

ABOUT THE COURSE:

COURSE NAME:	OPERATIONAL LOGISTICS
TOTAL DURATION:	45 Hrs
MODE OF DELIVERY	PHYSICAL CLASSROOM TRAINING AT RESPECTIVE COLLEGES
TRAINER TO STUDENT RATIO:	1:50
TOTAL MARKS:	75

TABLE 1	
OVERALL COURSE OBJECTIVE:	<ul style="list-style-type: none"> ● Explore logistics management principles and practices, integrating knowledge from diverse job roles ● Cultivate the ability to analyze operational data effectively, utilizing insights to make informed decisions and drive continuous improvement ● Master inventory control techniques and methodologies to optimize inventory levels ● Learn strategic supply chain planning and optimization techniques to improve overall efficiency ● Develop strong communication and collaboration skills to facilitate coordination among various stakeholders
LEARNING OUTCOME:	<p>At the end of the course, the learners can able to</p> <ul style="list-style-type: none"> ● Evaluate logistical challenges and propose solutions to ensure timely delivery and cost-effective operations. ● Interpret key performance indicators (KPIs) and metrics to assess the effectiveness of operational logistics processes. ● Implement inventory control strategies and methodologies to minimize stockouts, excess inventory, and carrying costs. ● Analyze supply chain networks and

	<p>distribution channels to identify opportunities for optimization and cost reduction.</p> <ul style="list-style-type: none"> ● Evaluate facility layout, equipment utilization, and staffing requirements to optimize distribution center performance and productivity.
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TABLE 2: MODULE WISE COURSE CONTENT AND OUTCOME

SL.NO	MODULE NAME	MODULE CONTENT	MODULE LEARNING OUTCOME	DURATION (HRS)
1	Role of Logistics operations and system concept	Fundamentals of Logistics Systems - Evolution of Logistics and Supply Chain Management - Key Components of Logistics Systems - Logistics Strategies and Planning - Technology Integration in Logistics - Role of Information Systems in Logistics - Performance Measurement in Logistics - Logistics Network Design and Optimization - Global Logistics and International	role of logistics operations and system concepts, focusing on efficient resource management, optimization, and strategic implementation within supply chain networks.	5

		Operations.		
2	Inventory and Warehousing operations	Basics of Inventory Management - Inventory Types and Classification - Inventory Costs and Valuation - Inventory Control Techniques - Warehouse Design and operations - Warehouse Safety and Security - Material Handling Equipment - Technology Integration in Warehousing.	Analyse the intricacies of inventory management and warehouse operations, gaining skills to optimize storage, streamline processes, and enhance logistical efficiency within supply chains	5
3	Freight and Transportation operations	Overview of Freight and Transportation - Modes of Transportation (Air, Sea, Road, Rail) - Basics of Freight Forwarding and Brokering - Basics of Transportation Management Systems (TMS) - Routing and Scheduling in Transportation	Analyse the intricacies of freight and transportation operations, mastering strategies for efficient, cost-effective, and timely movement of goods across various logistical networks	5

		<ul style="list-style-type: none"> - Intermodal Transportation - Last-Mile Delivery Strategies - Regulatory Compliance in Transportation 		
4	Information Technology in Logistics operations	<ul style="list-style-type: none"> Role of IT in Supply Chain Management - Basics of Logistics Information Systems (LIS) - Basics of Warehouse Management Systems (WMS) - Basics of Transportation Management Systems (TMS) - Inventory Management Software - Supply Chain Visibility and Tracking Technologies - Emerging Technologies in Logistics 	Identifying information technology's pivotal role in logistics operations, focusing on its application to streamline processes, enhance visibility, and optimize supply chain performance	5
5	Export and Import and INCOTERMS	<ul style="list-style-type: none"> Introduction to Export and Import in Supply Chain - Global Trade and International Supply Chains - Export Procedures and Documentation 	Perform export, import procedures, and INCOTERMS, enabling effective navigation of international trade regulations and logistics practices	5

		<ul style="list-style-type: none"> - Import Procedures and Documentation - Role of Customs in International Trade - INCOTERMS in Logistics - Types and Application of INCOTERMS - Tariffs, Duties, and Trade Compliance - Global Logistics and INCOTERMS. 		
6	Practical projects and case studies			20
	Total			45

TABLE 3: OVERALL COURSE LEARNING OUTCOME ASSESSMENT CRITERIA AND USE CASES		
LEARNING OUTCOME	ASSESSMENT CRITERIA	USE CASES
<p>At the end of the course, the learners can able to</p> <ul style="list-style-type: none"> ● Explain the fundamental principles of logistics operations and their significance in supply chain management. 	<ul style="list-style-type: none"> ● Multiple Choice questions ● Projects ● Case studies 	<p>Case Study 1: A multinational retail corporation aims to enhance its distribution network efficiency to meet the increasing customer demands while minimizing costs. With multiple warehouses and diverse product lines, analyse and propose</p>

<ul style="list-style-type: none"> ● Identify different types of inventories and their role in supply chain management. ● Compare the various warehousing and inventory management technologies. ● Distinguish between different modes of transportation and their suitability for specific cargo types. ● Demonstrate the integration of IT systems in logistics operations. 		<p>a strategy to optimize their distribution network, considering factors like inventory management, transportation modes, and location optimization.</p> <p>Case Study 2: A local delivery service provider faces challenges in delivering parcels in densely populated urban areas efficiently. Develop a plan to improve last-mile delivery operations considering factors such as traffic congestion, delivery routes, scheduling, and customer convenience, aiming to enhance service quality while reducing delivery times and costs.</p>
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TABLE 4: LIST OF FINAL PROJECTS (5 PROJECTS THAT COMPREHENSIVELY COVER ALL THE LEARNING OUTCOME) TOTAL HOURS - 20	
SL.NO	FINAL PROJECT
1	Logistics System Diagram: Task students to create a visual representation (flowchart or diagram) illustrating the logistics system concept. This documentation should showcase the flow of materials, information, and processes involved in logistics operations.
2	Warehousing Operations Checklist: Have students create a detailed checklist that covers all aspects of warehousing operations. This documentation should include procedures

	for receiving, storing, picking, and dispatching goods in warehouses.
3	Freight Management Documentation: Task students with compiling documentation on freight management practices. This documentation should cover transportation modes, freight rate calculations, and documentation for shipping.
4	Export-Import Handbook: Students can collaborate to create a handbook explaining export and import procedures and INCOTERMS. This handbook could cover documentation requirements, shipping terms, and trade regulations in export-import operations.
5	INCOTERMS Application Guide: Have students develop a guide that explains the application of various INCOTERMS in different trade scenarios. This documentation should provide examples and guidelines on choosing appropriate INCOTERMS for specific transactions.