MBSC-4.2D

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

Fourth Semester M.B.A. Degree Examination, October - 2025
(SLM Scheme) (CBCS) (Elective - D)
MANAGEMENT
OPERATIONS
World Class Manufacturing

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

SECTION - A

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

Q1) Define World Class Manufacturing and state its objectives.

Q2) Mention the Six P's of World Class Benchmarking.

Q3) Differentiate between Lean Manufacturing and Agile Manufacturing.

Q4) What is Kaizen? Give its benefits.

Q5) List obstacles to TQM implementation.

Q6) Write a short note on Taguchi's Quality Loss Function.

Q7) State the advantages of implementing 5S techniques.

SECTION - B

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

Q8) Explain the World Class Excellence Model and its application in Indian industries.

Q9) Discuss the role of Process Management and Continuous Improvement in achieving WCM.

Q10) Elaborate on Group Technology (GT). Highlight its advantages, limitations, and applications.

Q11) Explain the importance of Benchmarking and its process with examples.

Q12) Describe the concept of Total Productive Maintenance (TPM). How does it reduce downtime?

Q13) Write notes on :

a) FMEA (Failure Mode and Effect Analysis)

b) Quality Circles

SECTION - C

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

TexFab Industries Ltd., a textile manufacturer in South India, has been exporting cotton and blended fabrics for more than two decades. Recently, it has been losing ground to global competitors who provide higher quality fabrics at lower prices. Customers now demand faster delivery, customized textile designs, and eco-friendly production.

To stay competitive, TexFab has decided to implement World Class Manufacturing practices, focusing on:

• Cellular Manufacturing for flexibility and reduced lead times.

• TPM to minimize machine breakdowns.

• Kaizen and 5S to build a culture of continuous improvement.

• Six Sigma to reduce defects and enhance process capability.

• Green Manufacturing to meet global sustainability standards.

Challenges include high employee turnover, supplier inconsistency in providing quality raw materials, and lack of a benchmarking framework to measure progress against international leaders.

Questions :

a) What are the major challenges TexFab Industries faces in adopting WCM?

b) Suggest strategies to implement Lean, TPM, and Kaizen effectively in the textile industry.

c) How can Green and Sustainable Manufacturing practices enhance TexFab's global competitiveness?

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