[6004]-554
B.E.(E&TC)
ELECTRONIC PRODUCT DEVELOPMENT (Elective - IV)
(404185B) (2019 Pattern) (Semester-VII)

Time : 2½ Hours]   *[Max. Marks : 70*

Instructions to the candidates :
1) *Neat diagrams must be drawn wherever necessary.*
2) *Figures to the right indicate full marks.*
3) *Use of logarithmic tables slide rule, mollier charts, electronic pocket calculator and steam tables is allowed.*
4) *Assume suitable data, if necessary.*

Q1) a) Explain the following terminologies: **[8]**

     i) Risk Abatement and Failure Preventions

     ii) Software Bugs and Testing

     iii) Good programming practice

     b) Explain software design with any case study and design example. **[9]**

OR

Q2) a) Describe traditional software lifecycle with reference to Waterfall Model. **[8]**

     b) Illustrate prototyping model and spiral model for software development **[9]**

Q3) a) Explain assembly and materials required with factors affecting on costing of PCB. **[9]**

     b) Explain configurations of routing topologies in PCB layout designing **[9]**

OR

Q4) a) Interpret the role of proper component placement in PCB **[9]**

     b) How can we improve reliability over failure in PCBs? **[9]**

Q5) a) What are the different steps in the debugging? Differentiate debugging from troubleshooting. **[9]**

b) Explain the following terms with example: **[9]**
   i) Prototyping and Testing
   ii) Integration
   iii) Validation and Verification
   iv) Manufacturing

OR

Q6) a) Define debugging process and explain steps of debugging. **[9]**

b) State the important parameters to be considered while selecting passive, active and switching components. **[9]**

Q7) a) Explain the need of documentation? **[8]**

b) Explain with example what do you mean by preparation, presentation and preservation of documents. **[9]**

OR

Q8) a) Describe the need and types of documentation. **[8]**

b) What are the different methods of preservation of documents? Explain.**[9]**

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