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Total No. of Pages: 01

Total No. of Questions: 08

M.Tech. (PE) (Sem. – 3)
PRODUCT DESIGN & DEVELOPMENT

Subject Code: PE-524

M Code: 39022

Date of Examination: 14-12-2022

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. a) What do you understand by term financial feasibility and economic worthwhileness? How different are they from each other? How much important are these for good product design?
b) What is the importance of product design in the industry?
2. a) Discuss in detail the main ergonomic factors considered for good product design.
b) What is the importance of various elements and concepts of visual design?
3. a) How a color wheel helps in product designing. Explain with the help of examples.
b) What is the methodology followed in product design. Explain with the help of an example.
4. Explain in detail the different levels of packaging. What are the important characteristics which should be considered while selecting the packaging materials? Explain with the help on an example.
5. What is value? What are its different types? What are the various steps of value analysis? How value of a product is measured?
6. a) What is creativity? How does design by creative routes differ from Engineering design?
b) Explain Functional Analysis System Technique (FAST) diagrams. Illustrate with an example.
7. a) What is the role of product graphics in product design?
b) List out and explain briefly some modern approaches to product design.
8. Write short notes on:
 - a) Industrial Design
 - b) Advantages of Value engineering
 - c) Packaging Strategies
 - d) Value control

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