## **National Institute of Technology**

## **Department of Management Studies**

## **Syllabus of the PhD Admission Test (MBA)**

Sl no	Broad sections	Topics
1	Research Methodology (Compulsory)	Meaning, Objectives, Concept of theory, empiricism, deductive and inductive theory. Problems and hypothesis, Research Design, Characteristics of scientific method, Research methods vs. Methodology. Types of research – Descriptive vs. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical, concept of applied and basic research process, criteria of good research and concept of measurement, Validity and Reliability. Levels of measurement, Research ethics
2	Statistics for management (Compulsory)	Measures Of Central Tendency and Dispersion, Probability Distribution – Binominal, Poison, Normal and Exponential, Basics of Sampling, Hypothesis Testing – Procedure; T, Z, F, Chi-square tests, ANOVA, Correlation and Regression (Multiple) Analysis, Concept of Multivariate analysis
3	<b>Specialisations</b>	(ANY ONE)
A	Financial Management	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 Uncertainly Analysis Dividend – Theories and Determination Mergers and Acquisition – Corporate Restructuring, Value Creation, Merger Negotiations, Leveraged Buyouts, Takeover Portfolio Management – CAPM, APT
В	Marketing Management	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  Consumer and Industrial Buying Behaviour: 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;
		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 International Marketing – Entry Mode Decisions, Planning Marketing Mix for International Markets
С	Human Resource Management & Organizational Behaviour	Organisational Behaviour – Significance & Theories 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, 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  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, Industrial Relations: Disputes & Grievance Management, Labour Welfare and Social Security Trade Union & Collective Bargaining International Human Resource Management – HR Challenge of International Business Green HRM
D	Systems & Operations Management	Facility Location and Layout – Site Selection and Analysis, Layout – Design and Process Enterprise Resource Planning – ERP Modules, ERP implementation Scheduling; Loading, Sequencing and Monitoring Quality Management and Statistical Quality Control, Quality Circles, Total Quality Management – KAIZEN, Benchmarking, Six Sigma; ISO 9000 Series Standards, LPP, Assignment, Transportation, Simplex, Sensitivity Analysis, Big-M, Two Phase method, Game Theory, Queuing Decision Theory, PERT / CPM, Logistics and Supply Chain Management, Drivers, Value creation, Supply Chain Design, Information Technology – Use of Computers in Management Applications; MIS, DSS Artificial Intelligence and Big Data, Data Warehousing, Data Mining and Knowledge Management – Concepts Managing Technological Change