



P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belagavi)

Seventh Semester, B.E. - Information Science and Engineering

Semester End examination; Dec. - 2019

Supply Chain Management

Time: 3 hrs

Max. Marks: 100

Note: Answer FIVE full questions, selecting ONE full question from each unit.

UNIT - I

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|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| 1 a. | What is a supply chain? Briefly discuss the importance of decision phases in a supply chain. | 10 |
| b. | Consider the supply chain involved when a customer purchases a book at a bookstore. Identify cycles in this supply chain and the location of the push / pull boundary. | 8 |
| c. | Define ISCM and SRM. | 2 |
| 2 a. | Explain with examples, the three basic steps required to achieve the strategic fit. | 10 |
| b. | Give arguments to support the statement that Wal-Mart has achieved very good strategic fit between its competitive and supply chain strategies. | 5 |
| c. | What is the importance of expanding the scope of strategic fit across the supply chain? Explain. | 5 |

UNIT - II

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|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| 3 a. | Explain the following delivery network designs with respect to Information, Facility and Handling, Transportation, Inventory, Returnability, Customer Experience, Product Availability, Product Variety, and Order Visibility factors; | 10 |
| | i) Retail storage with Customer Pickup | |
| | ii) Manufacturer storage with In-Transit Merge | |
| b. | Illustrate the impact of E-Business on Customer Service and the impact of E-Business on supply chain cost. | 10 |
| 4 a. | Explain the role of network design in the supply chain. | 10 |
| b. | List and explain the issues that managers should keep in mind when making network design decisions for a supply chain. | 10 |

UNIT - III

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|------|-------------------------------------------------------------|----|
| 5 a. | Explain the basic approach to demand forecasting in detail. | 10 |
| b. | Discuss the following: | |
| | i) Role of IT in forecasting | 10 |
| | ii) Forecasting in practice | |

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- 6 a. List and explain the approaches used to reduce the cost of capacity required to meet predictable variability. 10
- b. List the key factor influencing the timing of a promotion and explain how we can implement sales and operations planning in practice? 10

UNIT - IV

- 7 a. Discuss the role of cycle inventory in a supply chain. 10
- b. Explain the two commonly used lot-size-based discount schemes in detail. 10
- 8 a. Discuss the role of safety inventory in a supply chain. 10
- b. How we can estimate and manage safety inventory in practice? Explain. 10

UNIT - V

- 9 a. Define Procurement and list the advantages of effective sourcing decisions. 10
- b. Discuss the risks that firms must evaluate when they move any function to a third party. 10
- 10 a. Explain the role of pricing and revenue management in a supply chain. 10
- b. Discuss the pricing and revenue management for;
- i) Seasonal demand 10
- ii) Bulk and Spot contracts

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