

(3 Hours)

[Total Marks: 80]

N.B. 1) Attempt any 4 questions.

2) Draw neat and labeled diagrams wherever required.

3) Figures to the right indicate full marks.

1. (a) Define PLM and explain its different phases. How its study can be used by manufacturing department in a company? (10)
(b) Write note on "Design for X". Explain "Design for Serviceability" in detail with an example. (10)
 2. (a) What are the principles of change management? How can it be carried out smoothly in an organization? (10)
(b) Write a note on PLM Vision and Strategy. Explain strategy structure and strategy elements. (10)
 3. (a) Write note on 3D CAD systems. Explain the role of digital mock-up in Product Design. (10)
(b) Write a detailed note on 'Concurrent Engineering'. (10)
 4. (a) What elements does product data comprise of? Explain how PDM system helps product development process to proceed smoothly. (10)
(b) What is Product Configuration and Variant Management? Explain in details with suitable examples. (10)
 5. (a) Explain phases of Life Cycle Assessment in ISO Standards. (10)
(b) Explain the role of modeling and simulation in product design with some example or a case study. (10)
 6. Write short notes (any four) (20)
 - (a) PLM feasibility study during its implementation
 - (b) Mission flow diagram
 - (c) Relevance Trees
 - (d) Morphological Matrix Technique
 - (e) Design for Environment
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