PA-2636

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B.E. (E & TC)

ELECTRONIC PRODUCT DEVELOPMENT

(2019 Pattern) (Semester - VII) (404185B) (Elective - IV)

Time : 2½ Hours]   *[Max. Marks : 70*

Instructions to the candidates:

1) *Answer 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 whenever necessary.*

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

4) *Use of logarithmic tables slide rule, Mollier charts, electronic pocket calculator and steam tables is allowed.*

5) *Assume suitable data, if necessary.*

Q1) a) Articulate software with reference to algorithmic, languages, methods, selection, and purchase. **[8]**

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

OR

Q2) a) What are the metrics to assess performance and progress? Explain. **[8]**

b) What are software bugs introduced, how to locate and eliminate them. **[9]**

Q3) a) Explain different mechanisms used for cooling of electronic circuits. **[9]**

b) What are the different types of PCB? Explain one. **[9]**

OR

Q4) a) Discuss about PCB partiotining Design Rules for EMC improvement. **[9]**

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

Q5) a) Explain the steps of Debugging and techniques for trouble shooting and characterization. **[9]**

b) Explain Analog-Digital conversion in detail. **[9]**

OR

Q6) a) Explain techniques for Trouble shooting. **[9]**

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

Q7) a) With the help of suitable example explain how the bill of material is prepared. **[8]**

b) Discuss about records, accountability and liability with respect to documentation. **[9]**

OR

Q8) a) Explain need of Layout of Documentation. What is proper Layout of Documentation? **[8]**

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

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