# Contents

Preface List of Figures List of Tables List of Boxes

#### 1. MATERIALS MANAGEMENT

- 1.1 Introduction
- 1.2 Concepts of materials management
- 1.3 What is inventory? and management of inventories
- 1.4 Importance of Materials Management
- 1.5 Codification
- 1.6 Simplification
- 1.7 Standardisation
- 1.8 Value Analysis
- 1.9 Value Engineering
- 1.10 Vendor Analysis
- 1.11 Summary
- 1.12 Questions

### 2. SUPPLY CHAIN MANAGEMENT

- 2.1 Evolution of Supply Chain Management
- 2.2 What is SCM?
- 2.3 Functioning of SCM
- 2.4 Objectives of SCM
- 2.5 Scope of SCM
- 2.6 Importance of SCM

## VIII STRATEGIC MATERIALS & SUPPLY CHAIN MANAGEMENT

- 2.7 Supply chain drivers and obstacles
- 2.8 The complexity in SCM
- 2.9 Key issues in SCM
- 2.10 Strategic decisions in supply chain management
- 2.11 Supply chain decision and tradeoffs
- 2.12 Legal aspects in SCM
- 2.13 Customers relationship management strategy
- 2.14 Competitive Supply Chain Strategy
- 2.15 Achieving Strategic Fit
- 2.16 Summary
- 2.17 Questions

## 3. DYNAMICS IN SUPPLY CHAIN INTERVENTIONS

- 3.1 Introduction
- 3.2 Role of distribution and service levels
- 3.3 Supply Chain Interventions
- 3.4 Distribution networks in SC
- 3.5 Network Design and distribution operations in SC
- 3.6 Distribution cost component
- 3.7 Pipe line inventory
- 3.8 Centralised and decentralised control
- 3.9 Direct shipment
- 3.10 Cross docking
- 3.11 Push based Vs Pull based supply chain management
- 3.12 Summary
- 3.13 Questions

## 4. DEMAND FORECASTING IN SUPPLY CHAIN

- 4.1 Introduction
- 4.2 Value of Information
- 4.3 Demand Forecasting in Supply Chain
- 4.4 Demand Forecasting
- 4.5 Qualitative Forecasting
- 4.6 Forecast Approaches
- 4.7 IT based Forecasting Models
- 4.8 Demand forecast for Service Industry
- 4.9 Bullwhip Effect and Remedial Measures
- 4.10 Measurement of Bullwhip Effect
- 4.11 Summary
- 4.12 Questions

## 5. INVENTORY MANAGEMENT

- 5.1 Introduction
- 5.2 What is inventory? and management of inventories in SC Environment
- 5.3 Economic lot size model
- 5.4 ABC and VED inventory models
- 5.5 Other inventory models
- 5.6 Advantage and disadvantage of holding inventories.
- 5.7 Multi Echelon Inventory Models
- 5.8 Effect of demand uncertainty

- 5.9 Fixed order cost
- 5.10 Variable lead frame
- 5.11 Inventory under certainty and uncertainty
- 5.12 Other Multi echelon Inventory Models
- 5.13 Risk management
- 5.14 Summary
- 5.15 Questions

#### 6. TRANSPORTATION IN SUPPLY CHAIN ENVIRONMENT

- 6.1 Introduction
- 6.2 Transportation in SC
- 6.3 Issues in transportation
- 6.4 Transportation economics
- 6.5 Transportation selection and rating
- 6.6 Design options for transportation network
- 6.7 Decision parameters for transportation
- 6.8 Transport department responsibility
- 6.9 Summary
- 6.10 Questions

#### 7. STRATEGIC OUTSOURCING

- 7.1 Introduction
- 7.2 Out sourcing and strategic alliances
- 7.3 Third Party Logistic (3PL)
- 7.4 Fourth Party Logistics (4PL)
- 7.5 Bar coding
- 7.6 RFDI and Tracking Materials
- 7.7 Distributors integration Types and issue
- 7.8 Summary
- 7.9 Questions

## 8. RETAILER SUPPLIER PARTNERSHIPS AND VENDOR MANAGEMENT

- 8.1 Introduction
- 8.2 Retailer Supplier Partnerships
- 8.3 Relationship Issues, Requirements and Failures
- 8.4 Supplier Selection and development
- 8.5 Supplier performance monitoring
- 8.6 Supplier Evaluation
- 8.7 Vendor Bench Marking
- 8.8 Contract negotiations and relationships
- 8.9 Vendor relationship management
- 8.10 Ancillary Units
- 8.11 Vendor Managed Inventories
- 8.12 Outsourcing
- 8.13 Summary
- 8.14 Questions

### 9. INFORMATION TECHNOLOGY IN SCM

- 9.1 Introduction
- 9.2 MIS in SCM
- 9.3 Role of IT in supply chain management

#### x Strategic Materials & Supply Chain Management

- 9.4 IT frame work for SCM
- 9.5 Sharing of information regarding operations
- 9.6 Technology partnership
- 9.7 International co-ordination
- 9.8 Data base
- 9.9 System architecture
- 9.10 Communications in SCM
- 9.11 E Commerce
- 9.12 Implementation of ERP in SCM areas
- 9.13 Summary
- 9.14 Questions

#### 10. SUPPLY CHAIN PERFORMANCE

- 10.1 Why measure performance?
- 10.2 Issues in SCM measurement and evaluation
- 10.3 Measurement categories
- 10.4 Price performance
- 10.5 Cost effectiveness measures
- 10.6 Quality and Time measures
- 10.7 Strategic performance measures
- 10.8 Development of SC performance Model
- 10.9 Implement and review system
- 10.10 SCOR Model 4
- 10.11 Summary
- 10.12 Questions

#### 11. CURRENT ISSUES IN SCM

- 11.1 Introduction
- 11.2 Outsourcing Procurement of Services
- 11.3 CRM Vs SCM
- 11.4 New organisational requirements
- 11.5 Green Supply Chain
- 11.6 Rural supply chain management
- 11.7 Quality in Supply Chain
- 11.8 Professional ethics
- 11.9 Summary
- 11.10 Questions

#### 12. CASE STUDIES

- 12.1 What is bench marking?
- 12.2 Active Sourcing
- 12.3 Hamara partner
- 12.4 Lead time management
- 12.5 Logistics in retail sector
- 12.6 MSTC limited
- 12.7 On setting ethical standards
- 12.8 SCM in retail sector
- 12.9 Supply chain security measures in Indian Ports
- 12.10 Tender Negotiation
- 12.11 We Deliver

- 12.12 Fresh and Cheap Farm produce to Consumers
- 12.13 From Field to Fries
- 12.14 Integrating the Distribution Network
- 12.15 ECIL

Bibliography

Index