

2056
B. Voc. (Logistic Management) FYUP
Second Semester
BLM-201: Transportation and Distribution Management

Time allowed: 3 Hours

Max. Marks: 80

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting one question from each Unit.

x-x-x

I. Answer any four of the following:-

- a) State four pre-requisites for setting up an effective distribution system.
- b) State three techniques for optimizing local facilities and their primary benefits.
- c) Differentiate between intensive, selective, and exclusive distribution strategies.
- d) Describe the roles of two key transportation participants in a distribution network.
- e) Name three multimodal transportation models with a brief merit for each.
- f) Describe briefly two transit operation software's and their roles. (4x4)

UNIT - I

- II. Describe the step-by-step process of designing distribution channels, covering segmentation, positioning, targeting, and implementation. Analyze factors like customer needs and channel power that influence design decisions. (16)
- III. Explain warehousing concepts in detail, including storage techniques, inbound/outbound processes, and types like cross-docking or flow-through handling. Illustrate how these concepts optimize distribution efficiency in modern supply chains. (16)

UNIT - II

- IV. Elaborate on the material management process within distribution network planning, covering procurement, inventory control, and demand forecasting. Analyze how MRP and JIT integrate to enhance efficiency and reduce stockouts. (16)
- V. Identify and analyze the roles of major participants in transportation, including shippers, carriers, freight forwarders, and 3PL providers. Discuss coordination challenges and strategies for seamless integration in distribution networks. (16)

UNIT - III

- VI. Discuss the key performance characteristics of transportation models, such as speed, capacity, reliability, and accessibility. Explain selection criteria for supply chains, including trade-offs between cost and service levels, with examples of when to choose air versus rail. (16)

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(2)

- VII. Analyze transportation performance costs, including fixed (fleet ownership) and variable (fuel, labor) components. Discuss value measures like cost per ton-mile and strategies for cost benchmarking. (16)

UNIT - IV

- VIII. Elaborate on transportation operations management, focusing on scheduling, load planning, and real-time monitoring. Analyze its role in minimizing delays and maximizing resource utilization during routing decisions. (16)
- IX. Examine the application of information technology in transportation, including TMS (Transportation Management Systems) and AI-driven route optimization. Illustrate benefits for dynamic rerouting and predictive analytics. (16)

x-x-x