

22233

**M.Tech. 2nd Semester Mechanical Engg. (Machine  
Design) Examination, May-2017**

**PRINCIPLES OF MACHINE DESIGN**

**Paper-M-806-A**

*Time allowed : 3 hours]*

*[Maximum marks : 100*

*Note : Attempt any five questions. All questions carry  
equal marks.*

1. Discuss the design process and role of designer in the designing of a product. 20
2. Discuss the role of information in designing the product and discuss the various types of information. 20
3. Explain the role of creativity as means to synthesis of alternatives. 20
4. Discuss the product life cycle from production to consumption and disposal. 20
5. Discuss how the visualization and synthesis is done for a new product and discuss the characteristics of a good model. 20
6. Explain the steps followed in the design of modular products and discuss how the quality and cost is controlled for the same. 20

22233-P-2-Q-8 (17)

[P.T.O.]

( 2 )

**22233**

7. Discuss the role of a report and discuss the steps followed in preparing and presenting the report. What is the quality of good report ? 20
8. Write short note on following :
- (a) Preliminary design
  - (b) Characteristics of good design
  - (c) Oral vs. written communication. 20

**22233**