P5153

B.E./Insem. - 559

B.E. (E/TC) (Semester - I)

ELECTRONIC PRODUCT DESIGN

(2012 Pattern) (Elective -II)

Time : 1 Hour]   *[Max. Marks : 30*

Instructions to the candidates:

1) *Answer Q.1 or Q.2, Q.3 or Q.4, Q5 or Q.6.*

2) *Figures to the right indicate full marks.*

3) *Neat diagrams must be drawn wherever necessary.*

4) *Assume suitable data if required.*

5) *Use of non-programmable calculator is allowed.*

Q1) a) Explain the following terms -   **[6]**

       i)   Cognition

       ii)   Reliability

       iii)   Ergonomics

       iv)   Quality

    b) Explain the importance of vibration & shock test to be carried out on an electronic product with suitable example.   **[4]**

<div align="center">OR</div>

Q2) a) Explain the concept of user-centered design.   **[6]**

    b) What is the need of grounding? Briefly explain different types of grounding.**[4]**

Q3) a) What is prototyping? Discuss different types of prototyping indicating their advantages and drawbacks.   **[6]**

    b) Explain what do you understand by the term design reviews.   **[4]**

<div align="center">OR</div>

Q4) a) Explain the design process of any one electronic product using neat block diagram. **[6]**

b) Discuss the methods of module debug & test. **[4]**

Q5) a) State the features of good programming. **[4]**

b) Explain the various phases of bug introduction & common bugs present in software. **[6]**

OR

Q6) a) Explain the term user interface wrt to software. **[4]**

b) Discuss any two with the help of neat diagram/schematic. **[6]**

   i) Structured programming

   ii) Coupling & cohension

   iii) Documentation for software

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