

Total No. of Pages : 01

Total No. of Questions : 08

M.Tech.(CAD/CAM) (E-V) (Sem.-3)
PRODUCT DESIGN & DEVELOPMENT
Subject Code : ME-521
Paper ID : [E1040]

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTION TO CANDIDATES :

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWENTY marks.

- Q1. Explain different product design phases with the help of a flow chart.
- Q2. What is the role of aesthetics in product design? Explain different methods to improve aesthetics of a product.
- Q3. What is meaning of design for production? Explain design of forged parts.
- Q4. What do you understand by value of a product? Explain the process of value analysis.
- Q5. Explain the selective laser sintering process with the help of a diagram.
- Q6. a) Explain different problem solving techniques.
b) Explain safety and environment considerations related to product design.
- Q7. a) Explain the process of stereolithography with the help of a diagram.
b) What is break even analysis? Explain with the help of a diagram.
- Q8. a) What are the benefits of rapid prototyping as compared to conventional manufacturing? Explain its various applications.
b) What are the various options available to management for increasing the profit? Discuss the threats related to each option.