

Total No. of Questions : 08]

SEAT No. :

**P3608**

[Total No. of Pages : 2

**[4959] - 1089**  
**B.E. (Electronics and Telecommunication)**  
**Electronic Product Design**  
**(Semester - I) (Elective - IIB) (2012 Pattern)**

*Time :2.30 Hours]*

*[Max. Marks :70*

*Instructions to the candidates:-*

- 1) *Attempt Q.No. 1 or Q.No. 2, Q.No. 3 or Q.No. 4, Q.No. 5 or Q.No. 6 and Q.No. 7 or Q.No. 8.*
- 2) *Figures to the right indicates full marks.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Assume suitable additional data if necessary.*
- 5) *Use of non programmable calculator is permitted.*

- Q1)** a) Explain five elements of successful design. **[8]**  
b) Explain functional design and architectural design. Mention the difference between them. **[8]**  
c) What is good programming practice. **[4]**

OR

- Q2)** a) Explain the importance of temperature, vibration and shock tests in electronic Product design. **[6]**  
b) How the specifications are formulated. Explain difference between specifications and requirements. **[8]**  
c) Explain waterfall model of software development. **[6]**

- Q3)** a) Explain routing topologies. What are the differences between the two Topologies? **[10]**  
b) What are the grounding methodologies? Explain with suitable sketches. **[8]**

OR

**P.T.O.**

- Q4)** a) Write short notes on any two [8]  
i) Image planes  
ii) Functional Partitioning  
iii) Aspect Ratio  
b) What is a concept of critical frequency? Explain the concept of decoupling. [6]  
c) Explain technique of ESD protection. [4]

- Q5)** a) Compare conducted EMI with Radiated EMI. [8]  
b) What are electromechanical components? Explain any one of them. [8]

OR

- Q6)** a) What is debugging? Explain the steps of debugging. [8]  
b) Explain Integration, validation and verification. [8]

- Q7)** a) What is need of documentation ? Explain different types of documentation. [8]  
b) What is bill of material ? Explain with suitable example. [8]

OR

- Q8)** a) Explain the layout of documentation. [8]  
b) How the documents are preserved. What are the methods to preserve? [8]

