

COURSE NAME:	Port Logistics
TOTAL DURATION:	45 Hrs
MODE OF DELIVERY	Physical Classroom Training at Respective Colleges
TRAINER TO STUDENT RATIO:	1:50
TOTAL MARKS:	75

OVERALL COURSE OBJECTIVE:	<ol style="list-style-type: none"> 1. Analyse Port Logistics Operations: Develop an in-depth understanding of port logistics, focusing on supply chain operations, roles, and key documentation processes. 2. Optimize Procurement and Vendor Management: Evaluate procurement processes, apply vendor performance KPIs, and leverage ERP systems to streamline vendor selection and management. 3. Critically Assess Inventory Management: Evaluate and optimize inventory management strategies using techniques like ABC, VED, and FSN analysis for effective stock control and forecasting. 4. Synthesize EXIM Documentation and Customs Processes: Synthesize the preparation of export-import documentation, integrate customs clearance procedures, and manage cargo tracking and payment processing. 5. Evaluate Health, Safety, and Ethical Standards: Critically evaluate health, safety, and ethical compliance within port logistics, ensuring adherence to legal and regulatory requirements.
LEARNING	1. Evaluate Supply Chain Operations: Students will

OUTCOME:	<p>evaluate and synthesize the various activities in port logistics, demonstrating a comprehensive understanding of supply chain processes and documentation.</p> <p>2. Design Procurement Strategies and Vendor Relations: Students will design and implement procurement strategies, select suppliers, and assess vendor performance, optimizing the use of ERP systems.</p> <p>3. Critique and Forecast Inventory Management: Students will critique inventory management data, apply forecasting methods, and use ERP systems to ensure efficient inventory control.</p> <p>4. Integrate EXIM Documentation and Customs Compliance: Students will integrate and synthesize export-import documentation, ensure customs compliance, and track cargo movements effectively.</p> <p>5. Evaluate and Implement Safety and Ethical Practices: Students will evaluate health, safety, and ethical compliance protocols and implement best practices in port logistics operations.</p>
-----------------	--

**TABLE 2: MODULE WISE COURSE
CONTENT AND OUTCOME**

S.NO	MODULE NAME	MODULE CONTENT	MODULE LEARNING OUTCOME	DURATION (HRS)
1.	Introduction to Supply Chain Executive	Introduction to supply chain operations	– Identify various activities in plant operations	5 hrs

		<ul style="list-style-type: none"> - Overview of activities in plant operations - Roles and responsibilities of a supply chain executive - Preparation of key documents related to in-plant operations. 	<ul style="list-style-type: none"> - Perform your job role as a supply chain executive - Prepare important documents related to in plant operations 	
2.	Procurement and Vendor Management	<p>Day-to-day procurement activities –</p> <ul style="list-style-type: none"> Estimation of demand and MRP using ERP - Selection and evaluation of suppliers - Preparation of purchase orders and GRNs - Vendor development and management - KPI evaluation for vendor performance - Use of ERP for vendor-related tasks - Emergency material planning - Compliance with GST and regulatory 	<p>Students with</p> <ul style="list-style-type: none"> estimate demand needs by coordinating with the production/product departments - Identify the quantity of goods to be procured by running MRP using ERP software - Calculate the amount to be purchased based on lead time and priority - Select the right supplier from the existing pool of suppliers 	10 hrs

		norms.	<ul style="list-style-type: none"> - Perform the essential steps after contacting supplier - Plan for emergency material requirement - Prepare purchase order with all necessary details - Check order quantity, packaging and other parameters against PO - Prepare goods receipt note as per SOP - Prepare material return note (MRN) as per SOP - Operate ERP for processing GRN and MRN - Perform invoice processing as per SOP. - Comply with GST, packaging, dangerous goods 	
--	--	--------	---	--

			etc compliance norms	
3	Inventory and Data Analysis	<p>Inventory analysis techniques (ABC, VED, FSN)</p> <ul style="list-style-type: none"> - Inventory data recording and MIS reporting - Forecasting methods and variance analysis - ERP data entry for warehouse operations - Preparation of reports (variance, line stops, rejection data) - Escalation management and supplier relations - Use of ERP for warehouse data analysis. 	<p>Prepare MIS reports based on inventory data fed into the ERP system</p> <ul style="list-style-type: none"> -Record inventory information with details on item code, unit name, purchase price, tracking code etc. - Examine inventory data for discrepancies and rectify issues - Demonstrate ABC, VED and FSN analysis - Decide on the optimum amount of inventory to be held by using ABC analysis, VED analysis, FSN analysis etc - Select the appropriate forecasting method based on business 	10 hrs

			<p>needs and suitability</p> <ul style="list-style-type: none">- Perform inventory forecasting as per SOP.- Identify forecast variance and it's cause- Demonstrate the process of issuing material request for line usage in ERP <p>Operate ERP for various data entry on loading-unloading, line feeding, delays, escalations, priorities etc</p> <ul style="list-style-type: none">- Prepare reports such as variance analysis, line stops, rejection data report, daily report etc.- Prepare daily and periodic reports for review by management- Report deviation	
--	--	--	---	--

			as per escalation matrix – Manage relations with suppliers and transport companies	
4	EXIM Documentation and Customs Clearance	Preparation of export and import documentation – Analysis of cargo details (quantity, weight, size, etc.) – Use of Indian Customs EDI System (ICES) for mandatory documentation – Customs clearance processes – Tracking documents in ICEGATE and PGAs – Payment processing for customs – Interaction with customs brokers – Preparation of invoices for payment.	– Analyse the cargo quantity, value, packing, labelling, weight, size etc to prepare the EXIM documentation checklist – Evaluate the Know Your Customer (KYC) and Goods and Service Tax (GST) details of the importer/exporter including copies of invoice, purchase order, Statutory Declaration Form (SDF), packing list, shipping bill/ Airway bill, Bill of lading, as delivery order, certificate of origin, industrial license, insurance document, etc for correctness	10 hrs

			<ul style="list-style-type: none">-Perform customs bond execution for duty exempted items-Prepare mandatory documentation in Indian Customs EDI System (ICES) for Bill of Lading, Airway Bill, commercial invoice cum packing list, dock receipt, shipping bill, Bill of Entry etc.-Inspect accuracy of number of packages, quantity, unit rate, total Freight on Board (FOB) / Cost, Insurance and Freight (CIF) value, etc.- Prepare declaration of goods with necessary support documentation-Prepare documentation for pilferage, damage etc.	
--	--	--	---	--

			<ul style="list-style-type: none"> -Perform customs clearance involving customs brokers -Process documentation in "Indian Customs Electronic Commerce/ ICEGATE" web portal -Perform payment processing for customs clearance. -Track documents in the portals of customs, shipping lines, Directorate General of Foreign Trade (DGFT), Participative Government Agencies (PGAs) etc 	
5	Health, Safety, and Ethical Compliance	<p>Health, safety, and security norms</p> <ul style="list-style-type: none"> - Implementation of 5S at the workplace - Inspection of unsafe working conditions - SOP adherence for handling hazardous goods - Emergency 	<ul style="list-style-type: none"> -Follow health, safety and security procedures in warehouse -Implement 5S at workplace -Inspect the activity area and equipment, for appropriate and safe conditions 	10 hrs

		<p>protocols</p> <ul style="list-style-type: none"> - Integrity and ethics in logistics operations - Identification and reporting of corrupt practices - Data security practices - Documentation of violations - Escalation reporting. 	<ul style="list-style-type: none"> -Identify unsafe working conditions -Inspect adherence to standard operating procedures (SOP) while handling dangerous and hazardous goods -Implement standard protocol in case of emergency situations, accidents, and breach of safety -Prepare report on health, safety and security violations. -Report deviation as per the escalation matrix. 	
--	--	---	---	--

TABLE 3: OVERALL COURSE LEARNING OUTCOME ASSESSMENT CRITERIA AND USECASES			
Learning Outcome	Assessment Criteria	Performance Criteria	Use Cases
Evaluate Supply Chain Operations	Assess the understanding of port logistics operations and	Ability to analyse and evaluate port logistics processes	Use Case 1: Evaluate the current supply chain operations

	key documentation processes.	including supply chain documentation.	at a port, identify bottlenecks, and recommend improvements. Use Case 2: Analyze shipment documentation for a specific port and check for compliance with industry standards.
Design Procurement Strategies and Vendor Relations	Assess the ability to create procurement strategies, evaluate vendors, and use ERP tools.	Ability to design procurement processes, evaluate suppliers, and optimize ERP usage for vendor management.	Use Case 1: Design a procurement strategy for goods required at a port, accounting for varying lead times and priorities. Use Case 2: Review and evaluate vendor performance using ERP data, and recommend actions to optimize the vendor base.
Critique and	Evaluate the	Ability to use	Use Case 1:

Forecast Inventory Management	ability to apply inventory management techniques and forecasting methods.	ABC, VED, FSN analysis for inventory optimization, and forecast future inventory needs.	Analyze inventory levels at a port warehouse and recommend adjustments based on demand and storage costs. Use Case 2: Create a forecast for a port's inventory needs for the next quarter based on seasonal shipping patterns.
Integrate EXIM Documentation and Customs Compliance	Assess the ability to integrate EXIM documentation, customs processes, and compliance.	Ability to prepare, verify, and track export-import documents, and ensure compliance with customs regulations.	Use Case 1: Prepare EXIM documentation for a shipment leaving a port and verify compliance with customs regulations. Use Case 2: Track the status of a shipment through the Indian Customs EDI system

			(ICES) and resolve any discrepancies.
Evaluate and Implement Safety and Ethical Practices	Evaluate safety standards, ethical practices, and compliance with regulations.	Ability to identify unsafe conditions, report violations, and implement ethical practices.	Use Case 1: Conduct a safety audit of a port, identifying potential hazards in storage areas and equipment. Use Case 2: Implement a protocol to ensure ethical handling of hazardous materials at the port and report violations if any.

S. No	Table 4: List of Final Projects (Projects that comprehensively Cover all the learning outcome)
1	Logistics Process Flowchart: Task students with creating a process flowchart illustrating the key steps involved in port logistics within the supply chain. This flowchart should highlight the sequence of activities and interactions in the logistics process.
2	Port Infrastructure Documentation: Assign students to compile detailed documentation on various port infrastructures, such as terminals, berths, and warehouses. This documentation should cover their functionalities, capacities, and management.
3	Intermodal Transportation Guidebook: Task students with developing a guidebook that explains the intricacies of intermodal transportation in port logistics. This guidebook should cover various

	transportation modes, their integration, and benefits.
4	Risk Management Protocols Manual: Students can collaborate to create a manual detailing risk management protocol for port operations. This manual should include risk assessment procedures, contingency plans, and security measures.
5	Innovative Technology Showcase: Have students present an innovative technology or solution applicable to port logistics integration. They should create a documentation package detailing its features, benefits, and potential impact on the industry.

TABLE 5: COURSE ASSESSMENT RUBRICS					
(TOTAL MARKS: 75)					
Assessment Criteria	Learning Outcomes	Fair (1-5)	Good (6 -10)	Excellent (11-15)	Total Marks
Evaluation of Supply Chain Operations	Evaluate Supply Chain Operations	Analyse basic port logistics operations and documentation with some inaccuracies and gaps.	Analyse port logistics operations and documentation effectively, with minor gaps in detail.	Evaluates port logistics operations and documentation with deep insight and precision, synthesizing key aspects.	15
Procurement Strategy and Vendor Evaluation	Design Procurement Strategies and Vendor Relations	Designs a basic procurement strategy with limited vendor evaluation and insufficient ERP integration.	Designs a well-structured procurement strategy with solid vendor evaluation and adequate ERP usage.	Designs an innovative and highly effective procurement strategy with detailed vendor evaluation and advanced ERP integration.	15

Inventory Management and Forecasting	Critique and Forecast Inventory Management	Critiques inventory management processes with limited application of forecasting techniques and optimization	Critiques inventory management processes and forecasts effectively, optimizing inventory with minor gaps.	Critiques and forecasts inventory management processes with advanced techniques, optimizing inventory with precision.	15
EXIM Documentation & Customs Compliance	Integrate EXIM Documentation and Customs Compliance	Integrates EXIM documentation with basic understanding, but with several mistakes in preparation and validation.	Integrates EXIM documentation and customs compliance processes, with a few minor inaccuracies.	Synthesizes EXIM documentation and customs compliance, accurately and comprehensively preparing all necessary documents.	15
Safety, Ethics & Compliance	Evaluate and Implement Safety and Ethical Practices	Evaluates safety protocols and ethical practices with limited implementation and minor gaps in adherence.	Evaluates and implements safety protocols and ethical practices effectively, with few gaps.	Evaluates and implements safety and ethical practices with comprehensive adherence to protocols, ensuring full compliance.	15