

Rajiv Gandhi Institute of Petroleum Technology

Department of Management Studies

Syllabus for PhD Written Test 2023

Unit-1: Research Process; Research Design; Descriptive Statistics, Sampling; Sampling distributions; Data Sources, Tests of Hypothesis; Large and small samples; t z, F, Chi-square tests; Correlation and Regression analysis

Unit-2: Understanding and Managing Group Behaviour, Processes-Inter-personal and group dynamics-Communication Leadership-Managing Change-Managing conflicts. Organisational Development; Ethical issues and analysis in Management; Value based organisations; Environmental ethics; Social responsibilities of business; Corporate governance; Entrepreneurial characteristics; Motivation and competencies; Innovation and Entrepreneurship; Business Opportunity Identification; Detailed business plan preparation

Unit-3: Marketing-Concept; Nature and Scope; Marketing mix; Different environments and their influences on marketing; Understanding the customer and competition. Segmentation, Targeting and Positioning; Product Life Cycle; Brands-Meaning and Role; Brand building strategies; Share increasing strategies. Pricing objectives; Pricing concepts; Pricing methods. Product-Basic and Augmented stages in New Product Development; Promotion mix-Role and Relevance of advertising. Marketing to Organisations-Segmentation Models; Organisational buying process. Marketing control. Customer relationship management including the concept of 'Relationship Marketing' Use of internet as a medium of marketing; Managerial issues in reaching consumers/organisation through internet.

Unit-4: Human Resource Management (HRM) -Significance; Objectives; Functions; A diagnostic model; External and Internal environment Forces and Influences; Organizing HRM function. Recruitment and Selection-Sources of recruits; Recruiting methods; Selection procedure; Selection tests; Placement and Follow-up: Performance Appraisal System-Importance and Objectives; Techniques of appraisal system; New trends in appraisal system. Development of Personnel-Objectives; Determining Needs; Methods of Training & Development programs; Evaluation. Career Planning and Development-Concept of career; Career planning and development methods.

Unit-5: Fundamentals of Accounting; Preparation of Financial Statements, Income Statement and Balance Sheet; Financial Statement Analysis — Objectives and Techniques of Analysis. Ratio Analysis, Fund Flow Analysis and Cash Flow Analysis. Nature, Scope, objectives and Functions of Financial Management; Principles of Financial Management, Valuation of Securities; Pricing Theories, Capital asset pricing model and arbitrage pricing theory. Risk and return analysis. Cost of capital – concept and computation.

Unit 6: Role and Scope of Production Management; Facility Location; Layout Planning and Analysis; Production Planning and Control-Production Process Analysis; Demand Forecasting for Operations; Determinants of Product mix; Production Scheduling; Work measurement; Time and Motion Study; Statistical Quality Control. Role and Scope of Operations Research; Linear Programming; Transportation Model; Inventory Control; PERT/CPM. Concept of Supply Chains, Responsive and Efficient Supply Chains, Retail Supply and Industrial Supply Chain.