

Harcourt Butler Technical University, Kanpur

Syllabus of “Management” for Written Test to the Post of Assistant Professor (Contractual) under SFS Mode

UNIT-I

Management – Concept, Process, Theories and Approaches, Management Roles and Skills Functions, Planning, Organizing, Staffing, Coordinating and Controlling. Communication – Types, Process and Barriers. Decision Making

– 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

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

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

Unit – II

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

Unit III (Marketing)

STP, Marketing Mix, Customer Value Creation, Market Orientation, Competitive Positioning, Strategic Marketing Planning. Consumer Psychology, Decision-Making Processes, Customer Insights, Sensemaking, Digital Consumer Behaviour, Consumer Neuroscience.

Brand Equity, Brand Architecture, Brand Positioning, Strategic Brand Management, Integrated Marketing Communications, Advertising Strategy, Influencer Marketing, Media Strategy, Semiotics, Luxury Branding, Customer Journey Mapping, Customer Experience Design, Customer Lifetime Value, Relationship Marketing, Loyalty Management.

Pricing Strategy, Revenue Management, Behavioural Pricing, Psychology of Promotions, Dynamic Pricing, Value-Based Pricing, Pricing Analytics and Optimization. Channel Design, Distribution Strategy, Retail Management, Modern Retail, E-Commerce, Omnichannel Retailing.

Digital Marketing Strategy, SEO, SEM, Content Marketing, Social Media Marketing, Mobile Marketing, Omnichannel Marketing, Marketing Automation, Digital Metrics and Analytics, AI in Marketing, Generative AI Applications, Recommendation Systems, Hyper-Personalization, Marketing Automation, Platform Business Models, Privacy Paradox, AI Ethics, Digital Platforms and Ecosystems.

Services Marketing, Service Quality Management, Service Design, Service Recovery, Customer Value Delivery, Healthcare Marketing, Experience-Centric Service Systems.

Marketing Research Process, Marketing Information Systems, Customer Analytics, Market Forecasting, Predictive Analytics, Conjoint Analysis, Choice Modelling, Big Data Analytics and Decision Support Systems.

Research Philosophy and Theory Development, Quantitative and Qualitative Research Methods, Survey and Experimental Design, Scale Development and Validation, EFA, CFA, CB-SEM, PLS-SEM, Mediation and Moderation Analysis, Conjoint Analysis, Customer Analytics, Machine Learning Applications, Neuromarketing Methods.

Unit-4 (Operations)

Evolution of Operations Management, Manufacturing and Service Operations, Productivity Analysis, Process Design, Process Improvement, Capacity Planning, Facility Location, Facility Layout, Lean Operations, Industry 4.0 Basics.

Competitive Priorities, Strategic Fit, Operations Capability Development, Process Choice, Global Operations Strategy, Sustainability, Digital Operations Strategy, Operations Excellence

Supply Chain Design, Procurement and Sourcing, Inventory Management, Supply Chain Coordination, Risk Management, Global Supply Chains, Sustainable Supply Chains, Supply Chain Performance Measurement. Project Life Cycle, Project Planning, Work Breakdown Structure (WBS), PERT, CPM, Resource Allocation, Project Risk Management, Agile Project Management, Monitoring and Control.

Total Quality Management (TQM), Statistical Quality Control (SQC), Control Charts, Process Capability, Six Sigma DMAIC, Lean Six Sigma, Service Quality, Continuous Improvement.

Manufacturing Strategy, Flexible Manufacturing Systems, JIT, CIM, Smart Manufacturing, IoT, Digital Twins, Automation, Robotics, Additive Manufacturing.

Sustainable Operations, Circular Economy, Green Supply Chains, Sustainable Procurement, ESG Frameworks, Carbon Footprint Management, Supply Chain Resilience, Business Continuity Planning, Risk Management.

Service Design, Service Blueprinting, Capacity and Demand Management, Waiting Line Models, Service Quality, Healthcare Operations, Retail and Banking Operations, Service Process Improvement

Unit-5 (Business Analytics)

Descriptive/Inferential statistics, probability, hypothesis testing (t, F, Z, Chi-Square), Data lifecycle, OLAP, clustering. R ecosystem, data frames, R packages, statistical testing in R. KDD process, classification (Decision Trees), clustering, R visualizations. NLP, NLTK, text mining, social network analysis, web metrics. Python, Pandas, Numpy, Matplotlib, regression analysis. supervised/unsupervised learning concepts. Naive Bayes, ANN, k-NN, k-Means, Python implementation. CNNs, RNNs, GANs, hyper-parameter optimization, neural networks.

Unit-6 (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.

Entrepreneurship Innovations in Business – Types of Innovations, Creating and Identcept and Process of Technical, Market and Financial Analysis Micro and Small-Scale Industries in India; Role of Government in Promoting SSI Sickness in Small Industries – Reasons and Rehabilitation Institutional Finance to Small Industries – Financial Institutions, Commercial Banks, Cooperative Banks, Micro Finance.