



# CBCS SCHEME

18MA822

Eighth Semester B.E. Degree Examination, June/July, 2023

## 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. Briefly explain the basic components of a PDM system. (10 Marks)  
b. Define PDM system. Explain the importance and reasons for implementing them in organization. (10 Marks)

OR

- 2 a. Explain the opportunities and benefits of PLCM. (10 Marks)  
b. What are the components of PLM and explain the phases of PLM with a neat sketch. (10 Marks)

### Module-2

- 3 a. Explain the various strategies for Recovery at End of product life. (10 Marks)  
b. Discuss the role of concurrent engineering in product design and development. (10 Marks)

OR

- 4 a. With an example, discuss the various steps involved in Engineering design. (10 Marks)  
b. What is product recycling? Discuss the benefits of product recycling. (10 Marks)

### Module-3

- 5 a. Define New Product Development (NPD) and Discuss the need for NPD. (10 Marks)  
b. Explain briefly the steps involved in product redesign. (10 Marks)

OR

- 6 a. What is Decision Support System (DSS)? Discuss the components for building DSS. (10 Marks)  
b. Explain briefly Launching the Tracking of new product program. (10 Marks)

### Module-4

- 7 a. Briefly explain relevance tree technique with a suitable example. (10 Marks)  
b. Define Technology Forecasting. Briefly explain the different methods of technology forecasting. (10 Marks)

OR

- 8 a. Define Technological change. Explain briefly its impact on society. (10 Marks)  
b. Briefly discuss the various methodologies and tools in product innovation. (10 Marks)

### Module-5

- 9 a. Briefly explain any two common techniques for analyzing virtual product models. (10 Marks)  
b. Explain briefly the concept of product configuration and its benefits. (10 Marks)

OR

- 10 a. Explain briefly the product data technology and its classification. (10 Marks)  
b. Discuss 3D – CAD system and Digital Mock – up tools used in virtual product development. (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.