

Eighth Semester B.E. Degree Examination, June/July 2019
Product Life Cycle Management

Time: 3 hrs.

Max. Marks: 80

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

Module-1

- 1 a. Define PLM. List and explain the different phases of Product Life Cycle. (06 Marks)
b. What is PLM Strategy? Explain. (04 Marks)
c. List the benefits of PLM. (06 Marks)

OR

- 2 a. Sketch and explain the PLM has a holistic approach to the management of a product. (06 Marks)
b. List and explain the various opportunities of PLM. (06 Marks)
c. What do you mean by PLM feasibility study? Explain. (04 Marks)

Module-2

- 3 a. What is Engineering design? Explain. (04 Marks)
b. Sketch and explain the product design process. (06 Marks)
c. Sketch and explain the recovery strategies at end of life. (06 Marks)

OR

- 4 a. Sketch and explain the comparison between sequential and concurrent engineering in product development process. (06 Marks)
b. List and explain the most common DFX techniques used in the product design and development process. (06 Marks)
c. Explain the human factors to be considered in product design. (04 Marks)

Module-3

- 5 a. Sketch and explain the various activities of new product development. (08 Marks)
b. How do you estimate the market potential of a new product? Explain. (08 Marks)

OR

- 6 a. What is Decision Support System? How it is helpful in decision making? Explain. (08 Marks)
b. With the aid of a flow chart, explain the process of launching and tracking of a new product. (08 Marks)

Module-4

- 7 a. Define Technology Forecasting. Explain why technology forecasting is important. (08 Marks)
b. List and explain any one method of Technology Forecasting. (08 Marks)

OR

- 8 a. Sketch and explain the importance of 'Relevance Tree' by taking Automobile as an example. (08 Marks)
b. List and explain the importance of ideation tools in the innovation process. (08 Marks)

Module-5

- 9 a. What is Model building? How do you classify them? Explain. (06 Marks)
b. Explain the following :
i) Product structures ii) Digital mock – up. (10 Marks)

OR

- 10 Explain the following :
a. Data model.
b. Product configuration.
c. 3D CAD systems.
d. Variant Management. (16 Marks)