



**MBA DEGREE EXAMINATIONS: APRIL /MAY 2024**

(Regulation 2022)

Third Semester

**MBA- PROJECT MANAGEMENT**

P22MPEO631: Operations Management

**COURSE OUTCOMES**

- CO1:** Appreciate the strategic role of OM in creating and enhancing a firm's competitive advantages and issues of OM
- CO2:** Propose suitable tools and techniques of operations management for productivity improvement and operational issues in the value addition processes of a firm.
- CO3:** Display analytical skills in the application of problem-solving tools to resolve the operational issues.

**Time: Three Hours**

**Maximum Marks: 100**

**PART A (1Q x 20M = 20 Marks)**

- 1 XYZ Manufacturing Company produces electronic components for various industries. The company has been facing challenges related to product defects, inconsistent quality, and customer complaints. To address these issues, the management decides to implement Total Quality Management (TQM) principles across all departments. CO3 [K<sub>4</sub>]

**Implementation Steps:**

- Leadership Commitment:** The CEO and top management communicate the importance of TQM and actively participate in the implementation process.
- Employee Involvement:** Cross-functional teams are formed to identify quality issues and suggest improvements. Employees are encouraged to participate in decision-making processes.
- Continuous Training:** Comprehensive training programs are conducted to educate employees about TQM principles, quality standards, and problem-solving techniques.
- Process Improvement:** Lean manufacturing techniques are adopted to streamline processes and eliminate waste. Statistical process control (SPC) tools are implemented to monitor and control the production process.

5. **Supplier Partnerships:** Collaborative relationships are established with suppliers to ensure the quality of raw materials and components.
6. **Customer Focus:** Regular feedback is collected from customers to understand their needs and expectations. Customer satisfaction metrics are monitored closely.

Analyse how can XYZ Manufacturing measure the effectiveness of its TQM implementation?

(OR)

- |   |  |     |                   |
|---|--|-----|-------------------|
| 2 | Analyse the importance of 7 QC tools in improving the efficiency of an organization? | CO3 | [K <sub>4</sub> ] |
|---|--|-----|-------------------|

**PART B (5Q x 4M = 20 Marks)**

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|---|--|-----|-------------------|
| 3 | Explain the various challenges organizations are facing in terms of global operations? | CO1 | [K <sub>2</sub> ] |
| 4 | Explain EOQ model and its relevance in inventory management?                           | CO1 | [K <sub>2</sub> ] |
| 5 | Illustrate Capacity Planning in detail.  | CO1 | [K <sub>2</sub> ] |
| 6 | Explain the advantages and disadvantages of cellular layout                            | CO1 | [K <sub>2</sub> ] |
| 7 | Illustrate how statistical process control is done in manufacturing?                   | CO1 | [K <sub>2</sub> ] |

**PART C (3Q x 20M= 60 Marks) Answer Any Three Questions Only**

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|---|--|-----|-------------------|
| 8 | a)Analyze the relationship between the operations function and other management functions such as marketing, finance, and human resources.                                   | CO2 | [K <sub>4</sub> ] |
|   | b)Evaluate the role of operations strategy in addressing the challenges of global operations management, including the alignment of competitive priorities and capabilities. | CO2 | [K <sub>5</sub> ] |
| 9 | a)Examine in detail all the inventory management techniques used in organisations?   | CO2 | [K <sub>4</sub> ] |
|   | b)Analyse the relevance of aggregate planning and Master Production Schedule in manufacturing?   | CO2 | [K <sub>4</sub> ] |

- 10 a)Examine how enterprise resource planning (ERP) systems integrate materials management processes with other functional areas of an organization, facilitating seamless coordination and decision-making across the supply chain. CO2 [K4]
- b)Analyze the concept of materials requirement planning (MRP) and its application in determining the quantity and timing of materials needed for production. CO2 [K4]
- 11 a)Location strategy plays a critical role in the success of businesses, particularly those operating in service industries. Examine the statement with relevant justification. CO2 [K4]
- b)Analyse the various seven types of wastages in Lean manufacturing? CO2 [K4]

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