

Q.P. Code : 27969

[Time: 3 Hours]

[Marks: 80]

- N.B:
1. Solve any four questions.
 2. Assume suitable data if required and mention it clearly
 1. Figures to right indicate full marks

1. A) Explain importance of PDM systems. **05**
B) Explain role of 3D CAD systems as virtual product development tools. **05**
C) Explain useful life extension strategies. **05**
D) Explain field of application and limitations of life cycle assessment. **05**
2. A) Explain financial justification of PDM. What are barriers to PDM implementation? **10**
B) Explain following- **10**
 - i) Pre-PLM Environment
 - ii) PLM paradigm
3. A) With respect to virtual product development tools explain:- **10**
 - i) Model Building
 - ii) Model Analysis
B) Explain strategies essential for effective change management for PLM in detail. **10**
4. A) Explain need for life cycle environmental strategies. Explain End -of -Life Strategies. **10**
B) Explain life cycle costing giving examples. **10**
5. A) With respect to Life Cycle Assessment and Life Cycle Cost Analysis explain:- **10**
 - i) Phases of LCA in ISO standards
 - ii) Evolution of models for product life cycle cost analysis.
B) With examples of your choice explain concept of design for X **10**
6. A) Starting PLM initiative **05**
B) PLM applications **05**
C) New Product Development(NPD) **05**
D) Methodological Evolution in Product Design **05**