

**Model Syllabus for Logistics (Minor) inconsonance with
Curriculum framework w.e.f. AY 2026-27**

COURSE STRUCTURE

Year	Semester	Course	Title of the Course	No. of Hrs /Week	No. of Credits
II	IV	2	Transportation and Distribution Management	4	4

SEMESTER-IV

COURSE2:TRANSPORTATION AND DISTRIBUTION MANAGEMENT

Theory

Credits:4

4 hrs/week

Course Objectives

This course is designed to:

- Explore the fundamental concepts of transportation and distribution management.
- Understand distribution channels and network models used in supply chains.
- Develop knowledge in distribution network planning and requirement planning.
- Gain insights into international transportation systems and fleet management.
- Examine the role of IT in transportation and distribution management.

Course Outcomes (COs)

At the end of the course, the student will be able to:

CO1:Understand distribution techniques and different distribution networks in the supply chain.

CO2:Develop the various distribution network models and evaluate their performance.

CO3:Illustrate various modes of transportation and analyze mode and carrier selection decisions.

CO4:Examine concepts related to vehicle routing, scheduling, and transportation optimization.

CO5:Identify challenges and regulatory aspects involved in international transportation and IT integration.

Unit I:Distribution:

Role of Distribution in Supply chain, Distribution channels – Functions, resources, Operations in Distribution, Designing Distribution network models - its features - advantages and disadvantages.

Unit II: Planning:

Distribution network planning, Distribution network decisions, Distribution requirement planning (DRP)

Unit III: Transportation:

Role of Transportation in Logistics and Business, Principle and Participants-Scope and relationship with other business functions, Modes of Transportation - Mode and Carrier selection, Routing and scheduling.

Unit IV: International Transportation:

International transportation, Carrier, Freight and Fleet management, Transportation management systems-Administration, Rate negotiation, Trends in Transportation.

Unit V:InformationTechnology(IT):

Usage of IT applications -E commerce – ITMS, Communication systems-Automatic vehicle location systems, Geographic information Systems.

Activities:

- Seminar on transportation management systems and their business applications.
- Workshop on ERP modules related to logistics and distribution.
- Guest lecture by logistics industry professionals on routing and scheduling techniques.
- Group assignment to design a distribution network model for a case company.
- Case study analysis on international transportation challenges.
- Demonstration of GPS/GIS systems in logistics tracking.
- Debate on sustainability and environmental concerns in transportation.

References:

1. DavidLowe,Lowe's Transport Manager's and Operator's Handbook2019
2. JanatShah, Supply Chain Management, Pearson Education India,2nd edition2016
3. Raghuram and N.Rangaraj, Logistics and Supply chain Management– Leveraging Mathematical and Analytical Models: Cases and Concepts, New Delhi: Macmillan, 2000.
4. Sunil Chopra, Peter Meind 1, Supply Chain Management: Strategy, Planning, and Operation, Pearson, 6th edition 2014.
5. Michael B Stroh, Practical Guide to Transportation and Logistics, Logistics Network, 2006.
6. Alan Rushton, John Oxley, Handbook of Logistics & Distribution Management, KoganPage Publishers, 2006.

**MODEL QUESTION PAPER
SEMESTER-IV**

COURSE 2: TRANSPORTATION AND DISTRIBUTION MANAGEMENT

(w.e.f. 2026-27)

Time : 3Hrs

Max Marks 75

SECTION - A

Answer any Five of the following

5 X 3= 15 Marks

1. Short answer question from Unit-1
2. Short answer question from Unit-1
3. Short answer question from Unit-2
4. Short answer question from Unit-2
5. Short answer question from Unit-3
6. Short answer question from Unit-3
7. Short answer question from Unit-4
8. Short answer question from Unit-4
9. Short answer question from Unit-5
10. Short answer question from Unit-5

SECTION - B

Answer Five of the following One question from each Unit. 5 X 12= 60 Marks

11. Long answer question from Unit-1
- OR**
12. Long answer question from Unit-1
13. Long answer question from Unit-2
- OR**
14. Long answer question from Unit-2
15. Long answer question from Unit-3
- OR**
16. Long answer question from Unit-3
17. Long answer question from Unit-4
- OR**
18. Long answer question from Unit-4
19. Long answer question from Unit-5
- OR**
20. Long answer question from Unit-5