JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA
PGDM / PGDM (M) / PGDM (SM)
IV TRIMESTER (Batch 2021-23)
END TERM EXAMINATION, NOVEMBER 2022
SET-2

Course Name	Supply Chain Management	Course Code	20522
Max. Time	2 hours	Max. Marks	40 MM

INSTRUCTIONS:
- Attempt all four questions.
- Distribution of marks for each question mentioned in the bracket.
- It is closed book / notes exam, no mobile/ electronic / digital medium is allowed. Only calculators are allowed.
- Answers should be rich in content, precise and to the point.

Q1)
Landmark has five large format retail stores across major cities in India including Mumbai, Bengaluru, Chennai, Hyderabad and Pune. A customer residing in Chennai and planning to buy a book can either order the book online on Amazon/ Flipkart or go to Landmark retail outlet in Chennai.

a) Are the customers looking for same kind of service and value from both these companies? Examine the differences in customer value factors in case of these two supply chains.
b) Examine the differences in supply chain network design decisions in these two supply chains in view of their different competitive strategies.
c) Comparatively evaluate these two supply chain designs in terms of Facilities costs, Inventory related costs and transportation costs.

(5+5+5=15 Marks)

Q2)

EXXON MOBIL Company serves three main distribution centres (DC1, DC2, and DC3) from its main factory, and maintains inventory at all the DCs. Currently EXXON MOBIL uses TL transportation separately to each distribution centre. Each truck has a hiring cost of $800 plus $250 per stop (loading/unloading/handling charges). EXXON MOBIL is considering aggregating deliveries to all the DCs on a single truck. Demand at DC1 is 60 tons a year, demand at DC2 is 24 tons a year, and demand at DC3 is 8 tons a year. Product cost for EXXON MOBIL is $10,000 per ton, and h = 0.25. The truck capacity is 12 tons.

a) If EXXON ships separately to each DC, examine the annual order (transportation) and holding costs?
b) If EXXON aggregates shipment to each DC on every truck that is used for transportation, examine the annual order (transportation) and holding costs?
c) Briefly discuss merits & demerits of aggregation for DCs with different annual demand.

(4+4+2=10 Marks)

Q3)

a) Examine the trade-off between mode of transportation employed and inventory level. What modes of transportation are best suited for large, low value shipments. Analyse the reasons.
b) Identify and discuss two examples of supply chains wherein the availability of real-time information though use of technology has been used to improve supply chain performance.

Q4) Compare the following with suitable examples/Illustration:

    a) Staple stock (storage) DC vs cross-dock DC
    b) MTO vs CTO
    c) Direct Shipment vs Milk Runs

(3+3+3=9 Marks)