CBCS SCHEME

17ME835

USN

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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