

Online PGDM

Second Year, Trimester-4, June 2024

Course Name : Supply Chain Management

Max Marks : 70

Course Code : 4111

Max Time : 2 hrs

Instructions for Students:

This is a closed book examination. No external resource material allowed.

The Question Paper consists of 3 Sections- A, B, C. All sections to be attempted.

Allocated marks for each of the Section and Questions indicated.

Answers should be rich in content, pointwise and precise. Avoid unnecessary long answers.

Section A : Objective Type Questions

Max. Marks-24

(Answer all Questions, each question of 2 marks each, Total Marks: 2x12=24)

Q 1. Select the correct answer

1.1

As the response time desired by the customer decreases, the required number of facilities in the distribution network

- A) decreases.
- B) remains the same.
- C) increases.
- D) increases and then decreases.

1.2

The main advantage of in-transit merge over drop-shipping is

- A) the ability to reduce cost of inventory by centralizing inventories at the manufacturer.
- B) supply chains save on the fixed cost of facilities, because the need for other warehousing space in the supply chain has been eliminated.
- C) somewhat lower transportation cost and improved customer experience.
- D) order tracking is easy to implement because of the complete integration of information

systems at both the retailer and the manufacturer.

1.3

The required safety inventory

- A) increases with an increase in the lead time and the standard deviation of periodic demand.
- B) decreases with an increase in the lead time and the standard deviation of periodic demand.
- C) remains stable with an increase in the lead time and the standard deviation of periodic demand.
- D) increases with a decrease in the lead time and the standard deviation of periodic demand.

1.4

With the objective of reducing cycle inventory, a key to reducing lot size without increasing costs is to

- A) reduce the holding cost associated with each lot.
- B) reduce the fixed cost associated with each lot.
- C) reduce the material cost associated with each lot.
- D) reduce the manufacturing cost associated with each lot.

1.5

The impact of the lack of coordination on supply chain processes decreases for the following measure.

- A) Manufacturing cost
- B) Level of product availability
- C) Transportation cost
- D) Replenishment lead time

1.6

The practice of combining shipments for several retailers on the same truck is known as

- A) a milk run.
- B) a less than truckload shipment.
- C) a truckload shipment.
- D) an ASN.

1.7

Distributors add value to a supply chain between a supply stage and a customer stage

- A) if there is a small number of customers requiring a large amount of product.
- B) if there is a large number of customers requiring a large amount of product.
- C) if there are many small players at the customer stage, each requiring a small amount of the product at a time.
- D) if there are a few large players at the customer stage, each requiring a large amount of the product at a time.

1.8

One replenishment system that assigns replenishment responsibility to a single entity in a supply chain is

- A) vendor managed inventory.

- B) coordinated stocking.
- C) a sell-in to sell-through system.
- D) owner-managed inventory.

1.9

Improperly structured sales force incentives

- A) help create stable demand.
- B) have very little effect on the timing of customer orders.
- C) tend to create spikes in customer orders.
- D) ensure that orders are quickly and accurately entered and communicated to other affected supply chain processes.

1.10

The bullwhip effect decreases

- A) product availability.
- B) manufacturing cost.
- C) replenishment lead time.
- D) transportation cost.

1.11

Customer Rick places orders with retailer Negan, who orders from Dwight, who orders from Simon, who orders from Regina. Simon makes it's forecast for the coming year based on the orders he receives from Dwight. Simon's process is creating a(n)

- A) incentive obstacle.
- B) operational obstacle.
- C) information processing obstacle.
- D) behavioral obstacle.

1.12

Outbound transportation costs per unit at a given facility tend to be

- A) about the same as inbound costs.
- B) higher than inbound costs.
- C) lower than inbound costs.
- D) neither higher or lower than inbound costs.

Section B : Subjective Type Questions (Short Answer Questions)

Max. Marks-16

(Answer all questions, Total Marks= 8x2=16)

Q2 Consider the supply chain involved when a customer orders a best seller book from an online retailer. Identify the push pull boundary and two processes each in the push and pull phases. (8 Marks)

Q3

- a) Why an online retailer such as Amazon able to provide a large variety of books and music with less safety inventory than a book store chain selling through retail stores. Why? (4 Marks)
- b) Discuss various managerial levers to decrease the safety inventory. (4 Marks)

Section C : Subjective Type Questions (Long Answer Questions)

Max.Marks-30

(Answer any two questions, Total Marks= 2*15 = 30)

Q4

Blue Nile is one of the world's largest online diamond jewellery retailer. The company was founded in 1999 and has its headquarters in Seattle, Washington. Customers across the globe such as those in USA, Europe, China, Singapore etc can place their orders online and receive deliveries of diamond jewellery at home. In contrast, Zales is an American jewellery retailer with headquarters in Delaware, USA. Zales started in 1993 by selling diamond jewellery through its brick and mortar retail outlets. Over time Zales also started diamond jewellery online.

4.1 Based on the information provided, compare and evaluate the Competitive Strategies of Blue Nile and Zale. (5 Marks)

4.2 Based on the information provided, discuss and evaluate major supply chain strategic (or design) decisions taken by the two companies as part of their supply chain strategy and in alignment with their respective competitive strategy. (10 Marks)

Q5

Supply Chain decisions related to six drivers of Supply Chain Management impacts Responsiveness and Efficiency of a Supply Chain. **Providing one appropriate example of each**, discuss various supply chain decisions related to six drivers and their impact on Responsiveness and Efficiency of a supply chain. (15 Marks)

Q6

A manufacturer is working on its distribution network design and have decided to use "Manufacturer storage with direct shipping" instead of "Retail storage with customer pickup".

6.1 What can be the possible reasons behind this decision? (5 Marks)

6.2 Compare the two distribution network designs in terms of supply chain costs and customer value factors. (10 Marks)