

INDIRA UNIVERSITY, PUNE

SET-1

SCHOOL OF BUSINESS- MBA

Term End Examination (2025 Pattern) December – 2025 - Semester – I

Subject Name: Operation and Supply Chain Management
Subject Code: 25MBA103

Max. Marks: 25
Time: 1½ Hours

Instructions:-

- All questions are compulsory
- Illustrate your answers with neat figures and diagrams.

CO #	Cognitive Ability	Course Outcome
CO3	Apply	Identify the role of Operations, Supply Chain Management and the key issues.
CO4	Analyse	Examine components for integrated working across the SCM and Operations.
CO5	Evaluate	Explain the tools and techniques used in increasing the manufacturing and service efficiency.
CO6	Create	Formulate the various aspects of supply chain of a given company.

Q1.	Attempt Any One question: (5 Marks)	CO3																											
	<p>a. A manufacturing firm is struggling to maintain delivery timelines due to fluctuating demand and global supply disruptions. As an Operations Manager, prepare which core functions of operations management must be strengthened, and discuss how you would re-align current priorities to ensure agility and cost efficiency.</p> <p>b. A manufacturing organization uses following items in inventory: Using given data, carry out ABC analysis of these.</p> <table border="1"><thead><tr><th>Item</th><th>Annual usage (units)</th><th>Unit cost (₹)</th></tr></thead><tbody><tr><td>A1</td><td>1,000</td><td>50</td></tr><tr><td>A2</td><td>800</td><td>80</td></tr><tr><td>A3</td><td>600</td><td>40</td></tr><tr><td>A4</td><td>400</td><td>100</td></tr><tr><td>A5</td><td>300</td><td>20</td></tr><tr><td>A6</td><td>200</td><td>200</td></tr><tr><td>A7</td><td>150</td><td>10</td></tr><tr><td>A8</td><td>100</td><td>5</td></tr></tbody></table>	Item	Annual usage (units)	Unit cost (₹)	A1	1,000	50	A2	800	80	A3	600	40	A4	400	100	A5	300	20	A6	200	200	A7	150	10	A8	100	5	
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Q2.	<p>Attempt Any One question: (5 Marks)</p> <p>a. A furniture company notices that even though its factory utilization has increased, customer orders are still delayed. How can aligning productivity measures in Operations Management with Supply Chain performance metrics help improve delivery performance?</p> <p>b. A manufacturing plant reports frequent material handling delays and congestion on the shop floor. Analyze how changes in layout design can improve supply chain efficiency and material flow.</p>	CO4
Q3.	<p>Attempt Any One question: (5 Marks)</p> <p>a. Toyota has been globally recognized for its lean operations that emphasize waste elimination and continuous improvement. The company's adoption of Just-in-Time (JIT) has helped reduce inventory levels, enhance productivity, and maintain product quality. However, such efficiency also exposes the company to potential disruptions in its global supply chain. Evaluate how implementing JIT has improved Toyota's operational efficiency and discuss the associated risks that could threaten its long-term sustainability.</p> <p>b. Croma, a leading electronics retailer, faces challenges in balancing inventory cost efficiency with maintaining strong supplier relationships. Implementing Economic Order Quantity (EOQ) models with quantity discounts may help optimize ordering costs. Critically assess how EOQ with quantity discounts can influence Croma's cost efficiency and supplier relationships.</p>	CO5
Q4.	<p>Read the caselet and attempt both the subsequent questions : (5x2 =10 Marks)</p> <p>Freshomake is a chain of outlets located in Pune. Two brothers Ajay and Sujay are managing this business. Freshomake have 5 outlets across Pune. It operates a provision stores containing a wide variety of food items such as canned and packaged foods, fresh produce (Vegetables etc.), dairy and frozen products, beverages and ready to eat snacks. Some snacks are prepared at outlet but most of them are outsourced. All the inventory currently is locally outsourced. Even though the demand is there, rating of the 3.3 is not encouraging. Many a times the outlets seems cramped up, at times it is difficult to find the product. Sometimes the customers have to be committed further date of availability. 4 persons has approached Freshomake to open an outlet with their own funding in their area. Sujay and Ajay sensed the opportunity but were aware of the challenges in the business. Ajay and Sujay started brainstorming about the idea.</p> <p>Questions :</p> <p>a. With overall rating of 3.3, can you suggest Sujay and Ajay about some key factors in Operations and SCM domain to improve the rating?</p> <p>b. Create a plan with respect to OSCM area and what advice / recommendations will you give Sujay and Ajay about the idea of opening 4 more outlets.</p>	CO6