

Roll No.

Total No. of Pages : 01

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M.Tech (ME) (2017 Onwards) (Sem.-2, 3)
PRODUCT DESIGN AND DEVELOPMENT
Subject Code : MTME-213
M.Code : 74989

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTIONS TO CANDIDATES :

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

1. What do you understand by design by innovation? List and explain essential factors of product design.
2. Discuss the fundamental three “S”s that relate to economic analysis of product design. Also list out the Activities and Advantages of Standardizing a product design.
3. What is the product success strategy of an organization, and how does it affect the design of the product?
4. What are the courses of action open to management in improving profits? What are the likely hazards linked with each course of action?
5. Define Value Engineering. Explain the application of the value engineering concept with the help of two case studies.
6. What issues should be considered before commercializing or launching new product? What are the methods of launching? Discuss the steps in launch control protocol.
7. Studying and making detailed design of a product is considered to be an important phase of Product design and development. Discuss in detail the steps involved in making detailed design of a new product. What is the role of allowances and tolerances in detailed design and assembly?
8. Write short notes on :
 - (a) Difference between factor of safety and reliability.
 - (b) Product life cycle.
 - (c) Designing for maintenance.
 - (d) Break-even point.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.