

Total No. of Questions : 8]

SEAT No. :

PB-2295

[Total No. of Pages : 2

[6263]-133

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 wherever necessary.
- 3) Figures to the right indicates full marks.
- 4) Use of electronic pocket calculator is allowed.
- 5) Assume suitable data if necessary.

Q1) a) List & Explain different commonly identifiable limitations of the software. [9]

b) Explain the concept of risk abatement and failure prevention. [9]

OR

Q2) a) What are the features of good programming practices? [5]

b) Explain the term user interface w.r.t. software. [5]

c) What is real time software? Explain its significance in product design with example. [8]

Q3) a) Define & Explain following terms associated with PCB Design. [9]

i) EMI (Electromagnetic interference)

ii) EMC ( Electromagnetic compatibility)

iii) ESD ( Electrostatic discharge)

b) State & Explain cooling techniques. [8]

OR

P.T.O.

- Q4)** a) State & Explain types of shielding techniques. [9]  
b) What are grounding methodologies? Explain with suitable sketches. [8]

- Q5)** a) Explain the different methods of product debugging? [9]  
b) Explain how integration, validation and verification support engineering development. [9]

OR

- Q6)** a) Define & Explain concept of conducted EMI & radiated EMI. [9]  
b) Compare different types of ADC's with respect to parameters such as resolution, conversion time, power dissipation error. [9]

- Q7)** a) Explain the visual technique of documentation. [8]  
b) Explain the following terms with respect to documentation. [9]  
i) Records  
ii) Accountability  
iii) Liability

OR

- Q8)** a) Define documentation, what is need of documentation? Explain different types of documentation. [9]  
b) What is importance of Bill of material? Explain bill of material with suitable example. [8]

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