



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

(An Autonomous Institution affiliated to VTU, Belgaum)

**Seventh Semester, B.E. - Industrial and Production Engineering**

**Semester End Examination; Dec - 2016/Jan - 2017**

**Supply Chain Management**

*Time: 3 hrs*

*Max. Marks: 100*

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

### UNIT - I

- |   |    |
|---|----|
| 1a. What is supply chain Management? Describe with a neat sketch supply chain stages. | 10 |
| b. Explain the various decision phases in a supply chain.                             | 10 |
| 2 a. Describe how the strategic fit achieved?   | 10 |
| b. Write a note on Drivers of supply chain performance.                               | 10 |

### UNIT - II

- |  |    |
|--|----|
| 3 a. Explain any five factors influencing distribution network design.     | 10 |
| b. With a neat sketch explain distributor storage with a carrier delivery. | 10 |
| 4. Write a short note on the following :                                   |    |
| a) Impact of uncertainty on network design                                 | 5  |
| b) Discounted cash flow analysis   | 5  |
| c) Evaluating Network design decision using decision tree.                 | 10 |

### UNIT - III

- |  |    |
|--|----|
| 5 a. Discuss an expression for the log size for simple product (EOQ) and multiproduct. | 10 |
| b. Explain the impact of supply uncertainty.   | 10 |
| 6 a. Write a short note on the following :   |    |
| i) Trade promotions  |    |
| ii) The role of safety inventory in a supply chain                                     | 15 |
| iii) Optimum level of product availability.  |    |
| b. Describe the managerial levers to improve supply chain profitability.               | 5  |

### UNIT - IV

- |  |    |
|--|----|
| 7 a. What are the modes of transportation? Explain each briefly.   | 14 |
| b. Mention the pros and cons of different transportation networks. | 6  |
| 8. Write a short on the following :                                |    |
| a) The role of IT in pricing and revenue management                | 5  |
| b) Using pricing and revenue management in practice                | 10 |
| c) Pricing and revenue management for seasonal demand.             | 5  |

**UNIT - V**

- |      |  |    |
|------|--|----|
| 9 a. | Explain the various obstacles to coordination in supply chain. | 15 |
| b.   | Write a note on managerial levers to achieve coordination.     | 5  |
| 10.  | Write a short note on the following :                          |    |
| a)   | The Role of IT in supply chain                                 |    |
| b)   | CRM  | 20 |
| c)   | RFID system  |    |
| d)   | Lean supply chains.  |    |

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