[5561]-658

B. E. (Electronics & Tele Communication)
ELECTRONIC PRODUCT DESIGN
(2015 Pattern) (Elective-II) (Semester - I)

Time : 2½ Hours]   *[Max. Marks : 70*

Instructions to the candidates:

1) *Answers the Q. 1 or Q. 2, Q. 3 or Q. 4, Q. 5 or Q. 6, Q.7 or Q.8.*
2) *Neat diagrams must be drawn wherever necessary.*
3) *Figures to the right side indicate full marks.*
4) *Use of calculator is allowed.*
5) *Assume suitable data if necessary.*

Q1) a) Write a short note on following: **[12]**

     i) Cognition

     ii) Safety

     iii) Grounding

   b) Explain in detail system partitioning.   **[4]**

   c) Discuss in brief about risk management in software testing.   **[4]**

OR

Q2) a) Write short notes on: **[12]**

     i) Black box test.

     ii) White box test.

     iii) Gray box test.

   b) Discuss in detail user centered design.   **[4]**

   c) Explain in detail Ergonomics.   **[4]**

Q3) a) Explain models, metrics and software limitations.   **[8]**

   b) What are the different types of PCB? Explain one.   **[5]**

   c) Explain grounding methodologies.   **[5]**

OR

P.T.O.

Q4) a) Discuss about PCB partitioning Design Rules for EMC improvement. **[8]**

b) Explain waterfall model of software development. **[5]**

c) What is Defect/Bug? What is defect life cycle? **[5]**

Q5) a) Explain EMI & EMC issues in detial. **[8]**

b) Differentiate between active components & passive components. **[4]**

c) Explain techniques for Troubleshooting. **[4]**

OR

Q6) a) Explain Analog-Digital conversion in detail. **[8]**

b) Define debugging process and explain steps of debugging. **[8]**

Q7) a) Define documentation & Explain the need of documentation. **[8]**

b) Write a short note on following: **[8]**
   i) Records
   ii) Accountability

OR

Q8) a) Discuss in detail visual techniques with example. **[8]**

b) Write short note on any two of the following: **[8]**
   i) Liability
   ii) Bill of material

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