

CBCS SCHEME

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18ME652

Sixth Semester B.E. Degree Examination, Jan./Feb. 2023 World Class Manufacturing

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Define World Class Manufacturing. Explain requirements of manufacturing excellence. (05 Marks)
- b. Explain with a neat diagram, Schonberger model of WCM (10 Marks)
- c. Explain organization cultural of WCM company. (05 Marks)

OR

- 2 a. With a neat sketch explain Gunn's model and Maskell's model of world class manufacturing. (10 Marks)
- b. Explain with a neat sketch Hall's framework for value added manufacturing. (10 Marks)

Module-2

- 3 a. What is benchmarking and explain its best practices. (10 Marks)
- b. Explain lean manufacturing and its tools. (05 Marks)
- c. What are bottlenecks and explain its best practices? (05 Marks)

OR

- 4 a. Explain eliminating waste of Toyota Production system, with an example. (10 Marks)
- b. Explain gaining competitive edge through WCM. (10 Marks)

Module-3

- 5 a. Explain Flexible Manufacturing System (FMS) with its block diagram. (10 Marks)
- b. What is Rapid prototyping? Explain. (05 Marks)
- c. What do you mean by Poka-Yoke quality control technique. (05 Marks)

OR

- 6 a. What is Total Productive Maintenance (TPM)? Explain pillars of TPM. (08 Marks)
- b. Explain 5S is Toyota production system with suitable example. (08 Marks)
- c. What are visual controls and explain its types. (04 Marks)

Module-4

- 7 a. What is Human Resource Management? Explain. (05 Marks)
- b. Explain any to methods/techniques of Removing root cause of problems. (10 Marks)
- c. List the steps involved in solving the problem. (05 Marks)

OR

- 8 a. Explain Fishbone (cause and effect) diagram to solve and find the root cause of problem. (08 Marks)
- b. Explain motivation and reward in the age of continuous improvement. (07 Marks)
- c. Explain Five why's analysis. (05 Marks)

Module-5

- 9 a. Explain the typical characteristics of WCM. (10 Marks)
b. Explain the following performance indicators:
(i) POP (ii) TOPP (iii) AMBITE Systems (10 Marks)

OR

- 10 a. What is World Class Performance? (04 Marks)
b. What is green and clean manufacturing? Explain. (08 Marks)
c. Explain the concept of six-sigma philosophy. (08 Marks)

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