

# MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

## DEPARTMENT OF MANAGEMENT STUDIES

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### SYLLABUS FOR PHD (MANAGEMENT) ENTRANCE TEST

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#### **General Management & Strategy:**

Concept, Process, Theories and Approaches, Management Roles and Skills Functions – Planning, Organizing, Staffing, Coordinating and Controlling; Decision Making – Concept, Process, Techniques and Tools; Organisation Structure and Design – Types, Authority, Responsibility, Centralisation, Decentralisation and Span of Control; Managerial Economics – Concept & Importance Demand analysis – Utility Analysis, Indifference Curve, Elasticity & Forecasting; Market Structures – Market Classification & Price Determination; National Income – Concept, Types and Measurement Inflation – Concept, Types and Measurement; Business Ethics & CSR Ethical Issues & Dilemma Corporate Governance Value Based Organisation, International business and International trade.

Strategic Management – Concept, Process, Decision & Types; Strategic Analysis – External Analysis, PEST, Porter's Approach to industry analysis; Internal Analysis – Resource Based Approach, Value Chain Analysis Strategy Formulation – SWOT Analysis; Corporate Strategy – Growth, Stability, Retrenchment, Integration and Diversification, Business Portfolio Analysis – BCG, GE Business Model, Ansoff's Product Market Growth Matrix; Strategy Implementation – Challenges of Change, Developing Programs McKinsey 7s Framework

#### **Human Resources & Organisational Behaviour:**

Human Resource Management – Concept, Perspectives, Influences and Recent Trends, Human Resource Planning, Recruitment and Selection, Induction, Training and Development, Job Analysis, Job Evaluation and Compensation Management

Significance & Theories of Individual Behaviour – Personality, Perception, Values, Attitude, Learning and Motivation; Group Behaviour – Team Building, Leadership, Group Dynamics Interpersonal Behaviour & Transactional Analysis; Organizational Culture & Climate; Work Force Diversity & Cross Culture Organisational Behaviour; Emotions and Stress Management; Organisational Justice and Whistle Blowing, Theories of psychology.

Strategic Role of Human Resource Management, Competency Mapping & Balanced Scoreboard; Career Planning and Development; Performance Management and Appraisal; Organization Development, Change & OD Interventions; Talent Management & Skill Development; Employee Engagement & Work Life Balance; HR Analytics

#### **Accounting & Finance:**

Accounting Principles and Standards, Preparation of Financial Statements; Financial Statement Analysis – Ratio Analysis, Funds Flow and Cash Flow Analysis, DuPont Analysis; Preparation of Cost Sheet, Marginal Costing, Cost Volume Profit Analysis; Standard Costing & Variance Analysis

Financial Management – Concept & Functions; Capital Structure – Theories, Cost of Capital, Sources and Finance; Budgeting and Budgetary Control, Types and Process, zero base

Budgeting; Leverages – Operating, Financial and Combined Leverages, EBIT–EPS Analysis, Financial Breakeven Point & Indifference Level.

Value & Returns – Time Preference for Money, Valuation of Bonds and Shares, Risk and Returns; Capital Budgeting – Nature of Investment, Evaluation, Comparison of Methods; Risk and Uncertainty Analysis; Dividend – Theories and Determination; Mergers and Acquisition – Corporate Restructuring, Value Creation, Merger Negotiations, Leveraged Buyouts, Takeover; Portfolio Management – CAPM, APT; Derivatives – Options, Option Payoffs, Option Pricing, Forward Contracts & Future Contracts; Working Capital Management – Determinants, Cash, Inventory, Receivables and Payables Management, Factoring International Financial Management, Foreign exchange market; Finance Analytics

### **Marketing & Consumer Behaviour:**

Marketing – Concept, Orientation, Trends and Tasks, Customer Value and Satisfaction; Market Segmentation, Positioning and Targeting; Product and Pricing Decision – Product Mix, Product Life Cycle, New Product development, Pricing – Types and Strategies; Place and promotion decision – Marketing channels and value networks, VMS, IMC, Advertising and Sales promotion; Theories and Models of Consumer Behaviour; Brand Management – Role of Brands, Brand Equity, Equity Models, Developing a Branding Strategy; Brand Name Decisions, Brand Extensions and Loyalty; Logistics and Supply Chain Management, Drivers, Value creation, Supply Chain Design; Designing and Managing Sales Force, Personal Selling; Service Marketing – Managing Service Quality and Brands, Marketing Strategies of Service Firms Customer; Relationship Marketing – Relationship Building, Strategies, Values and Process; Retail Marketing – Recent Trends in India, Types of Retail Outlets; Emerging Trends in Marketing – Concept of e-Marketing, Direct Marketing, Digital Marketing and Green Marketing; Marketing Analytics

### **Research Methods and Statistics for Management**

Introduction to business research methods; Principles of scientific enquiry; Measurement (qualitative and quantitative); Scaling; Reliability and Validity; Sampling – Probabilistic & Non-probabilistic techniques; Sample size determinations; Primary and Secondary data – Sources and Collection tools; Data collection design issues

Role of statistics and analytics in business decision making and gaining competitive advantages; Defining and understanding data; Summarizing data; describing data and identifying patterns; probability distributions; sampling and central limit theorem; making statistical inferences samples; data; hypothesis testing and confidence intervals; linear regression analysis and forecasting; Understanding and modelling time series data; Reporting statistical analyses.

### **Applications of Information Technology/ Information Systems:**

Information systems – Core concepts and classification; Organizational strategy and Information systems; information systems and managerial decision making; information system governance; Infrastructure requirements for developing information systems, Planning & developing information systems; Information systems as strategic enablers; Issues in managing Information and system security.

Introduction to challenges and opportunities in new digital world; Changing nature of technology; Changing strategic levers in digital age; Crafting digital vision of organization;

Reimagining in digital age – business scope & models, value chains, customer behaviour & relationships, human capital; Digital transformation – Framework, enablers, and implementation

### **Operations and Supply Chain Management**

Operations – The origins of operations research, overview of operations research modelling approach, introduction to linear programming, solving linear programming, duality theory, sensitivity analysis, transportation and assignment problem, network optimization problem, dynamic programming, integer programming, non-linear programming, metaheuristics, game theory, decision analysis, Markov chains, queueing theory, inventory theory, Markov decision processes, simulation.

Supply chain Management – Importance of supply chain, process view of supply chain, competitive and supply chain strategies, achieving strategic fit, drivers of supply chain performance, facilities, inventory, transportation, sourcing, pricing, obstacle to achieving strategic fit, role of distribution in supply chain, The role of network design in the supply chain, framework for network design decision, facility location and capacity allocation, impact of uncertainty on network design forecasting in supply chain, managing predictable variability, economies of scale, safety inventory, sourcing decisions, pricing and revenue management, IT in supply chain, and coordination in supply chain, Supply chain Analytics.