

CBCS SCHEME

USN

17ME835

Eighth Semester B.E. Degree Examination, July/August 2022 Product Life Cycle Management

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. Define Product Life Cycle Management. Discuss the Opportunities (any 4) of Product Life Cycle Management. (10 Marks)
b. Discuss briefly the various Components of Product Life Cycle Management. (10 Marks)

OR

- 2 a. Discuss briefly the steps involved in the development of a PLM strategy. (10 Marks)
b. Explain the basic component of Product Data Management System. (10 Marks)

Module-2

- 3 a. List the benefits and objectives of a good Product Design. (10 Marks)
b. What is Concurrent Engineering? List the advantages of Concurrent Engineering. (10 Marks)

OR

- 4 a. Discuss briefly the various steps involved in Product Design Process. (07 Marks)
b. What is Product Recycling? Also discuss the benefits of Recycling. (13 Marks)

Module-3

- 5 a. What is New Product Development (NPD)? Discuss the need for NPD. (10 Marks)
b. Explain the step involved in NPD. (10 Marks)

OR

- 6 a. Explain the steps involved in structuring New Product Development. (14 Marks)
b. List the characteristics of an ideal Decision Support System. (06 Marks)

Module-4

- 7 a. Discuss the meaning of Technological change with examples. Also mention its impact on Society. (10 Marks)
b. Explain the following Technology Forecasting method :
Brain Storming , Delphi technique and Scenario writing. (10 Marks)

OR

- 8 a. What is Technology Forecasting? Mention the reasons for Technology Forecasting. (08 Marks)
b. Explain 'Relevance Tree Technique' of Forecasting with a suitable example. (12 Marks)

Module-5

- 9 a. What is Virtual Product Development? Mention the benefits of Virtual Product Development. (10 Marks)
b. Discuss the 3D , CAD system used for Virtual Product Development, also mention its benefits. (10 Marks)

OR

- 10 a. What is Product Data Technology? Discuss the classification of Product Data. (10 Marks)
b. Illustrate the Generic Product Structure of a Bicycle. (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and/or equations written eg. 42-8-50, will be treated as malpractice.