COURSE NAME : SUPPLY CHAIN OPERATIONS
CODE : LGS/2021/SCOA/079
Duration: **Theory** - **19 Hrs**
Practical - **71 Hrs** → (16 days)
OJT - **270 Hrs (45 days)**
Total - **360 Hours**

Total Modules – 16
13 modules – Professional skills
3 Modules – Soft skill development
Each Module will be taught in a day.

Details Syllabus (T – Theory, P-Practical)

Module	CONTENT	HOURS	Day
1	**E-Commerce and Role of Supply Chain in E - Commerce**		**1**
	Theory E-commerce E-commerce – concept, Evolution of E-commerce in India, Growth and development of E-commerce in India, Reasons for growth of E-commerce in India. Role of Supply Chain in E-Commerce Concept of supply chain management Components of supply chain management Concept of product availability, delivery, customer review and reverse logistics in E-Commerce	1 hr.	
	Practical • Mention the reasons for growth of E-Commerce in India. • Demonstrate customer review process. • Identify some major E-Commerce business in today's era.	4 hrs. 30 mins.	
2	**Overview of E-Commerce Tools and Equipments and E-commerce Lingo – A glossary of E-commerce terminologies and Abbreviations list**		**2**
	Theory Overview of E-commerce tools and equipments: Tools and equipments used to move a package from one point to customer doorstep Concept of warehouse equipment Concept of dock equipment Concept of conveyors Concept of storage equipment Concept of lifting equipment Concept of packing equipment E-Commerce Lingo – a glossary of E-Commerce terminologies and Abbreviations List:	1 hr.	

Module	CONTENT	HOURS	Day
	Concept of brick and mortal store Concept of Business to Business (B2B) Concept of Business to Customer (B2C) Concept of Customer to Customer (C2C) Concept of Call to Action (CTA) Concept of Conversion Rate Concept of Discount Code+ Concept of Inventory Concept of fulfilment Concept of landing page Concept of m-commerce Concept of partial shipments Concept of service level agreements (SLA) Concept of shopping carts Concept of transactions Meaning of ASAP, AWD, BD, BGM, CCC, CFT, CLT, CN, COD, CPT, D2S, DD, DH, DN, EAN, EOD, ERP, ETA, FC, FE, GRN, GTL, H&B, HHD, IBL, IMEI, IMT, IPC, IPP, INR, IRT, ISBN, ISC, ISO, JIT, KPI, LBH, LMD, LMI, LTA, MH, MIS, MOM, MRN, MRP, MTD, NC, NCOB, NDD, OMS, PC, PIL, PL, PO, POA. POC, POD, POS, PV, QC, RC, RCA, RN, RO, RTD, RO, RVP, SBS, SKU, SOP, SRN, STD, STN, TAT, TTL, VRN, WH, WID, WSH, YTD		
	Practical • Different equipments (such as dock plate, dock bumper, wheel chokes, belt conveyor, roller conveyor, bins, tote, forklift, pallet jacks, dollies, duct tape, bubble wrap etc.) can be shown to the trainee and asked them to identify and differentiate between them. • Illustrate the supply chain management process. • Demonstrate the reverse logistics cycle. • Identify different lifting equipment • Mention few B2B stores in India.	4 hrs. 30 mins.	
3	**Overview of E-Commerce and cycle of supply chain divisions / segmentation specific**		**3**
	Theory Role of supply chain management in E-Commerce: Large Concept of Distribution centre, Cross Dock and Last Mile. Non-Large	1 hr 30 mins.	

Module	CONTENT	HOURS	Day
	Concept of Fulfilment Centre, Mother Hub, First Mile Delivery, and Last Mile Delivery. Grocery Concept of Fulfilment Centre and Cross Dock		
	Practical • Illustrate the distribution center in large division. • Demonstrate how grocery division works with a flow chart.	4 hrs.	
4	**Overview of E-Commerce operation Division or Segmentation specific**		**4**
	Theory Operational activities of Fulfilment Centre: Concept of Inbound activities Concept of Inventory Concept of Outbound activities Concept of Return Centre or RC Operational activities of Mother Hub: Concept of Primary sorting Concept of Secondary sorting Concept of Bag Weighing and Labelling Concept of Putting Concept of Loading and Unloading - Steps of Loading Process - Steps of Unloading Process Operational activities of Last Miles or City Logistics: Concept of Morning activities Concept of Closing activities Operational activities of Large: Concept of Distribution Centre or DC activities - Operational activities of Inbound - Operational activities of Inventory - Operational activities of Outbound - Operational activities of Return Centre Concept of Cross Dock or X Dock activities Concept of Last Mile activities Operational activities of Grocery: 1) Operational activities of FC: a) Operational activities of Inbound process b) Operational activities of Inventory process c) Operational activities of Outbound process d) Operational activities of Return process	2 hrs.	

Module	CONTENT	HOURS	Day
	2) Operational activities of Cross Dock or X Dock		
	Practical • Demonstrate inbound activities.	4 hrs.	
5	**Inbound Activities**		**5**

	Theory
	Inbound Activities (Part – I):
	Inbound process flow (diagram)
	Concept of Invoice Sanity Check
	    - Invoice Sanity Check for Books (11 points)
	    - Invoice Sanity Check for Non-books (13 points)
	Concept of Invoice Receipt Number (IRN) Creation
	    - Steps creating IRN
	Concept of unloading
	Concept of segregation
	
	Inbound Activities (Part II):
	Concept of Invoice Receipt Number or IRN submission
	    - Steps of submitting Invoice Receipt Number (IRN) (6 steps)
	Concept of Invoice Receipt Number or IRN receiving
	    - Steps of receiving Invoice Receipt Number (IRN) (10 steps)
	Concept of Quality Check (QC)
	    - Category wise Quality check
	        • For Camera, Computer and Communication (CCC)
	        • For Apparel and Footwear
	        • For Books
	        • For Health and Beauty Products
	Concept of Putlist Creation and Putaway
	    - Steps followed for putlist creation (6 steps) (with Diagram)
	    - Concept of unloading
	    - Concept of segregation
	        • Steps of segregation (12 Steps)
	        • Steps for closed delivery segregation (12 steps)
	Category wise segregations (Camera, Compute, Communication Products (CCC), Books, Apparel and Footwear, Health and Beauty products, Fragile Items, Tools Category.
		1 hr. 30 mins.	

	Practical • Draw the steps of submitting Invoice Receipt	4 hrs. 30 mins.	

Module	CONTENT	HOURS	Day
	Number (IRN) • Draw the steps of receiving Invoice Receipt Number (IRN) • Draw quality check (QC) for health and beauty products. Give the diagram also. • Segregate the orders.		
6	**Inventory Process**		**6**

	Theory
	
	Inventory Process:
	Types of Inventory (store, Non-store)
	    • Terminology used in Inventory – Floor-3, Pathway-1, Aisles-AB, Rock No.-12, Shelf-B, Bin-07
	    • Putaway Process in Inventory
	    • Types of Putaway Process – HHD Putaway (ERP), Paper Based Putaway.
	    • HHD(Hand Held Device) Putaway Process (ERP) (15 steps) (with diagram)
	    • Paper Based Putaway Process (8 steps) (with diagram)
	
	Inventory Outbound Process (Part - I)
	
	Concept of Picking Process
	    • Concept of Picklist
	    • Steps of Picklist creation
	    • Prerequisite of Picking Process
	    • Basic types of picking
	        ➢ Picking via HHD (ERP) Process
	        ➢ Paper Based Picking Process
	
	Inventory Outbound Process (Part – II)
	Concept of Goods Transfer List (GTL)
	Concept of Transfer Task List (TTL)
	Steps of GTL and TTL process (with diagram)
	Concept of stock counting or stock taking
	Importance of stock taking
	Types of stock takes
	Steps in stock takes task creation – location based (with diagram)
	Steps in stock takes task creation – product based (with diagram)
	Steps in stock takes task reassigning (with diagram)
	Stock take execution process (location based and product based) (with diagram)
		1 hr. 30 mins.	

	Practical	4 hrs. 30	

Module	CONTENT	HOURS	Day
	• Draw HHD putawary process with a flow chart. • Identify different types of putaway process. • Draw Paper Based putaway process with diagram. • Participate in stock taking process and watch stock taking task creation – location based and product based both. Prepare a report on this.	mins.	
7	**Outbound Process – Packing Process**		7

	Theory
	Concept of Packing
	Importance of packing in current scenario
	Concept of ANDON
	Pre system based segregation process
	Scenarios for performing system based segregation
	    - Hard copy based picking
	    - Picking via HHD
	SBS and Packing process steps
	    - Single line item shipment
	    - Multi line item shipment
		1 hr.	

	Practical • Identify different types of ANDON (Green, Yellow and Red) and their functions.	4 hrs. 30 mins.	
8	**Mother Hub Activities / Sort Center Activities**		8

	Theory
	Shipment processing cycle at Mother Hub and beyond (with diagram)
	    - Shipment (Local, Zonal, National)
	    - Bags (Primary sorting, Secondary sorting and Bag Weighing and Labelling)
	    - Outbound Bag Staging
	    - Steps of performing outbound staging) (with diagram)
	    - Steps of performing outbound bag picking (with diagram)
	    -
		1 hr.	

	Practical • Draw outbound bag staging and outbound bag picking process.	4 hrs. 30 mins.	
9	**Last Mile Delivery**		9
	Theory Opening of the Day: (concept) Open the last mile hub Check for the security	1 hr.	

Module	CONTENT	HOURS	Day
	Load receiving by transport console app Delivery boy or girl reporting Overnight tally Closing of the Day: (concept) Delivery Boys/ Girls arrival back to Last Mile Hub Return Process Runsheet Updation Cash Reconciliation Pending Reconciliation Close the Last Mile Hub		
	Practical	4 hrs. 30 mins.	
	• Illustrate the process of opening of the day of Last Mile Hub in a flow chart. • Illustrate the process of closing of the day of Last Mile Hub in a flow chart.		
10	**Return in Supply Chain & Overview of Large Material Handling (Large Division)**		**10**

	Theory
	Return process in Supply chain
	Concept of distribution center (DC) (large division)
	Concept of cross dock (CD) (large division)
	Concept of last mile (LM) (large division)
	Large and furniture order life cycle
	Concept of Inbound process
	    - Invoice sanity check (ISC)
	    - Invoice Receipt Note (IRN)
	    - Dock Allocation
	    - Unloading
	    - IRN Submission
	    - Steps of ERP process (with diagram)
	    - Steps of putaway process (with diagram)
	Inventory process
	    - Concept of Goods Transfer List (GTL)
	    - Concept of Transfer Task List (TTL)
	    - Concept of Inter Warehouse Transfer List (IWIT)
	    - Concept of Perpetual Stock Take (PST)
	    - Steps of Perpetual Stock Take process by using ERP (with diagram)
	    - Customer Outbound Process steps (with diagram)
	    - Steps for system based segmentation process (with diagram)
	    - Steps for performing dispatch process (with diagram)
	    - Steps for manifest creation by using ERP (with diagram)
	    - Steps for LH team activity process (with diagram)
	    - Concept of return process
	    - Returns Receiving
	    - Product verification
	    - Steps for putlist creation and putaway creation (with
		1 hr. 30 mins.	

Module	CONTENT	HOURS	Day
	diagram)		
	Practical		
	• Identify Quality control points which are applicable during inbound receiving an operator follow while performing the Quality Check for the Cycle product in a table. • Draw a steps for activities that are performed for creating a Manifest by using ERP • Draw a table pointing out the quality control points for cycle	4 hrs. 30 mins.	
11	**Overview of Grocery Products Handling (Grocery Division)**		**11**

	Theory
	Fulfillment Center
	Cross Dock or Last Mile
	Functional Parts:
	   - Inbound Process
	   - Inventory Process
	   - Outbound Process
	   - Return Process
	Cross Dock or X Dock (operational activities)
		1 hr.	

	Practical • Draw the Material Handling process in detail. • Illustrate the process of physical QC with help of a flow chart.	4 hrs. 30 mins.	
12	**Hyperlocal Supply Chain - Overview**		**12**

	Theory
	Concept of Hyperlocal
	Operation process of E-Commerce hyperlocal market
	Process cycle of the hyperlocal market:
	   - Inbound
	   - Inventory
	   - Outbound
	   - Handover
	   - Returns
		1 hr.	

Module	CONTENT	HOURS	Day
	Practical • Draw the Inbound process of hyperlocal market • Demonstrate handover process.	4 hrs. 30 mins.	
13	**Effective Communication (Verbal & Non-Verbal) & Etiquettes**		**13**

	<u>Theory</u>
	Concept of communication
	Characteristics of Effective communication
	Types of communication
	   - Verbal
	      • Written
	      • Oral
	      • Visual
	   - Non-Verbal
	      • Open Body Language
	      • Closed Body Language
	Different tips to improve body language
		1 hr.	

	Practical • Demonstrate different types of body language (such as open body language, closed body language etc.)	4 hrs. 30 mins.	
14	**Interpersonal Skills (Positive Attitude, Listening Skills, Empathy)**		**14**

	Theory
	Concept of Interpersonal skills
	Concept of positive attitude
	   - Ways to develop habits of positive thinking
	Concept of Listening skills
	   - Elements of active listening
	Concept of Empathy
	   - Empathy vs. sympathy
	   - Empathy at workplace
	   - Benefits of empathy at workplace
		1 hr.	

	Practical • Demonstrate some forms of positive thinking (such as meditation, writing, play etc.)	4 hrs. 30 mins.	

Module	CONTENT	HOURS	Day
15	**Safety and Security in Supply Chain**		15

	Theory
	Ground rules of safety
	General safe working practices
	   - Working environment
	   - Floor safety
	   - Billing area
	   - Hand operated pallet truck
	   - Safety of delivery boy and girl
	Understanding fire safety
	   - States of fire
	   - Operate a fire extinguisher
	   - Fire prevention
	First Aid
	   - Understand the contents of a basic first aid kit
	   - Golden rules of first aid
	Understanding medical emergencies
		1 hr.	

	Practical
	   • Demonstrate how to operate a fire extinguisher
	   • Identify different stages of fire and how to take care of that.
	   • Identify the contents of a basic first aid kit.
	   • Identify some basic medical emergencies.
	   • Demonstrate the steps he would follow in case of heart attack of any employee or any superior.
		4 hrs. 30 mins.	

16	**Jobready Skills (Interview skills, Teamwork, Work ethics, POSH)**		16

	Theory
	Interview skills
	   - Top interview skills
	   - 7 ways to prepare for interview
	Team work
	   - Concept of a team
	   - Top qualities of a good team
	Work ethics
	   - Characteristics of an Ethical Business Culture
	POSH (Prevention of Sexual Harassment) Policies
	   - Facts about POSH
	   - Employees Responsibilities
		1 hr.	

	Practical
	   • Explain top interview skills.
	   • Demonstrate the responsibilities as an employee regarding POSH.
		4 hrs. 30 mins.	

17	OJT	270 hrs.	45

Module	CONTENT	HOURS	Day
			days
	Total	**366 hrs.**	**61 days**

Assessment evidences (Course Outcomes)

Outcomes to be assessed	Assessment criteria for the outcome
1. Explain the concept of E-Commerce – the smart way of doing business, where it has started and how it is booming.	1.1. Identify how E-Commerce is working. 1.2. Able to explain E-Commerce has been evolved over time. 1.3. Able to explain how E-Commerce is gaining importance in today's new normal scenario.
2. Explain the concept of supply chain and how it is related to E-Commerce. Understand how effective E-Commerce with sound supply chain can lead to customer satisfaction, which is the backbone of company's success.	2.1. Able to explain the concept supply chain 2.2. Able to explain the role of supply chain in today's business 2.3. Able to explain the concept of Reverse Logistics 2.4. Able to explain the components of supply chain and how these components are related to customer satisfaction.
3. Demonstrate E-Commerce tools and equipments	3.1. Able to identify the tools and equipments used to move a package from Point A to Customer doorstep. 3.2. Able to understand the E-Commerce terminologies and abbreviations used to be familiar with to get a solid hold onto this industry.
4. Identify the divisions or segmentation of the E-Commerce industry based on the product range	4.1. Able to illustrate the concept of large, non-large and grocery division. 4.2. Able to illustrate the concept of Distribution centre, Cross Dock and Last Mile. 4.3. Able to illustrate concept of Fulfilment Centre, Mother Hub, First Mile Delivery, and Last Mile Delivery 4.4. Able to explain the concept of Fulfilment Centre and Cross Dock in grocery division. 4.5. Able to illustrate the process flow of non-large division.
5. Demonstrate the day-to-day operational activity in each of the divisions stated above	5.1. Able to explain the operational activities of fulfillment center 5.2. Able to illustrate operational activities of mother hub 5.3. Able to illustrate the operational activities of last mile or city logistics

Outcomes to be assessed	Assessment criteria for the outcome
6. Illustrate the inbound activities which is very crucial to maintain the quality and receive the right products with the right quantity	6.1. Able to explain clearly the eight activities of inbound operations 6.2. Able to illustrate inbound process flow 6.3. Able to conduct invoice sanity check 6.4. Able to create Invoice Receipt Number (IRN) 6.5. Able to submit Invoice Receipt Number (IRN) 6.6. Able to conduct category wise quality check 6.7. Able to create putlist 6.8. Able to conduct open delivery segregation and closed delivery segregation
7. Demonstrate the inventory process	7.1. Able to explain the concept of inventory 7.2. Able to identify the types of inventory 7.3. Able to identify the terms used in inventory 7.4. Able to explain the putaway process – both for Hand Held Device (HHD) and paper based 7.5. Able to explain the picking process 7.6. Able to illustrate the process of picklist creation 7.7. Able to illustrate the picking process via HHD (ERP) as well as paper based picking process 7.8. Able to illustrate inventory outbound process 7.9. Able to explain stock counting 7.10. Able to explain the stock take execution process
8. Illustrate the outbound activities	8.1. Able to Explain the concept of packing and its importance in the current new normal scenario 8.2. Able to explain the concept of ANDON 8.3. Able to illustrate how ANDON colour system works 8.4. Able to illustrate the system based segregation system
9. Explain mother hub activities or sort center activities	9.1. Able to illustrate the Shipment processing cycle at Mother Hub and beyond 9.2. Able to explain inward flow and outward flow related to this center 9.3. Able to segment the shipment into local, zonal and national categories 9.4. Able to illustrate the outbound bag staging
10. Illustrate last mile delivery and return in supply chain	10.1. Able to explain the concept of opening of the day and closing of the day of last mile delivery 10.2. Able to illustrate the return in supply chain process 10.3. Able to illustrate the order management system 10.4. Able to explain the liquidation process
11. Demonstrate the large material handling of large division	11.1. Able to explain the concept of large division. 11.2. Able to illustrate the concept of large and furniture

Outcomes to be assessed	Assessment criteria for the outcome
	order life cycle 11.3. Able to explain the inbound process 11.4. Able to illustrate the quality control process of large division 11.5. Able to illustrate the putaway process 11.6. Able to illustrate the customer outbound process 11.7. Able to illustrate the product verification process
12. Demonstrate the online grocery division	12.1. Able to explain the concept of grocery 12.2. Able to explain the concept of fulfillment center 12.3. Able to illustrate the invoice sanity checklist 12.4. Able to illustrate the vehicle unloading process in grocery division 12.5. Able to demonstrate how to prepare QC norms
13. Identify hyperlocal in supply chain	13.1. Able to explain the concept of hyperlocal 13.2. Able to illustrate how an e-commerce hyperlocal marketplace works? 13.3. Able to illustrate the process of hyperlocal model
14. Explain communication, which is a vital part of this business	14.1. Able to explain the concept of communication 14.2. Able to explain the characteristics of sound communication 14.3. Able to illustrate different types of communication 14.4. Able to mention some measures to improve body language
15. Demonstrate interpersonal skills required to interact with customers	15.1. Able to explain interpersonal skills 15.2. Able to identify the habits of positive thinking 15.3. Able to illustrate the elements of active listening 15.4. Able to illustrate the benefits of empathy at workplace 15.5. Able to differentiate between empathy and sympathy
16. Illustrate the significance of safety and security in work place	16.1. Able to identify the ground rules of safety 16.2. Able to illustrate the general safety working practices 16.3. Able to explain the fire safety process 16.4. Able to illustrate the golden rules of first aid
17. Demonstrate the skills that makes a person jobready (jobready skills)	17.1. Able to illustrate top interview skills 17.2. Able to explain the qualities of a good team 17.3. Able to explain the characteristics of an ethical

Outcomes to be assessed	Assessment criteria for the outcome
	business culture
	17.4. Able to explain the concept of POSH
	17.5. Able to illustrate the employees' responsibilities relating to POSH
18. Participate is real life exposure in the form of OJT (on the Job Training)	18.1. Able to prepare a report on various activities undertaken during on the Job Training.

Trainers Qualifications:

- **3 Yrs Diploma in any stream/ Graduate in any stream**
- **3 Yrs experience in relevant field.**

Qualification of Trainee:

Class 12th Pass