

M.B.A. (GM-OM) Sem.-4 Examination

OM-408

CIP & SO

April-2025

Time : 2-30 Hours]

[Max. Marks : 70

Q-1	<p>A) The manager of <i>Stanley Steemer</i>, a carpet cleaning company, is preparing a quarterly forecast for customer demand for Year 5. The business experiences seasonal fluctuations, with peak demand in the third quarter and low demand in the first quarter.</p> <p>The manager has projected a total customer demand of 2,800 for Year 5. The table below presents quarterly customer demand data for the past four years:</p> <table border="1"> <thead> <tr> <th>Quarter (Q)</th> <th>Year 1 Demand</th> <th>Year 2 Demand</th> <th>Year 3 Demand</th> <th>Year 4 Demand</th> </tr> </thead> <tbody> <tr> <td>Q1</td> <td>45</td> <td>70</td> <td>100</td> <td>100</td> </tr> <tr> <td>Q2</td> <td>335</td> <td>370</td> <td>585</td> <td>725</td> </tr> <tr> <td>Q3</td> <td>520</td> <td>590</td> <td>830</td> <td>1160</td> </tr> <tr> <td>Q4</td> <td>100</td> <td>170</td> <td>285</td> <td>215</td> </tr> </tbody> </table>	Quarter (Q)	Year 1 Demand	Year 2 Demand	Year 3 Demand	Year 4 Demand	Q1	45	70	100	100	Q2	335	370	585	725	Q3	520	590	830	1160	Q4	100	170	285	215	14
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Q-2	<p>A) As service organizations adopt digital technologies to enhance efficiency and scale operations, can they maintain personalization and emotional intelligence in customer interactions? Critically assess this paradox in the context of emerging service trends.</p> <p style="text-align: center;"><u>OR</u></p> <p>B) In what ways does plant layout influence operational efficiency? Discuss the various types of plant layouts and provide an example of a company that uses one of these layouts to enhance its production process.</p>	14																									
Q-3	<p>A) What are the different types of demand patterns, and how do they impact inventory control and forecasting decisions? Support your explanation with relevant examples.</p> <p style="text-align: center;"><u>OR</u></p> <p>B) How are modern manufacturing industries embracing digital transformation through Industry 4.0 technologies? What are the key challenges they encounter when implementing smart manufacturing systems?</p>	14																									

(P.T.O)

E468-2

Q-4	A) Identify the different types of manufacturing systems and explain how they vary in terms of their operational characteristics. <p style="text-align: center;"><u>OR</u></p> A) How does demand forecasting aid in effective decision-making within the Production and Service industries? Discuss its objectives and explore the various types of demand forecasting in detail.	14
Q-5	A) Define the key concepts of production and operations management. How do manufacturing and service processes differ in terms of their operational characteristics?	14

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