2011. [For Unit -2, Reviewing the Literature]
- (3)Probability and Statistics, Murray R. Spiegel, Schaum's Outline Series, McGraw-Hill, 4th Edition, 2013.[For Unit -9 and Unit 10]

# **PART -B : Commerce & Management** (Weightage 50%)

### Unit 1:

# Management-

Definition, Nature, Purpose and Functions; Principles of Management- Planning, Nature, Process, Types and Steps; Organizing- Structure, Span of Management, Centralization, Decentralization; Empowerment; Staffing – Overview; Directing and Controlling- Process, Types of Control; MBO; Management Guru's, Management Theories, Managerial Grid.

#### Unit 2:

# **Organization Behavior -**

Nature, Learning; Personality- Definition, Traits, Determinants; Attributes of Personality, Evolution & Organizational Behavior in India; Perception-Meaning, Factors Influencing Perception, Errors of Perception; Decision Making, Values and Attitudes, Motivation, Morale, Conflict, Negotiations & Stress Management, Power and Politics.

### **Unit 3:**

## **Managerial Economics –**

Meaning, Nature, Scope; Law of Demand – Elasticity of Demand, Law of Supply, Elasticity of Supply; Perfect Competition, Monopoly, Oligopoly, Monopolistic Competition; Profits – Long term and Short term Profits; Cost Volume Profit Analysis, Break Even Point.

#### **Unit 4:**

## Accounting-

Definition, Types of accounting; Accounting concepts and conventions of Accounting; Capital and Revenue Expenditure and Receipt; Accounting Equation; Human Resource Accounting, Forensic Accounting, Sustainability Reporting; Accounting Standards and International Financial Reporting System.

#### Unit 5:

## **Marketing Management-**

Meaning, Importance, Marketing Management Process, Marketing Mix, Marketing Opportunities, challenges & Ethics, E-Marketing, Marketing Research, Marketing Process, Marketing Environment, Segmentation, Targeting, Positioning, Consumer Behaviour, Marketing Research, Demand Forecasting, Competition, Marketing Strategy, Customer Satisfaction.

#### Unit 6:

## **Human Resource Management -**

Definition, Nature, Scope, Importance and Evolution of the concept of HRM, Managerial and operative functions of HRM- Man power Planning, Recruitment, Selection, Training and Development, Performance Management System, HR Competency.

#### **Unit 7:**

### Financial Management -

Definition, Scope, Functions, Objectives, Time Value of Money; Financial Markets; Financial Instruments, Financial Institutions and Financial Services, Behavioural Finance.

#### Unit 8:

#### **Business Statistics-**

Definition, functions, scope; Measures of Central Tendency - Mean, Median, Mode, Geometric Mean, Harmonic Mean. Measures of dispersion: Range – Quartile Deviation, Standard Deviation. Research Methodology - Sampling and data collection, Definition, Types of sampling, Meaning of data, types of data, Methods of data collection, Time Series Analysis.

### Unit 9:

# Entrepreneurship -

Meaning, Functions, Types; Business Planning – Process, Types of plans; Institutions Supporting Entrepreneurs – SIDBI, NABARD, IDBI, SIDCO; Venture Capital in India – Nature, Importance, Process; Social Entrepreneurship – Need, types, Make In India, Smart India, Digital India, EDI.

### **Unit 10:**

## **Business Research-Definitions**

Nature, Scope; Research Process, Research Design, Exploratory Research, Primary, Secondary Data Collection and Analysis, Hypothesis Formulation, Questionnaire Construction, Basic Scales, Sampling, Data Preparation and Preliminary Analysis, Factor Analysis, Regression Analysis, Cluster Analysis, Conjoint Analysis, Reporting and Concluding Integration.

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