COURSE NAME:	E-COMMERCE ANALYST
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:	 Evaluate critical components of e-commerce logistics, including supply chain operations, warehousing, and lastmile delivery, to identify optimization opportunities. Design innovative logistics strategies that address real-world challenges and enhance operational efficiency in e-commerce. Integrate emerging technologies such as artificial intelligence, IoT, and blockchain to revolutionize logistics processes and support strategic goals. Critique existing logistics frameworks and propose sustainable practices to improve environmental impact and operational efficiency. Formulate comprehensive solutions to complex logistics problems, aligning with business objectives and evolving consumer needs.
LEARNING OUTCOME:	 Critically evaluate supply chain performance metrics and design efficient logistics systems to address challenges in e-commerce operations. Analyze large datasets using advanced analytical tools to identify trends, optimize inventory management, and improve decision-making in logistics. Apply emerging technologies such as AI

	 for demand forecasting, IoT for tracking, and blockchain for transparency to improve logistics operations. Develop strategies for last-mile delivery that enhance operational efficiency and customer experience, including route optimization and reverse logistics. Identify opportunities for sustainability in logistics operations and propose actionable solutions to minimize environmental impact while maintaining efficiency.
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	TABLE 2: MODULE WISE COURSE CONTENT AND OUTCOME			
SL. NO	MODULE NAME	MODULE CONTENT	MODULE LEARNING OUTCOME	DUR ATI ON (HR S)
1	Introduction to E-commerce Logistics	Overview of E-commerce Logistics - Evolution and Growth of E-commerce - Fundamentals of E-commerce Supply Chains - Logistics Challenges in E- commerce - Role of Logistics in E- commerce Success.	Students will be able to evaluate and create strategies for managing supply chains in e- commerce, mastering the skills to streamline operations, optimize logistics, and meet customer demands effectively.	7
2	Supply Chain Management in E-commerce	E-commerce Supply Chain Overview - Challenges in E-commerce Supply Chain Management - Demand Forecasting and Inventory Management in E-commerce -	Participants will analyze and design advanced last-mile delivery and fulfilment strategies to optimize efficiency and meet consumer demands in e- commerce logistics.	10

3	Last-Mile Delivery and	Supplier Relationship Management in E-commerce - Logistics and Distribution Strategies in E-commerce - Omni-channel and Multi-channel and Multi-channel Strategies - E-commerce Returns and Reverse Logistics - Sustainability in E-commerce Supply Chains	Students will create and evaluate	10
	Delivery and Fulfilment Strategies	Challenges and Importance of Last- Mile Logistics - Last- Mile Delivery Models and Strategies - Route Optimization and Planning for Last-Mile - Urban Logistics and City Distribution - Customer Experience in Last- Mile Delivery - Reverse Logistics in Last-Mile Operations.	optimized warehousing and inventory management strategies tailored to e-commerce, ensuring operational efficiency and	
4	Warehousing and Inventory Management for E- commerce	E-commerce Warehousing Overview - Role and Importance of Warehousing in E- commerce - Types of E-commerce Warehouses- Warehouse Layout	Upon completion, participants will proficiently manage warehousing and implement optimized inventory strategies tailored for the demands of e- commerce, ensuring efficient operations	8

	and Design forE-commerce-InventoryManagementStrategies forE-commerce-WarehousingTechnologies inE-commerce-OrderFulfilmentandPicking Strategies.	and customer satisfaction	
5 Technology Integration, Innovation, Challenges and Opportunities in E-commerce Logistics	Role of Technology in E-commerceLogistics - Basics ofData Analytics inE-commerce-Fundamentals ofArtificial IntelligenceinE-commerce -Basics of BlockchainTechnology in E-commerce Logistics- IoT (Internet ofThings) Applicationsin E-commerce -Overview ofAugmented Realityand Virtual Reality inE-commerce -Challenges andopportunities andFuture Directions -Innovations forSustainable E-commerce Logistics	Participants will explore the integration of cutting-edge technology, navigate innovation, address challenges, and leverage opportunities within the dynamic landscape of e- commerce logistics	10
	Total		45

TABLE 3: OVERALL COURSE LEARNING OUTCOME ASSESSMENTCRITERIA AND USE CASES

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Learning Outcome	Assessment Criteria	Performance Criteria	Use Cases
Students will	- Evaluate the		Use Case 1:
evaluate and	evolution and	- Design logistics strategies to	Your online store
		streamline e-	
synthesize	growth of e-		is receiving customer
strategies for	commerce	commerce	
managing supply chains in e-	logistics.	operations.	complaints about delayed
commerce,	- Analyze key		deliveries.
designing	logistics		
solutions to	challenges in e-	- Formulate	Evaluate your
streamline	commerce.	solutions to	supply chain and
operations,		address logistics	suggest solutions
optimize	-Design	challenges and	to speed up
logistics, and	strategies to	synthesize	delivery times
analyse	optimize e-	improvements.	and reduce
customer	commerce		complaints.
demands	supply chains.		Use Case 2: A
effectively.			new e-commerce
			business wants to
			expand its
			delivery network.
			Design a basic
			logistics plan to
			meet increasing
			customer
			demand and
			ensure timely
			deliveries.
Participants will	- Analyze	Formulate	Use Case 1: A
analyse and	demand	optimized last-	customer orders
design advanced	forecasting and	mile delivery	a product but
last-mile delivery	inventory	strategies.	receives it late
and fulfilment	management in		because of
strategies,	e-commerce.	- Evaluate	delivery
integrating		supplier	inefficiencies.
efficiency and	- Evaluate	relationships and	Analyze your
customer	challenges in e-	inventory	delivery process
satisfaction in e-	commerce	management	and suggest ways
commerce	supply chain	strategies for	to improve it so

logistics.	management. - Design advanced last- mile delivery and fulfilment strategies.	operational efficiency.	that customers receive orders on time. Use Case 2 : Your e-commerce company wants to start offering free delivery on all orders. Design a strategy to manage this without increasing costs, using efficient shipping methods.
Students will create and evaluate optimized warehousing and inventory management strategies, synthesizing solutions to ensure operational efficiency and customer satisfaction.	 Evaluate last- mile delivery models and strategies. Assess challenges in last-mile logistics and formulate solutions. Analyze customer experience in last-mile delivery and design improvements. 	 Design route optimization plans for efficient last-mile delivery. Develop solutions for reverse logistics and assess their impact. 	Use Case 1: A large e- commerce retailer is struggling with late deliveries in city areas. Create a new plan to improve delivery times by using local warehouses or delivery hubs. Use Case 2: Your e-commerce warehouse is often out of stock of popular items. Evaluate your inventory system and recommend changes to ensure items are always available for customers.

synthesize and implement optimized warehousing and inventory management strategies, creating solutions tailored to e-commerce demands for operational efficiency.	of different types of e-commerce warehouses and evaluate their functions. - Design and implement inventory management strategies to optimize operations. - Evaluate order fulfilment and picking strategies.	advanced inventory control techniques and optimize warehouse layout for efficiency. -Create strategies to improve order fulfilment and warehouse operations	Your e-commerce store is often out of stock for popular products. Create a better inventory system to ensure products are available when customers need them. Use Case 2 : The warehouse is getting too full, and space is limited. Implement a new warehouse layout to maximize space and make the picking process faster.
Participants will explore and synthesize cutting-edge technologies, innovating solutions to address challenges and leveraging opportunities in the evolving landscape of e- commerce logistics.	 Analyze the impact of emerging technologies (AI, IoT, blockchain) in e-commerce logistics. Evaluate opportunities and challenges in tech integration. Innovate solutions for sustainable e- commerce logistics. 	 Design strategies to integrate AI and data analytics for better forecasting and decision-making. Formulate innovative solutions to improve sustainability in logistics. 	Use Case 1: Your e-commerce business is facing problems with inventory accuracy. Implement barcode scanning technology to track stock levels in real-time. Use Case 2: Your company is experiencing delays in international shipping. Use blockchain technology to

tracking and security of international		improve the
international		tracking and
		security of
		international
shipments.		shipments.

TABLE 4: LIST OF FINAL PROJECTS THAT COMPREHENSIVELY COVER ALL THE LEARNING OUTCOME
TABLE 4: LIST OF FINAL PROJECTS THAT COMPREHENSIVELY

SL.NO	FINAL PROJECT
1	Purchase Order (PO) Report: This project helps to create PO detailing items, quantities, prices, and terms made by a buyer to a seller.
2	Sales Order (SO): This project helps to create SO includes the confirmation of a customer's purchase, outlining terms and initiating the fulfilment process by the seller.
3	Packing Slip: This project helps to create the list of items shipped in a package, aiding verification upon delivery and inventory management.
4	Invoice: This project deals with the creation of Invoice Document itemizing products or services provided to a customer, including payment terms.
5	Proof of Delivery (POD): This project helps the students to verify the successful delivery, typically including recipient's signature and delivery details.

TABLE 5: COURSE ASSESSMENT RUBRICS (TOTAL MARKS: 75)									
DESCRIBE THE CRITERIA OF THE BELOW CATEGORY PERFORMANCE									
Assessm	Learning	Fair (1-5)	Good (6-	Excellent	Tot				
ent	Outcomes		10)	(10-15)	al				
Criteria					Mar				
					ks				
Data	Analyze	Demonstrates	Analyzes	Conducts in-	15				
Analysis	large	limited ability	datasets	depth					
and	datasets to	to analyze	effectively	analysis of					
Pattern	identify	datasets;	,	datasets,					
Identificati	trends,	trends and	identifyin	identifying					
on	patterns,	patterns are	g trends	trends,					
	and	identified with	and	patterns, and					
	correlations	gaps.	patterns	correlations					
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optimizatio n f opportunitie	olutions are	g	innovative,	
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	feasibility.	proposing	supply chain	
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s and		efficiency		
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Evaluation	Evaluate	Identifies	Effectively	Conducts a	15
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and	marketing	with limited	metrics,	e evaluation,	
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	conversion		practical	overcome	
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	actionable		improve		
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