

(3 Hours)

[Total Marks: 100]

1. Q-1 is compulsory and attempt any four from the remaining questions.
2. All questions carry Twenty (20) marks.
3. Illustrate answers with neat sketches where ever required.
4. Answers to the questions should be grouped and written together.

- Q 1** Answer any **four** questions from the following : **20**
- a Explain the importance and benefits of PLM.
  - b State the Barriers to PDM implementation.
  - c Discuss PLM visioning
  - d Explain utility of Modeling and visioning in product design.
  - e Describe the Concepts of redesign of products.
- Q 2** **10**
- a Describe change management for PLM.
  - b What are the Typologies of Activity Models? Explain its specific applications in PLM? **10**
- Q 3** **10**
- a How the products are identified in the multi-product industries? Discuss the product identification standards and process used in the industries. **10**
  - b Describe Environmental Aspects of the Consumption of Energy Resources. **10**
- Q4** **10**
- a Explain integration of technological innovation and product development in businesses processes with in enterprises. **10**
  - b Explain Transfer file and Database integration with suitable diagram. **10**
- Q5** **10**
- a explain the System roles of ERP and CAD for Integration of the PLM system. **10**
  - b what are the various strategies for recovery at end of life. **10**
- Q6** **10**
- a Explain in brief Need for Life Cycle Environmental Strategies for the modern manufacturing industries. **10**
  - b Describe Useful Life Extension Strategies process. **10**
- Q7** **10**
- a How the Cost Analysis is carried out for the new product life cycle process? Support your answer with suitable considerations and diagrams. **10**
  - b Explain Framework of Life Cycle Assessment. **10**