

**PGDM (RM) (19-21)**  
**Supply Chain Management**  
**RM-107**

**Trimester – I, End-Term Examination: September 2019**

Time allowed: 2 Hrs 30 Min  
 Max Marks: 50

Roll No: \_\_\_\_\_

**Instruction:** Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means**. All other instructions on the reverse of Admit Card should be followed meticulously.

Sections	No. of Questions to attempt	Marks	Total Marks
A	Maximum 6 questions with internal choices and CILO covered (as an example)	6*5	30
B	Compulsory Case Study with minimum of 2 questions	20	20
			<b>50</b>

**SECTION A**

A1 a) Your friend is planning to start a firm that will sell highly innovative (CILO 2) electronic products. You have been hired to provide consulting on supply chain management of this firm. As a consultant, what kind of supply chain structure will you recommend? How will you structure the different drivers of this supply chain so that your friend can run his business successfully?

[5 Marks]

b) How is Flipkart able to sell a large variety of books and music with less safety inventory than a retailer selling through retail stores? [5 Marks]

**OR**

a) Amazon is selling all kinds of books to customers through its supply chain. Is the supply chain for all kinds of books same? If not, then why and how the structuring of drivers differs in terms of slow-moving (classical literature) and fast-moving (best sellers) books? [5 Marks]

b) Amazon hosts its flagship Great Indian Festival sale during the Diwali season. In 2018, Amazon is said to have seen sale of \$700-800 million during the six days of the sale. To make this event a grand success in 2019, what sorts of changes are required in Amazon's regular supply chain during Diwali season? [5 marks]

A2 a) Explain the characteristics of a supply chain (efficient) in the case of regular electronics products. (CILO 1) [5 Marks]

b) Consider the supply chain involved when a customer purchases a regular H & M T-shirt from Myntra. Demand variance of this T-Shirt is very low. Explain and justify the cycles in this supply chain and the location of the push/pull boundary. [5 Marks]

OR

a) Explain the concept of everyday low pricing, High low pricing and menu pricing. Why everyday low pricing is considered better than high low pricing? [5 Marks]

b) Cross-docking facility has widely used practices in the Indian retail industry. Explain the concept of cross-docking facility. Explain the conditions for successful cross-docking operations. [5 Marks]

A3 a) What type of distribution networks is best suited for highly differentiated products? Give your rationales behind the answer. (CILO 3) [5 Marks]

b) The Indian retail industry has undergone a significant transformation over the past decade and it continues to evolve quickly. As a supply chain consultant, pick a recent trend of your choice, discuss the nature of this trend in terms of its importance and impact on the retail industry and specify the several challenges associated with the implementation of this trend in the Indian retail industry. [5 Marks]

OR

a) Analyse cost factors associated with "distributor storage with last-mile delivery" distribution network. [5 Marks]

b) The several trends are redefining Indian retail industry. As a Supply Chain consultant, pick a recent trend of your choice, and discuss the nature of this trend in terms of its importance and impact on the Indian retail industry and the possible enablers related to the implementation of this trend in Indian retail industry. [5 Marks]

### SECTION B

Jugheads Bar and Restaurant uses 5200 bottles of an imported effervescent wine each year. The effervescent wine cost \$3 per bottle and it is served only in the whole bottle because it loses its bubble quickly. Jugheads figures that it costs \$10 each time an order is placed and holding cost are 20 percent of the purchase price. It takes two weeks for an order to arrive. Weekly demand is 100 bottles with a standard deviation of 30 bottles per week. Jugheads would like to use an inventory system that minimizes inventory cost and will provide a 95 percent service probability.

Jugheads orders its regular beer every ten days when a salesperson visits from one of the beer companies. Heineken is one of its most popular brands, with an average daily demand of 60 bottles. The standard deviation of daily demand was derived from examining beer sales over the past three months and was found to be 10 bottles per day. It takes two days for the order to arrive. Jugheads would like to satisfy 98 percent of the total demand. The salesperson just arrived and there are currently 100 bottles in stock. (CILO 3)

- B1. Identify the inventory model of Jugheads two products: effervescent wine and Heineken beer. [2 Marks]
- B2. What is the economic order quantity for effervescent wine to order? [5 Marks]
- B3. At what inventory level, Jugheads should place the order of effervescent wine. [5 Marks]
- B4. How many bottles of Heineken beer should be ordered? [5 Marks]
- B5. Explain the concept of service level and safety stock using an illustration. [3 Marks]

