MB-123-D

Sl.No. :

Total No. of Pages : 2

Fourth Semester M.B.A. Degree Examination, May - 2025
(SLM Scheme) (Non CBCS)
MANAGEMENT
Elective - D : Operations
MBSC 3.2 D : World Class Manufacturing

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

SECTION - A

Answer any five sub-questions. Each question carries 3 marks. [5 × 3 = 15]

Q1) a) What are the 5s technique.

b) What is FMEA.

c) Describe manufacturing excellence?

d) What is quality circle.

e) What is process mapping.

f) What is the concept of green manufacturing?

g) What is rapid prototyping?

SECTION - B

Answer any four sub-questions. Each question carries 5 marks. [4 × 5 = 20]

Q2) Describe the key pillars of World-Class Manufacturing (WCM).

Q3) Explain the main attributes of excellent companies in the context of World-Class Manufacturing.

Q4) Discuss the models used for manufacturing excellence, such as Schonberger, Halls, Gunn and Maskell.

Q5) How sisha Hozen & zero - defect helps to improve quality.

Q6) Explain the concept of kaizen and its role in continuous improvement within Total Quality Management (TQM).

Q7) Describe the principles of Six Sigma and their application in manufacturing.

SECTION - C

Answer any three questions. Each question carries 10 marks. **[3 × 10 = 30]**

Q8) Analyse the contributions of quality Gurus in TQM..

Q9) Write a note on group Technology.

Q10) How can companies achieve world class excellence.

Q11) Analyze the role of maintenance management within the Total Productive Maintenance (TPM) framework.

Q12) Select any two companies, one from India other from abroad identify the factors reading to their success.

SECTION - D

Q13) **Case (Compulsory)** **[1 × 15 = 15]**

Precision Tools Ltd. is a mid-sized manufacturing company specializing in high-quality precision tools for the automotive and aerospace industries. The company has been facing increasing competition from global manufacturers who are leveraging advanced technologies and quality management systems to produce superior products at lower costs.

To stay competitive, Precision Tools Ltd. decided to adopt World-Class Manufacturing (WCM) practices. The management identified the key WCM pillars–such as Total Productive Maintenance (TPM), continuous improvement, and employee involvement–as essential for achieving their goals. They also explored various models of manufacturing excellence, including those proposed by Schonberger, Halls, and Maskell, to find the best fit for their operations.

After implementing TPM, the company noticed a significant reduction in machine downtime and production failures. However, challenges remained in fully integrating agile manufacturing practices and achieving zero defects across all production lines.

Questions :

a) Analyze how the implementation of Total Productive Maintenance (TPM) at Precision Tools Ltd. contributed to reducing production failures.

b) Considering the models of manufacturing excellence by Schonberger, Halls, and Maskell, which model would you recommend for Precision Tools Ltd. to fully integrate into their operations? Analyze the potential benefits and drawbacks of your chosen model.

c) Evaluate the challenges Precision Tools Ltd. may face in adopting agile manufacturing practices.

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