



Master of Business Administration in Supply Chain Management

Semester IV

1. Elective - IV - Principles and Techniques of Quality Management
2. Elective - V - Production Planning and Control
3. Project Report
4. Project Viva-voce
5. Elective - VI - Service Operations Management
6. Strategic Management
7. Enterprise Systems and Supply Chain Management

Enterprise Systems and Supply Chain Management

Unit 1-

Introduction: fundamentals of supply chain management, applications systems in the individual business functions.

Unit 2-

Introduction to ERP: an overview of the enterprise, ERP and related technologies, ERP– a manufacturing perspective, Vendors, consultants and users, introduction to SAP, an overview of SD, MM, PP, FI /CO Modules of SAP.

Unit 3-

SAP's SCM system: recent developments in order and SCM based on SAP systems, case studies on SCM, Internet resources for SCM.

Unit 4-

Re- engineering: an imperative for survival, implementing BPR– methodology and steps, Is re- engineering necessary?

Unit 5-

Trends in Information technology: people view, empowering people through information, managing change– the Indian paradigm.

References :

1. ERP – Alex is Leon, Leon Publishers
2. Supply Chain Management based on SAP systems, G. Knolmayer, P. Mertens and A. Zeir, Springer International Edition.
3. The one Source For Comprehensive Solutions– Using Sap R / 3 III Edition – Authored by Asap World Consutancy- PHI .
4. Introduction to SAP, an overview of SD, MM, PP, FI / CO Modules of SAP
5. An Insider's Unblased Appraisal of SAPR / 3 Management– Wiley, Coriolis – dreamtech
6. ERP, Vinod Kumar Garg and N. K. Venkitakrishnan, PHI
7. Hammer, Michael and Champy, James: Reengineering the Corporation: A manifesto for business revolution: Harper Business.

Principles and Techniques of Quality Management

Unit 1-

Introduction to Total Quality Management- Defining Total Quality Management, Basic Approaches of Total Quality Management, Gurus of Total Quality Management, TQM Framework, Awareness about the Improved Quality, Historical Review, Obstacles in Implementing TQM, Benefits of TQM.

Unit 2-

Leadership and Total Quality Management- Defining Leadership, Characteristics of Quality Leaders, Leadership Concepts, The Seven Habits of Highly Effective People, Ethics and Quality, Deming Philosophy, Role of Leaders in TQM, Implementation, Quality Control, Core Values, Concepts and Framework, Strategic Planning and Communication, Decision Making.

Unit 3-

Customer Satisfaction and Employee Involvement- Overview of Customer Satisfaction, Defining Customer, Customer Perception of Quality and Feedback from Customer, Effectively using Customer Complaints, Service Quality, Transforming Needs into Requirement of Customers and Importance of Customer Retention, Motivational Theories, Empowerment, Teams and their Effectiveness, Rewards, Recognition and Performance Appraisal, Union and Employee Involvement, Benefits of Employee Involvement.

Unit 4-

Continuous Process Improvement and Performance Measures- Perfection through Continuous Improving Process, Process, The Juran Approach to Continuous Improvement Process, Improvement Strategies, Types of Problems, Problem Solving Method, Objectives of Performance Measures, Appropriate Strategy, Presentation of Performance Measures, Quality Costs, Malcolm Baldrige National Quality Award.

Unit 5-

Benchmarking- Concept of Benchmarking, Importance of Benchmarking, Definition of Benchmarking, Important Reasons of Benchmarking, Process of Benchmarking, Deciding What to Benchmark, Benchmark Planning, Actions to Close the Gap between Benchmark, Pitfalls and Criticisms of Benchmarking.

Unit 6-

Quality Management System- ISO, Benefits of ISO Registration, ISO 9000 Series of Standards, ISO 9001 Requirements, Implementation of Quality Management System (ISO), Documentation, Internal Audits, Registration.

Unit 7-

Environmental Management System- Introduction to Environmental Management Standards, ISO 14000 Series Standards, Concept of ISO 14001, Requirements of ISO 14001, Benefits of Environmental Management Standard, Integrating ISO 14000 with ISO 9000, Relationship of Standards with Health and Safety.

Unit 8-

Quality Function Deployment and Quality by Design- Concept of Quality Function Deployment, Role of Team in Quality Function Deployment, Benefits of Quality Function Deployment, Voice of the Customer, Process of Information by Organization, House of Quality, Building a House of Quality, Quality Function Deployment Process, Concept of Quality by Design, Rationale of Implementing Quality by Design, Benefits of Quality by Design, Communication Models, Implementation of Quality by Design, Tools Used for Implementing Quality by Design.

Unit 9-

Management Tools and Statistical Process Control- Introduction of Management Tools and their Importance, Forced Field Analysis, Nominal Group Technique, Affinity Diagram, Tree Diagram, Matrix Diagram, Process Design Program Chart, Activity Network Diagram, Just in Time and Just in Case, Concept of Statistical Process Control, Pareto Diagram, Process Flow Diagram, Cause and Effect Diagram, Check Sheets, Histogram, Control Charts, Scatter Diagram.

Suggested Readings:

1. Total Quality Management by Dale H. Besterfield, Carol Besterfield- Michna.

Production Planning and Control

Unit- 1

Introduction : Definition - Objectives of Production Planning and Control – Functions of production planning and control - Elements of production control - Types of production - Organization of production planning and control department – Internal organization of department.

Unit- 2

Forecasting - Importance of forecasting - Types of forecasting, their uses – General principles of forecasting - Forecasting techniques - qualitative methods and quantitative methods.

Unit- 3

Inventory management - Functions of inventories - relevant inventory costs – ABC analysis - VED analysis - EOQ model - Inventory control systems – P-Systems and Q-Systems -

Unit- 4

Introduction to MRP & ERP, LOB (Line of Balance), JIT inventory, and Japanese concepts.

Unit- 5

Routing - Definition - Routing procedure -Route sheets - Bill of material – Factors affecting routing procedure. Schedule -definition - Difference with loading

Unit- 6

Scheduling Policies - Techniques, Standard scheduling methods.

Unit- 7

Line Balancing, Aggregate planning, Chase planning, Expediting, controlling aspects.

Unit- 8

Dispatching - Activities of dispatcher - Dispatching procedure - followup – definition - Reason for existence of functions - types of followup, applications of computer in production planning and control.

References :

1. Elements of Production Planning and Control / Samuel Eilon.
2. Modern Production / Operations Management / Baffa & Rakesh Sarin.
3. Operations Management - S.N. Chary.
4. Inventory Control Theory and Practice / Martin K. Starr and David W. Miller.
5. Reliability [Engineering](#) & Quality Engineering by Dr. C. Nadha Muni Reddy and Dr. K. Vijaya Kumar Reddy, Galgotia Publications, Pvt., Limited.
6. Production Control A Quantitative Approach / John E. Biegel.
7. Production Control / Moore.
8. Operations Management / Joseph Monks.

Service Operations Management

Unit 1-

The Role of Services in an Economy- Define Service, Dependency of Manufacturing on Services, Economic Evolution, Stages of Economic Development, Nature of the Service Sector, New Experience Economy, Sources of Service Sector Growth.

Unit 2-

The Nature of Services- Service Classification, Service Package, Distinctive Characteristics of Service Operations, Classifying Services for Strategic Insights, Open System View of Services.

Unit 3-

Service Strategy- Strategic Service Vision, Understanding Competitive Environment of Services, Competitive Service Strategies, Winning Customers in the Marketplace, Competitive Role of Information in Services, Virtual Value Chain, Limits in the use of Information, Stages in Service Firm Competitiveness.

Unit 4-

New Service Development- New Service Development, Service Design Elements, Service Blue Print, Strategic Positioning through Process Structure, Taxonomy for Service Process Design, Generic Approaches to Service System Design, Customer Value Equation.

Unit 5-

Technology in Service- Technology in Service Encounter, Emergence of Self Service, Automation in Services, Internet Services, Economic of Scalability, Technological Innovation in Services.

Unit 6-

Service Quality- Defining Service Quality, Measuring Service Quality, Quality Service Design, Walk – Through Audit, Walk –Through Audit as a Diagnostic, Instrument, Achieving Service Quality, Service Recovery, Stages in Quality Development.

Unit 7-

Service Encounter- Service Encounter Triad, Service Organization, Contact Personnel, Customer, Creating a Customer Service Orientation, Service Profit chain.

Unit 8-

Supporting Facility- Servicescapes, Facility Design, Process Analysis, Facility Layout.

Unit 9-

Managing Projects- Nature of Project Management, Techniques for Project Management, Resource Constraints, Activity Crashing, Incorporating Uncertainty in Activity Times, Problems with Implementing Critical Path, Monitoring Projects.

Unit 10-

Forecasting Demand for Service and Managing Waiting Line- Subjective Models, Causal Models, Time Series Models, Inevitability of Waiting, Psychology of Waiting, Economics of Waiting, Essential Features of Queuing Systems.

Unit 11-

Service Supply Relationship- Supply Chain Management, Service Supply Relationships, Managerial Implication of Bidirectional Relationships, Sources of Value in Service Supply Relationships, Outsourcing Services, Managerial Considerations with Service Outsourcing.

Unit 12-

Managing Facilitating Goods- Inventory Theory, Order Quantity Models, Inventory Management under Uncertainty, Inventory Control System, Single –Period Model for Perishable Goods, Retail Discounting Model.

Unit 13-

Growth and Globalization of Services- Domestic Growth and Expansion Strategies, Franchising, Globalization of Services, Global Service Strategies.

Course Text: Service Management: Operations, Strategy, Information Technology by James A. Fitzsimmons, and Mona J. Fitzsimmons.

Strategic Management

Unit 1-

Overview of strategic management: origin of strategy, strategy vs structure, elements of business strategies, Strategic Management process.

Unit 2-

Environmental Analysis: Strategically relevant components of internal and external environment, Industry and competitive analysis, analysis of resources and competitive capabilities, environmental scanning techniques.

Unit 3-

Establishing organizational direction– developing strategic vision, mission and setting objectives. Strategic intent and the concept of strategic pyramid, corporate ethics and social responsibility.

Unit 4-

Generic competitive strategies– stability, expansion, retrenchment, conglomerate and their variants. Strategic and competitive advantage, new business models for global and internet economy, Strategy clusters and models relating to portfolio analysis .

Unit 5-

Strategy implementation– building core competencies and competitive capabilities, developing policies and procedures for implementation. Designing and installing supporting and rewarding systems. Evaluating and monitoring implementation.

Suggested Readings-

1. Strategy and Structure – Alfred C .Chandler
2. Strategic Management – Alex Miller and Irwin
3. Competitive Advantages: Creating and Sustaining, Superior Performance– Michael E .Porter
4. Competing for the future – Prahlad and Hammel
5. The Future of Competition– Prahlad and Venkataraman
6. Crafting and executing Strategy – Aurthor A . Thompson and others
7. The Art of Strategy– Avinash K. Dixit and Barry J. Nalebuff