

UNIT I INTRODUCTION

PART A

1. Define LSCM?

"Logistics typically refers to activities that occur within the boundaries of a single organization and Supply Chain refers to networks of companies that work together and coordinate their actions to deliver a product to market. Also, traditional logistics focuses its attention on activities such as procurement, distribution, maintenance, and inventory management. Supply Chain Management (SCM) acknowledges all of traditional logistics and also includes activities such as marketing, new product development, finance, and customer service"

2. Define Network?

a large system consisting of many similar parts that are connected together to allow movement or communication between or along the parts, or between the parts and a control centre

3. Define Reverse Supply chain.

It's the series of activities required to retrieve a used product from a customer and either dispose of it or reuse it. And for a growing number of manufacturers, in industries ranging from carpets to computers, reverse supply chains are becoming an essential part of business.

4. What is Logistics?

Logistics is used more broadly to refer to the process of coordinating and moving resources – people, materials, inventory, and equipment – from one location to storage at the desired destination. The term logistics originated in the military, referring to the movement of equipment and supplies to troops in the field.

5. Write any three importance of SCM?

- Reduced Costs
- Interconnected Supply Chain
- Information Transfer and Communication
- Better Customer Service
- Agility
- Create optimized schedules that balance production efficiency and delivery performance
- Maximize throughput on bottleneck resources to increase revenue
- Synchronize supply with demand to reduce inventories
- Provide company-wide visibility to resource capacity
- Enable scenario data-driven decision making

6. What is SCM Strategy?

Strategies and designing of the supply chain include:

Deciding on the supply chain structure and the activities each stage of the supply chain will perform

Selecting a location and capacities of facility

Deciding on the products that are to be made and the location where they need to be stored

Choosing the modes of transportation and the source from where the information is to be collected

7. Define Business Strategy

A business strategy refers to all the decisions taken, and actions undertaken by a business for achieving the larger vision. Knowing what business strategy is and how to execute it properly can help businesses become market leaders in their domain

8. What are the Modules of SCM Techniques?

- Advanced Planning and Optimization (SAP APO)
- Forecasting & Replenishment (SAP F&R)
- Event Management (SAP EM)
- Supply Network Collaboration (SAP SNC)
- Extended Warehouse Management (SAP EWM)

9. What are the functions of SCM

Supply chain is a very broad career field, it has 7 primary functional areas: Purchasing, Manufacturing, Inventory Management, Demand Planning, Warehousing, Transportation, and Customer Service.

10. Define Cycle time in SCM?

Supply chain cycle time is an all-encompassing metric measuring how long it would take to complete a customer's order if all inventory levels were zero at the time the order was placed. This metric is the sum of the longest possible lead times for every stage of the supply chain cycle.

11. Define Risk Management in SCM

Supply chain risk management refers to the process by which businesses take strategic steps to identify, assess, and mitigate risks within their end-to-end supply chain. There are both internal and external risks that can disrupt your supply chain, so it's helpful to understand the difference between the two.

12. Write short note on SCM Sustainability?

Supply chain sustainability refers to companies' efforts to consider the environmental and human impact of their products' journey through the supply chain, from raw materials sourcing to production, storage, delivery and every transportation link in between.

13. What is the value advantage in SCM

Advantages of Supply Chain Management.

- Cost efficiency
- Enhance output
- Avoids delay in process
- Easily identify problem areas

Disadvantages of Supply Chain Management

- Expensive to implement
- Complicated
- Lack of co-ordination among departments

14. Write short note on supply Chain Strategy

Deciding on the products that are to be made and the location where they need to be stored

Choosing the modes of transportation and the source from where the information is to be collected

15. What is meant by facility Decisions

Facility location decisions play a crucial role in the logistics activities involved in supply chain management. In real-life settings, the optimization of location and allocation decisions is often preceded by an evaluation of the existing distribution network system.

16. List the Six elements of SCM Strategy

6 Critical Elements of Successful Supply Chain Management

- Flexibility
- Data
- Focus On Your End Customer
- Full Integration
- Innovation
- Performance Measurement

17. What are the various enabling Techniques in SCM

describes what a supply chain does by explaining plan, source, make, deliver and return. But in order to do those things a supply chain needs to be built on top of a solid foundation of other processes inside of a company. The last group of processes in the SCOR framework is called Enable.

18. Distinguish between System and Value

Supply chain management consists of five main elements:

- Planning and designing a product to meet consumer demand
- Sourcing the materials or components needed to produce the goods
- Manufacturing the product
- Delivering the product to the buyer
- Accepting returns of defective products

Value chains are strategic, placing heavy focus on:

- Innovation
- Research and Development
- Product Testing
- Marketing
- Social Trend Analysis
- Economic Conditions

19. Define Sourcing

The act of getting something, especially products or materials, from a particular place: sourcing of sth Last year, the company centralized its sourcing of raw materials. Product sourcing is highly selective.

20. Define Imbalance of Power.

A power imbalance is being expressed when one partner (or a group of partners) is able to dominate decision- making or otherwise asserts power in ways that disadvantages other partners or are not in the best interest towards achieving the partnership objectives.

PART B

1. Explain the drives of SCM?
2. Describe the concept of SCM And Logistics Management
3. Explain the SCM enabling technologies
4. Explain the Evaluation Study of LSCM
5. Explain the role of SCM Manager
6. Discuss the impact of Effective performance of Logistics and SCM
7. Explain clearly about the SCM Strategy
8. Describe the Advantages and disadvantages of SCM
9. Describe the Concept of SCM And Logistic Management?
10. Explain the global application in SCM Value Chain Trends?

UNIT II SUPPLY CHAIN NETWORK

PART A

1. Define Logistics Management.
Logistics management is the part of the supply chain process that plans, implements, and controls the efficient, effective flow and storage of goods, services, and related information from the point of origin to the point of consumption to meet customer requirements.
2. What is Logistics Automation?
Logistics automation refers to the use of technology like machinery and logistics software to improve the efficiency of logistical processes from procurement to production, inventory management, distribution, customer service, and recovery.
3. Define 3PL
A 3PL (third-party logistics) provider offers outsourced logistics services, which encompass anything that involves management of one or more facets of procurement and fulfillment activities.
4. Define 4PL

Fourth-party logistics, also known as 4PL, is an operational model in which a business outsources its entire supply chain management and logistics to one external service provider.

5. What is emergency Logistics?

Emergency logistics management has evolved as a prominent international theme due to multiple global disasters in the last couple of decades. Although such global disasters have significantly raised humanitarian support in relief supply and distribution, emergency logistics remain critical during and after a disaster. Hence, it is critical to ensure that an effective and efficient emergency logistics management system is in place to cater to any uncertainties.

6. What is Storage

Storage management refers to the software and processes that improve the performance of data storage resources. It may include network virtualization, replication, mirroring, security, compression, deduplication, traffic analysis, process automation, storage provisioning and memory management.

7. What is business Logistics?

Business logistics refers to the entire set of processes involved in moving goods, whether from a supplier to a business or from a business to a customer. The key concept here is managing these processes as a unified system.

8. What is warehouse?

Warehouse management encompasses the principles and processes involved in running the day-to-day operations of a warehouse. At a high level, this includes receiving and organizing warehouse space, scheduling labor, managing inventory and fulfilling orders.

9. What is Packaging?

Packaging is a coordinated system of preparing goods for safe, secure, efficient and effective handling, transport, distribution, storage, retailing, consumption and recovery, reuse or disposal combined with maximizing consumer value, sales and hence profit

10. What is Transportation?

The movement of goods and persons from place to place and the various means by which such movement is accomplished

11. Define containment

- the act, process, or means of keeping something within limits
- the policy, process, or result of preventing the expansion of a hostile power or ideology

12. What is labeling?

Labelling or using a label is describing someone or something in a word or short phrase. For example, the label "criminal" may be used to describe someone who has broken a law. Labelling theory is a theory in sociology which ascribes labelling of people to control and identification of deviant behaviour.

13. What is meant by SWC

14. What is meant by CWC?

15. List the jobs of warehouse workers?

A Warehouse Worker is responsible for varied daily tasks such as restocking shelves, accepting incoming orders, processing and packing orders, counting inventory and ensuring orders are shipped in a timely manner.

16. Define Procurement in Logistics

At its core, procurement logistics is the sourcing of materials needed to manufacture products. In other words, this part of the supply chain focuses on purchasing raw materials, replacement parts, auxiliary supplies, operating supplies and other items needed for the manufacturing process to work.

17. Define Crossdocking.

Cross-docking is a practice in logistics of unloading materials from a manufacturer or mode of transportation directly to the customer or another mode of transportation, with little or no storage in between.

18. Who are all benefited from warehousing

5 Advantages of Warehousing

- Warehousing Helps Meet Urgent Demand
- Warehousing Helps Keep Goods Safe
- Warehousing Paves Way for Other Services
- Warehousing Helps Keep Your Food from Going Bad
- Warehousing Saves a Business a Great Deal of Money

19. Define Business Ethics of a 4PL

Business ethics concerns ethical dilemmas or controversial issues faced by a company. Often, business ethics involve a system of practices and procedures that help build trust with the consumer. On one level, some business ethics are embedded in the law, such as minimum wages, insider trading restrictions, and environmental regulations. On another, business ethics can be influenced by management behavior, with wide-ranging effects across the company.

21. What are the Functions of Implementation center?

Implementation Methodologies

- Direct cutover
- Pilot implementation
- Parallel operation
- Phased implementation

Part B

1. Explain 3PL and 4PL

2. Describe the various types of warehousing
3. Explain the term warehousing and storage
4. Discuss about the various types of transportation utilized in Logistics Management?
5. Explain the role of warehousing
6. Explain the fundamental of Logistics Management
7. Changing environment keeps the logistics of rethink always Critically comment
8. Explain the Current trends in Logistics automation?
9. Explain the Logistics Outsourcing?
10. Explain the term shipping container Labeling.

UNIT III PLANNING DEMAND, INVENTORY AND SUPPLY

PART A

1. Define distribution network.
A distribution network can be seen as the flow of goods from a producer or supplier to an end consumer. The network consists of storage facilities, warehouses, and transportation systems that support the movement of goods until they reach the end consumer.
2. What is returnability.
Returnability - Returnability is the ease with which a customer can return a damaged product. However it involves cost too. Returnability is worst when a damaged good has to be returned to the manufacturing site from where it was originally shipped
3. Define value added.
In business, total value added is calculated by tabulating the unit value added per each unit of product sold. Thus, total value added is equivalent to revenue minus intermediate consumption.
4. What is Presale?
Presales is a process or a set of activities/sales normally carried out before a customer is acquired, though sometimes presales also extends into the period the product or service is delivered to the customer.
5. What is Value addition.
Extra value added over the original value of something. It can apply to products, services, companies, management, as well as other areas of business. In other words, value-added is the enhancement made by a company/individual to a product or service before channelizing it before consumer.
6. What is post sale.

Post-Sales refers to a collection of processes that you need to perform after a customer purchases your service. Give your customers an outstanding experience by planning a smoother post-sales process with our checklist.

7. What is facility Location?

Facility location is a name given to several different problems in computer science and in game theory: Facility location (optimization problem), the optimal placement of facilities as a function of transportation costs and other factors.

8. What is AIS?

AIS is a tool for transmitting data electronically between a vessel and the AIS receiving station. Data can be transmitted from vessel to vessel, vessel to ashore station or vessel to satellite.

9. What is Decision Tree?

A decision tree is a flowchart-like structure in which each internal node represents a "test" on an attribute (e.g. whether a coin flip comes up heads or tails), each branch represents the outcome of the test, and each leaf node represents a class label (decision taken after computing all attributes).

10. Define Uncertainty

Uncertainty refers to epistemic situations involving imperfect or unknown information. It applies to predictions of future events, to physical measurements that are already made, or to the unknown. Uncertainty arises in partially observable or stochastic environments, as well as due to ignorance, indolence, or both.

11. What are the factors influencing network decision.

Factors that influence decision to integrate supply chains and achieve expected benefits include: management attitude to risk; firm size, resources and targeted market; the firm's geographical location; the firm's customers, suppliers and competitors; and the firm's structure.

12. Write short note on Optimized network.

Network optimization removes the hurdles that stand in the way of optimal data transmission speeds. This means decreased latency and jitter, faster response times, and a better-connected IT ecosystem, and, as a result, increased throughput.

13. Write short note on grocery

14. Define reliability of transportation channels.

A reliable transportation system dependably provides users with a consistent range of predictable travel times. Transportation system reliability is one of the core performance outcomes of many management and operation strategies.

15. What is meant by Bouncing bubbles

16. Define obnoxious facility Location.

The problem considered in this paper is the weighted obnoxious facility location in the convex hull of demand points. The objective function is to maximize the smallest weighted distance between a facility and a set of demand points. Three new optimal solution approaches are proposed

17. Define PLC.

Product Life Cycle (PLC) has been used to analyze the behavior of a product during its time of production. The success of enterprises depends on its capacity of aligning Supply Chain Strategy (SCS) with PLC.

18. Write short note on order Visibility.

Order visibility allows management to see a clear picture of where items are at any given time, how much inventory is in the warehouse, on the trucks, in the store, being held for shipment, and due to arrive. Collaboration between all steps and components of the supply chain is critical.

19. Define TL

Full truckload (TL) shipping

Shippers use full truckload when: There are enough items to fill an entire truck. The customer prefers a whole truck dedicated to their goods. The freight is time sensitive. The weight makes it more cost effective than less than truckload.

20. Define LTL

Less than truckload (LTL) freight refers to the transportation of products or goods that do not require a full truckload. These smaller freight loads typically result in many separate shipments being transported on one truck.

PART B

1. Explain the importance and note of distribution network design
2. Explain the concept of value additions
3. Explain the models of facility Locations
4. Discuss the impact of uncertainty on network design
5. Explain how network design decisions are made using decision trees
6. Explain the network design planning
7. Explain the performance measure of logistics network model
8. Explain the location analysis techniques
9. Describe the term GIS
10. Describe the design options for a distribution network

UNIT IV LOGISTICS

PART A

1. Define Sourcing

The act of getting something, especially products or materials, from a particular place: sourcing of sth Last year, the company centralized its sourcing of raw materials. Product sourcing is highly selective.

2. Define Logistics Outsourcing

Outsourcing logistics is when a company uses an external provider (aka a third-party) to handle various supply chain functions. These can include a mix of shipping, storing, packing and/or delivering a company's physical goods, from raw materials all the way to the finished product.

3. Write short note on make or buy decision

A make-or-buy decision is an act of choosing between manufacturing a product in-house or purchasing it from an external supplier. Make-or-buy decisions, like outsourcing decisions, speak to a comparison of the costs and advantages of producing in-house versus buying it elsewhere.

4. Define Inventory management

Field inventory management commonly known as inventory management is the function of understanding the stock mix of a company and the different demands on that stock.

5. Define Value of Information

Value of information (Vol) is a decision analytic method for quantifying the benefit of acquiring additional information to support such analyses that can be used to help in a wide range of manufacturing decisions.

6. Write short note on value of perfect information

The expected value of perfect information is the price that a healthcare decision maker would be willing to pay to have perfect information regarding all factors that influence which treatment choice is preferred as the result of a cost-effectiveness analysis

7. Define Bull whip effect.

The bullwhip effect is a supply chain phenomenon describing how small fluctuations in demand at the retail level can cause progressively larger fluctuations in demand at the wholesale, distributor, and manufacturer and raw material supplier levels. The effect is named after the physics involved in cracking a whip.

8. Define buffer stock

A buffer stock scheme is an attempt to use commodity storage for the purposes of stabilising prices in an entire economy or an individual market. Specifically, commodities are bought when a surplus exists in the economy, stored, and are then sold from these stores when economic shortages in the economy occur.

9. Write short note on Co Sourcing.

Co-sourcing is a form of outsourcing solution in which an organization accesses assistance from a specific outsourced contractor or professional. Similar to contractor hiring and consulting, you'll be able to access external support for your internal team.

10. Define asset management.

Asset management is the service of managing a client's money. At its core, that means identifying a client's financial goals and then working to accomplish those goals via portfolio management—buying and managing stocks, bonds and funds.

11. Define value of Clairvoyance

In decision analysis, the value of information is the improvement in the outcomes of our actions that we would expect if we could reduce or eliminate uncertainty before making a decision.

12. Write short note on Global Sourcing.

Global sourcing is the practice of sourcing from the global market for goods and services across geopolitical boundaries. Global sourcing often aims to exploit global efficiencies in the delivery of a product or service.

13. Write short note on Cost Conversion cycle.

In management accounting, the Cash conversion cycle measures how long a firm will be deprived of cash if it increases its investment in inventory in order to expand customer sales. It is thus a measure of the liquidity risk entailed by growth.

14. Define SCOR

Supply-chain operations reference model is a process reference model developed and endorsed by the Supply-Chain Council as the cross-industry, standard diagnostic tool for supply chain management.

15. Define CRP

Capacity requirements planning (CRP) is the process of specifying the level of resources (facilities, equipment and labor force size) that best supports the enterprise's competitive strategy for production.

16. Define VMI

Vendor-managed inventory is an inventory management practice in which a supplier of goods, usually the manufacturer, is responsible for optimizing the inventory held by a distributor. In traditional inventory management, a retailer makes his or her own decisions regarding the order size.

17. Write short note on “Turn and Earn”

The turn-earn index combines gross margin and turnover. It is calculated by multiplying inventory turnover by gross margin percentage: $\text{Turnover} \times \text{Gross margin} = \text{Turn-earn index}$. For example, if a distributor has an average gross margin of 25 percent and experiences six inventory turns, he has a turn-earn.

18. What is meant by Behavioral obstacles

From severe temper tantrums to defiance, or noncompliance with school or house rules, these problems can lead to highly negative and conflict-ridden environments at home or school. There are sometimes underlying causes of behavior problems such as depression, anxiety, or ADHD, though this may not always be the case.

19. Write short note on DDMRP

Demand-Driven Material Requirements Planning

DDMRP is the acronym for demand-driven material requirements planning (MRP), an approach to material control and replenishment that improves on the functionality of traditional MRP.

20. Write short note on JIT replacement?

Just-in-time, or JIT, is an inventory management method in which goods are received from suppliers only as they are needed. The main objective of this method is to reduce inventory holding costs and increase inventory turnover.

Part B

1. Explain the Implementation of Sourcing
2. Explain the role of Inventory Management
3. How do you manage cycle inventory and safety inventory
4. Describe about value of Information
5. Explain Bull whip effect
6. Explain the concept of Coordination in supply chain
7. Explain the supply chain redesign on the inventory
8. Explain coordination in Supply chain
9. Explain value information
10. Describe the Rationing and shortage gaming?

UNIT V SUPPLY CHAIN INNOVATIONS

PART A

1. What is e business
E-business is concerned with the use of the Internet to link companies with their suppliers, customers and other trading partners. As a business concept, it has evolved significantly since its introduction in the 1990's in parallel with the rapid rate of development of information technology (IT) during this period.
2. What is B2B
Business-to-business is a situation where one business makes a commercial transaction with another. This typically occurs when: A business is sourcing materials for their production process for output, i.e. providing raw material to the other company that will produce output.
3. What is E- Supply Chain Management
Electronic supply chain management (e-SCM) is collaborative use of technology to improve the operations of supply chain activities as well as the management of supply chains (Turban et al., 2012)
4. What is e Logistics.
e-Logistics refers to the process of utilizing information and technology infrastructure in the traditional supply chain process to simplify knowledge sharing, data transfer, etc. It essentially

means carrying out most of the traditional logistics processes in the supply chain through an online platform.

5. What is Resource Logistics

Logistics resources include soft resources (i.e. logistics information and knowledge) and hard resources (i.e. logistics infrastructure and location) and capabilities include customer service capability and resource integration capability.

6. What is Global Logistics Management

It is technically the process of managing goods through an international supply chain, from its production to other parts of the world through intermodal transport system, transport via ocean, air, rail, and truck.

7. What exactly can E- SCM do for you

8. Define NLP

Natural Language Processing can remove much of the administrative overhead in managing the supply chain. This includes understanding local and global news and events, making it easier for stakeholders to query the supply chain, providing language translation, using adaptive forms and automating customer service.

9. Write short note on CRM.

Customer relationship management is a process in which a business or other organization administers its interactions with customers, typically using data analysis to study large amounts of information.

10. Write short note on TBC.

TBC-traditional business criteria; RP-resilience pillars. Achieving a supply chain that is resilient to potential unforeseen disruptions

11. Write Short note on Agile Manufacturing

Agile manufacturing is a manufacturing methodology that places an extremely strong focus on rapid response to the customer – turning speed and agility into a key competitive advantage. It represents a very interesting approach to developing a competitive advantage in today's fast-moving marketplace.

13. Define E- Collaboration

E-collaboration defined as “collaboration, which is conducted without face-to-face interaction among individuals or members of virtual teams engaged in a common task using information and communication technologies.”

14. Define Agility.

Agility is the ability to move quickly and easily in response to change or challenge, but in a business setting, the term really depends on the context.

15. Write short note on capacity Planning.

Capacity planning is the process of determining the production capacity needed by an organization to meet changing demands for its products. In the context of capacity planning, design capacity is the maximum amount of work that an organization is capable of completing in a given period.

16. Define ERP Systems

Enterprise resource planning (ERP) is a type of software system that helps organizations automate and manage core business processes for optimal performance.

16. Define IT For SCM

17. Write note on B2G

Business to government (B2G) is the sale and marketing of goods and services to federal, state, or local agencies. In modern lingo, there are three basic business models: business to consumer (B2C), business to business (B2B), and business to government (B2G). B2G is not an insignificant chunk of business.

17. Define E- Procurement

Electronic procurement, also known as e-procurement or supplier exchange, is the process of requisitioning, ordering and purchasing goods and services online. It is a business-to-business process. Unlike e-commerce, e-procurement utilizes a supplier's closed system and is only available to registered users.

18. Define E- Logistics

E-Logistics refers to the process of utilizing information and technology infrastructure in the traditional supply chain process to simplify knowledge sharing, data transfer, etc. It essentially means carrying out most of the traditional logistics processes in the supply chain through an online platform.

19. Write short note on KM

Knowledge management is the collection of methods relating to creating, sharing, using and managing the knowledge and information of an organization. It refers to a multidisciplinary approach to achieve organisational objectives by making the best use of knowledge.

PART B

1. Explain briefly about Current trend in business

2. Describe clearly supply chain IT Framework

3. Explain agile supply chain

4. Describe the framework and note for supply chain in E- Business and B2B practices

5. Explain the ESRM, E-SCM, and Global Logistics

6. Describe the agility performance in SCM

7. Explain the Logistics process in sCM

8. Explain the role of enterprise IT managers

9. Explain Global Logistics

10. Describe the term VPN

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