

Sub: **Logistics & SCM**

Code: **20MBAMM402**

Date: **09-07-2022**

Duration: 90 mins

Max Marks: 50

Sem: IV

Branch: MBA

OBE

Marks CO

RBT

Part A -Answer Any Two Full Questions (20*02=40 Marks)				
1(a)	What is decoupling? It allows economy of scale within a single facility and permits each process to operate at maximum efficiency rather than having the speed of the entire process constrained by the slowest.	[03]	CO2	L1
(b)	Describe the functions of transportation. <ul style="list-style-type: none"> • Movement Of Goods • Easy Movement Of Labour • Control Of Price Hike • Profit Maximisation • Help In Mass Production • Extensive Market • Mobility of Labour and Capital • Specializations and Division of Labour • Economies of Large Scale Production • Stability in Prices • Benefits to Consumers • Employment Opportunities and Increase in the National Income • Discouragement to Monopoly • Development of Agriculture • Industrial Development • Increase in National Wealth 	[07]	CO2	L2
(c)	Discuss ABC analysis and its importance.	[10]	CO2	L2

ABC ANALYSIS

ABC ANALYSIS is an inventory management technique that a company can use for the complete chain of materials and distribution management.

CATEGORISATION OF INVENTORY

CATEGORY A : Highest value in terms of annual consumption. Includes 20% of product having value of 70% to 80%.

CATEGORY B : Medium consumption value goods. Includes 30% of product having consumption value of 5% to 10%

CATEGORY C : Lowest consumption value. Includes 50% of the total inventory items, having value ranging from 5% to 10%

CATEGORIZATION

Follow below steps to categorize the inventory.

1. Find annual consumption value
2. Calculate annual consumption value for all the items
3. Sort items based on values
4. Calculate percentage inventory value of each item.
5. Finally, put the items under the relevant category.

ADVANTAGES

- Gives structured view of all inventory items
- Helps to control items, which require substantial working capital.
- Save unnecessary staff and storage expenses
- Helps to keep track of the inventory and ensures optimum stock.
- Improves the stock turnover ratio

DISADVANTAGES

- This requires extensive efforts to put items into each category.
- Only considers the financial value of items ignoring the other factors
- Company needs to have standardization for the materials.
- It does not support GAAP.

2(a) Define shipper and consignee.

[03]

CO2

L1

Areas of Differences	Shipper	Consignee
Seller versus Buyer	Seller	Buyer
Title of Goods	Determinant of consignee field	Directly related
Optional versus Mandatory	Mandatory	Mandatory
Position Against Goods	Hands out the goods to the carrier	Receives the goods from the carrier

(b) Explain lead time reduction strategies.

- Create a Lead Time Contract With Every Supplier.
- Order Inventory More Often.
- Share Sales Data With Your Supplier.
- Automate Your Inventory Management.

[07]

CO2

L2

(c) Discuss the importance of inter-modal transportation.

- Lower Cost Alternative to Truckload
- Sustainability
- Increased Level of Security
- Reduces Highway Congestion
- Reliable Capacity
- Optimizes the Efficiency of Truck and Rail
- Improves Safety

[10]

CO2

L2

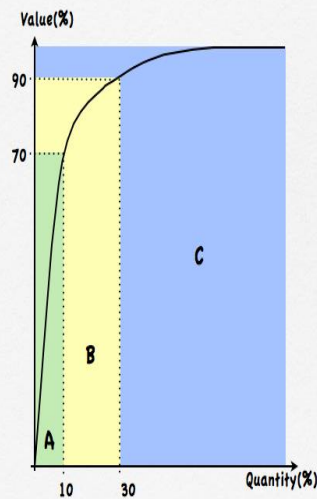
	<ul style="list-style-type: none"> • Easy to Monitor 			
3(a)	<p>Define lead time.</p> <ul style="list-style-type: none"> • Lead time in inventory management is the amount of time between when a purchase order is placed to replenish products and when the order is received in the warehouse. • Lead time is the time it takes to process an order and receive the shipment of your products. 	[03]	CO2	L1
(b)	<p>Describe the components of inventory decisions.</p> <p>Cycle inventory</p> <ul style="list-style-type: none"> • Average amount of inventory used to satisfy demand between shipments. • Depends on lot size. <p>Safety inventory</p> <ul style="list-style-type: none"> • Inventory held in case demand exceeds expectations costs of carrying too much inventory versus cost of losing sales. <p>Seasonal inventory</p> <ul style="list-style-type: none"> • Inventory built up to counter predictable variability in demand, cost of carrying additional inventory versus cost of flexible production <p>Overall trade-off: Responsiveness versus efficiency More inventory: greater responsiveness but greater cost, Less inventory: lower cost but lower responsiveness</p>	[07]	CO2	L2
(c)	<p>Discuss the role of infrastructure in transportation.</p> <p>Transport infrastructure is one of the key factors on which country's growth depends. The transport system is seen as the controller of the country's economy and offers a vital link between production and consumption. The amount of traffic moving on the roads of the country can demonstrate its progress. The current transport system in India includes different modes such as rail, air, road, and coastal shipping. Over the years, the transport has recorded a considerable growth in India both in terms of distance as well as the output of the system. When the transportation developments increase the accessibility of public and businesses to reach the jobs, goods, services and activities, the productivity also increases. This rise may be due to transport infrastructure enhancements and decreased travel time. As the labor market temporarily is brought closer to their workplaces because of improved travel time, companies experience improvements in worker's productivity. Although India has a huge and diverse transport industry with its own challenges, they are shifting to implement more and more energy-efficient technologies and customer-centric approach. It won't be wrong if we call it the 'lifeline' of a nation.</p>	[10]	CO2	L2
	Part B - Compulsory (01*10=10marks)			
4	<p>The organization ABC is into production of shoes. They produce formal shoes for army and to general public. They were facing problem with reference to stock out and more stock sometimes.</p>	[10]	CO2	L3

As a management trainee, use ABC analysis and help them to get rid of recurring stock issues.

ABC Analysis

- ✓ An inventory categorization technique used in materials management.
- ✓ Known as *Selective Inventory Control*.
- ✓ Based on the Pareto Analysis (80/20).
- ✓ ABC analysis based on user defined criteria.

Criteria	Class		
	A	B	C
Number of Items	10%	20%	70%
Value, \$	70%	20%	10%
Stock Control	Strict	Moderate	Loose
Delivery Cycle	Weekly	3 months	6 months
Control Report	Weekly	Monthly	Quarterly
Importance	High	Moderate	Low
Forecast	Accurate	Estimate	Roughly
Control Effort	Max	Moderate	Min
Sources	Max	> 2	2



Course Outcomes

		PO 1	PO 2	PO 3	PO 4
CO1	Demonstrate knowledge of the functions of logistics and supply chain management.				
CO2	To relate concepts and activities of the supply chain to actual organizations.	1a,2a,3a			1b,2b
CO3	Highlight the role of technology in logistics and supply chain management.				
CO4	Evaluate cases for effective supply chain management and its implementation.				

Cognitive level

KEYWORDS

L1	list, define, tell, describe, recite, recall, identify, show, label, tabulate, quote, name, who, when, where, etc.
L2	describe, explain, paraphrase, restate, associate, contrast, summarize, differentiate interpret, discuss
L3	calculate, predict, apply, solve, illustrate, use, demonstrate, determine, model, experiment, show, examine, modify
L4	classify, outline, break down, categorize, analyze, diagram, illustrate, infer, select
L5	grade, test, measure, defend, recommend, convince, select, judge, support, conclude, argue, justify, compare, summarize, evaluate
L6	design, formulate, build, invent, create, compose, generate, derive, modify, develop, integrate

PO1–Theoretical Knowledge; PO2–Effective Communication Skills; PO3–Leadership Qu
PO4 –Sustained Research Orientation; PO5 –Self-Sustaining Entrepreneurship

CCI

HOD