



**B.E DEGREE EXAMINATIONS: APRIL / MAY 2023**

(Regulation 2018)

Seventh Semester

**MECHANICAL ENGINEERING**

U18MEE0017: Logistics and Supply Chain Networks

**COURSE OUTCOMES**

**CO1:** Justify significance of a logistics and its relationship to supply chain management.

**CO2:** Identify and resolve contemporary issues in a logistic environment

**CO3:** Understand basics of supply chain and its overview

**CO4:** Analyze impact of sourcing decision in supply chain performance

**CO5:** Build distribution network design by analyzing its influencing factors

**Time: Three Hours**

**Maximum Marks: 100**

**Answer all the Questions:-**

**PART A (10 x 2 = 20 Marks)**

**(Answer not more than 40 words)**

- |   |     |                   |
|---|-----|-------------------|
| 1. Is non-value-added activity a part of value chain? Justify your answer.                            | CO1 | [K <sub>3</sub> ] |
| 2. What is the cost-trade-off in logistics?   | CO1 | [K <sub>2</sub> ] |
| 3. Explain the significance of logistics for electronic goods.  | CO2 | [K <sub>2</sub> ] |
| 4. Explain the effect of macroeconomics on supply chain demand planning.                              | CO2 | [K <sub>2</sub> ] |
| 5. What are three basic flows in supply chain.  | CO3 | [K <sub>1</sub> ] |
| 6. Differentiate effective and efficient supply chain.  | CO3 | [K <sub>2</sub> ] |
| 7. Explain the significance of supplier categorization to determine supplier relationship.            | CO4 | [K <sub>3</sub> ] |
| 8. How to achieve the strategic fit in supply chain?  | CO4 | [K <sub>3</sub> ] |
| 9. "Trust is basis for all collaboration" – Explain with respect to context of supply chain alliance. | CO5 | [K <sub>2</sub> ] |
| 10. What is in-transit inventory?   | CO5 | [K <sub>2</sub> ] |

**Answer any FIVE Questions:-**

**PART B (5 x 16 = 80 Marks)**

**(Answer not more than 400 words)**

- |   |   |     |                   |
|---|---|-----|-------------------|
| 11. a) Differentiate logistics and supply chain management with the help of a case study. | 8 | CO1 | [K <sub>2</sub> ] |
| b) Explain logistics in the context of marketing and production.                          | 8 | CO1 | [K <sub>2</sub> ] |
| 12. a) Explain the different modes of transportation. Select a mode for high-value &      | 8 | CO2 | [K <sub>3</sub> ] |

	low-life-cycle product and justify your selection.			
b)	Describe the scope of supply chain management.	8	CO2	[K <sub>2</sub> ]
13. a)	List the benefits of global sourcing. Justify the statement “Sourcing from low-labor-cost countries is efficient for labor intensive jobs”.	8	CO3	[K <sub>3</sub> ]
b)	Enumerate the steps to be followed in the procurement process.	8	CO3	[K <sub>2</sub> ]
14. a)	What is distribution network optimization? Explain with a case study.	8	CO4	[K <sub>3</sub> ]
b)	Explain the factors influencing the distribution network design.	8	CO4	[K <sub>2</sub> ]
15. a)	Explain the framework of supply chain performance.	8	CO5	[K <sub>2</sub> ]
b)	How will you do supplier selection for perishable goods. Justify your selection.	8	CO5	[K <sub>3</sub> ]
16. a)	Explain the functions of sourcing and the benefits of effective sourcing decisions.	8	CO1	[K <sub>3</sub> ]
b)	With the help of a case study explain the need for supplier scoring process.	8	CO3	[K <sub>2</sub> ]

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