

**NOTE:**

- 1) All Questions are compulsory with internal choice options and carry 15 marks each.
- 2) Figures to the right indicate full marks
- 3) Use of simple Calculator is allowed
- 4) Working note should form part of your answer for practical questions.

Q.1) a) Choose the correct option (Any 8): (08)

- 1) Lack of communication between members of supply chain leads to \_\_\_\_\_ effect.  
(a) Miscommunication, (b) Bull- Whip, (c) Classical, (d) Bad
- 2) \_\_\_\_\_ type of material handling equipment does not require an operator.  
(a) Fork Lift truck, (b) Crane, (c) Industrial Trucks, (d) Conveyors
- 3) Combining several shipments into one large shipment is termed as \_\_\_\_\_  
(a) Sorting, (b) Assortment, (c) Consolidation, (d) Cross Docking
- 4) \_\_\_\_\_ is not an objective of inventory management.  
(a) Minimising waste, (b) Optimum utilisation of space,  
(c) Blockage of investment, (d) Avoid over ordering
- 5) \_\_\_\_\_ is not an objective of performance measurement.  
(a) Planning, (b) Monitoring, (c) Controlling, (d) Directing
- 6) The \_\_\_\_\_ travels through the inland waterway to an ocean port and is loaded on to an ocean going vessel, and shipped across ocean.  
a) Barge    b) Container    c) Cargo    d) Pallets
- 7) \_\_\_\_\_ is not an I.T. related tool used in Logistics.  
(a) EDI, (b) RFID, (c) ERP, (d) S-OS
- 8) Mission of logistics is providing a means by which \_\_\_\_\_ is achieved.  
a) Customer Image, b) Goodwill, c) Customer satisfaction, d) Customer problem
- 9) In \_\_\_\_\_ method an attempt is made to develop forecast through group consensus.  
a) Delphi    b) Naive    c) Consumer Survey    d) Regression
- 10) Resource cost are assigned to various activities of the organization in \_\_\_\_\_.  
a) Mission Based Costing,    b) Activity Based Costing,  
c) Total Cost Approach,    d) Traditional Costing

Q.1) b) State the following True or False A (Attempt Any 7 Questions) (07)

- 1) Pipeline mode of transport is used for movement of liquid items.
- 2) Consumer packaging aims at attractive appeal and information sharing.
- 3) Break bulk is one of the service benefits of warehousing.
- 4) Transportation creates time utility.
- 5) TOFC stands for Transport on Flat car
- 6) Terminal facilities is not an element of transport infrastructure
- 7) Inventory management involves maintaining required level of stocks to meet customer requirements.
- 8) Outbound logistics deals with procurement of spare parts and raw materials.
- 9) Customers are the last link in the supply chain.
- 10) Moving average is a qualitative method of demand forecasting.

Q.2) a) Define and explain concept of Logistics. Discuss the importance of Logistics. (08)

b) List down and explain the 7 Rights of customers. (07)

“OR”

Q.2) c) From the below given data, calculate a 3 period Weighted Moving Average with weights as 3, 2 and 1. The largest weight is assigned to most recent period and current demand value. Also forecast the demand for 11<sup>th</sup> month. (10)

Period (Month)	1	2	3	4	5	6	7	8	9	10	11
Demand in Units	100	120	130	135	145	150	160	175	180	190	?

d) Discuss the concept of Bull-Whip effect with the help of its causes. (05)

Q.3) a) What do you mean by Inter Modal Transportation? Explain various Inter Modal Combinations. (08)

d) Explain the concept of Material Handling with the help of its principles (any 6). (07)

“OR”

Q.3) c) Explain the concept of packaging, also explain various packaging materials and their uses. (08)

d) What is Warehousing? Discuss various factors affecting Warehousing Cost. (07)

Q.4) a) Explain the concept of EOQ and solve the problem. The annual demand of an item is 5400 units. The unit cost is Rs. 10. The inventory carrying rate is 20%. The ordering (procurement) cost is 150. Calculate EOQ and Total Inventory Cost. (08)

b) Discuss the concept of Performance Measurement in Logistics. Explain Internal Dimensions/ Types of Performance Measurement. (07)

“OR”

- Q.4) c) Distinguish between ABC and MBC (08)  
d) What do you mean by Logistical network analysis? Explain its objectives. (07)

Q.5) Read the given Case carefully and answer the questions given below: (15)  
AGCO is a leading global force in the manufacture and supply of agricultural machinery. The company grew substantially over the course of two decades, achieving a considerable portion of that growth by way of acquisitions.

As commonly happens when enterprises grow in this way, AGCO experienced increasing degrees of supply chain complexity, along with associated increases in cost, but for many years, did little to address the issue directly, primarily due to the decentralized and fragmented nature of its global network.

In 2012, AGCO's leaders recognised that this state of affairs could not continue and decided to establish a long-term program of strategic optimisation.

With five separate brands under its umbrella, AGCO's product portfolio is vast. At the point when optimisation planning began, sourcing and inbound logistics were managed by teams in various countries, each with different levels of SCM maturity, and using different tools and systems.

As a result of the decentralised environment, in which inbound logistics and transport management were separate operational fields, there was insufficient transparency in the supply chain. The enterprise as a whole was not taking advantage of synergies and economies of scale (and the benefits of the same). These issues existed against a backdrop of a volatile, seasonal market.

Questions:

- 1) Explain the facts of the case with the help of SWOT analysis of the case. (08)
- 2) Suggest some strategies to resolve global supply chain problems mentioned in the above case. (07)

“OR”

Q.5) Short Notes (Any 3) (15)

- 1) Golden Quadrilateral
  - 2) Reverse Logistics
  - 3) LASH
  - 4) Bar-coding and GPS
  - 5) Palletisation
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