

CBGS SCHEME

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15ME835

Eighth Semester B.E. Degree Examination, July/August 2021

Product Life Cycle Management

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions.

- 1 a. Define PLM? Explain the different stages of PLM. (08 Marks)
b. Discuss and explain briefly the components of PLM. (08 Marks)
- 2 a. Discuss and explain the steps involved in product life cycle model with a neat sketch. (06 Marks)
b. Summarize the five step process in implementing the PLM strategy. (10 Marks)
- 3 a. Define Engineering Design? Explain briefly the steps involved in Engineering Design. (08 Marks)
b. Define Product Recycling? Discuss the various benefits of product recycling. (08 Marks)
- 4 a. Discuss and explain briefly the concepts involved in organization and decomposition in product design by considering a suitable example. (08 Marks)
b. Discuss and explain briefly the different guidelines to be followed during design for manufacturing and assembly. (08 Marks)
- 5 a. Explain the benefits of New Product development. (06 Marks)
b. Summarize the steps involved in estimating the market opportunities for a new product. (10 Marks)
- 6 a. Discuss the steps involved in launching of a New Product. (10 Marks)
b. Explain briefly the need and benefits of product redesign. (06 Marks)
- 7 a. Explain briefly the elements of Technology forecasting. (06 Marks)
b. Define Technology forecasting. Explain briefly the methods of technology forecasting. (10 Marks)
- 8 a. Discuss and explain briefly the importance of Relevance tree and mission flow diagram used in technology forecasting. (08 Marks)
b. Explain briefly the methodologies and tools involved in product innovation process. (08 Marks)
- 9 a. Summarize the tools involved in virtual product development. (08 Marks)
b. Illustrate with an example the Generic Product Structure. (08 Marks)
- 10 a. Define product data technology. Explain briefly the different categories of product data technology. (06 Marks)
b. Define Data Model. Explain briefly the different types of data models used in product life cycle management. (10 Marks)

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.

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