MBHC-4.1

Sl.No. : **Total No. of Pages : 2**

Fourth Semester M.B.A. Degree Examination, October - 2025
(SLM Scheme) (CBCS)
MANAGEMENT
Quality and Operations Management

Time : 3 Hours **Max. Marks : 80**

SECTION - A

Answer any five questions. Each question carries five marks. [5 × 5 = 25]

Q1) Define Production Management. Explain its significance.

Q2) Differentiate between Batch Production and Mass Production with examples.

Q3) XYZ company is planning to set up a new manufacturing unit. What factors should it consider while selecting a plant location?

Q4) What is World Class Manufacturing? List its main features.

Q5) What is Capacity Planning? Why is it important in operations management?

Q6) What is JIT? Explain its characteristics.

Q7) Write short notes on CAD, CAM, and CNC in modern production management.

SECTION - B

Answer any four questions. Each question carries ten marks. [4 × 10 = 40]

Q8) Explain the key factors influencing plant location and facility layout decisions with suitable examples.

Q9) Explain the importance of inventory management. Discuss different techniques used to control inventory.

Q10) Explain the role of Top Management in implementing TQM. How does benchmarking help in continuous improvement?

Q11) Explain the importance of ISO 9000 and ISO 14000 certifications for global competitiveness.

Q12) Explain the principles of the Toyota Production System and its impact on lean manufacturing.

Q13) What is line balancing? Explain its significance in production planning and control.

SECTION - C

Q14) **Case (Compulsory)** **[1 × 15 = 15]**

Sunrise Textiles Ltd. is a growing garment manufacturer located in South India. The company produces cotton shirts for both domestic and international markets. Over the past year, the company has faced significant challenges in meeting customer demand on time. One of the major issues is forecasting demand. Sales often fluctuate seasonally, but the company does not have a proper forecasting system, leading to overproduction during low demand and stock shortages during peak demand.

Another issue is the facility layout. The current process layout causes workers and materials to move across long distances, increasing lead time and reducing efficiency. The management feels that a product layout may be more suitable since the company produces standardized shirts in large volumes. In addition, the company has received complaints about inconsistent quality. While some shirts meet export standards, others are rejected, resulting in high rework costs. The CEO is considering implementing TQM practices such as 5S, quality circles, and Six Sigma to improve product quality.

Questions :

a) Identify the key operational issues faced by Sunrise Textiles and suggest production planning and layout strategies to overcome them.

b) Discuss how the adoption of TQM practices can help Sunrise Textiles to improve quality and competitiveness

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