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Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech.(ME) (2012 Onwards E-II) (Sem.-7)****PRODUCT DESIGN & DEVELOPMENT**

Subject Code : DE/PE-3.0

M.Code : 72016

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

**SECTION-A****1. Answer briefly :**

- a) What do you understand by Product Design & Development?
- b) Write objectives of product development.
- c) Write objectives of product graphics.
- d) Describe 'colors and traditions'.
- e) What do you understand by special relationships and composition in 2D and 3D?
- f) Describe graphics of display and control panels.
- g) What do you understand by line color in visual design?
- h) What is the role of aesthetics in product design?
- i) Describe product graphics.
- j) What do you mean by balance proportions in visual design?

### SECTION-B

2. What are basic elements of Visual design? Explain.
3. What do you mean by 'product graphics'? Describe graphics of display and Control panels?
4. What are various standard fastening and joining details in different materials? Explain.
5. What is the role of designer in product development?
6. Describe productivity and fabrication in pressed component design.

### SECTION-C

7. Describe :
  - a) Size
  - b) Shape
  - c) Mass
  - d) Unity
  - e) Variety as elements of visual design
8. What are essential features of Product Design? Differentiate between design by evolution and design by innovation?
9. Describe color as an element of design, its interrelations, traditions and clarification dynamics?

**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.**