CBCS SCHEME

USN | | | | | | | | | | |

15ME835

Eighth Semester B.E. Degree Examination, November 2020
Product Life Cycle Management

Time: 3 hrs. Max. Marks: 80

Note: Answer any FIVE full questions irrespective of modules.

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.

Module-1

1 a. Explain the different phases of PLCM with a neat sketch. **(08 Marks)**
b. Explain the component of PLCM. **(08 Marks)**

2 a. Explain in brief the basic components of a PDM system. **(08 Marks)**
b. Explain the process of implementing the PLM strategy. **(08 Marks)**

Module-2

3 a. Discuss the various steps involved in product design. **(08 Marks)**
b. What is Design for X in product design? List the various techniques in design for X-system. **(08 Marks)**

4 a. What is product recycling? Discuss the benefits of product recycling. **(08 Marks)**
b. Discuss in brief the various human factors to be incorporated during product design. **(08 Marks)**

Module-3

5 a. Define New Product Development (NPD) and discuss the need for NPD. **(08 Marks)**
b. Discuss components for building Decision Support System (DSS). **(08 Marks)**

6 a. Explain the steps involved in product Redesign. **(08 Marks)**
b. What are different factors for estimating market opportunities for new product? **(08 Marks)**

Module-4

7 a. What is technology forecasting? State the need for technology forecasting. **(07 Marks)**
b. Write short notes on :
i) Delphi technique ii) Scenario writing iii) Growth curves. **(09 Marks)**

8 a. Discuss the mission flow diagram in technology forecasting. **(08 Marks)**
b. Briefly discuss the various methodologies and tools in product innovation process. **(08 Marks)**

Module-5

9 a. Write short notes on : i) 3D CAD system ii) Digital Mock-up. **(08 Marks)**
b. Discuss the need and benefits of virtual product development. **(08 Marks)**

10 a. What is data model? Discuss the different types of data models. **(08 Marks)**
b. Explain the important guidelines to be followed in writing product description. **(08 Marks)**

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