

Total No. of Questions : 8]

SEAT No. :

PD4627

[Total No. of Pages : 2

[6404]-133

B.E. (E & TC)

ELECTRONIC PRODUCT DEVELOPMENT

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

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer Q1 or Q2, Q3 or 4, Q5 or Q6, Q7 or Q8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Use of electronic calculator is allowed.
- 5) Assume suitable data if necessary.

Q1) a) Explain the software life cycle and various types of softwares. **[9]**

b) Write short note on the concept of the failure and risk abatement. **[8]**

OR

Q2) a) How real time software is embedded in electronic product development stages. **[9]**

b) What are the different types debugging practices observed in software development of electronic products. **[8]**

Q3) a) Write short note of routing topology in PCB layout designing. **[9]**

b) State and explain fan cooling and force cooling technique in electronic product systems. **[9]**

OR

Q4) a) Explain the grounding & shielding techniques in PCB design. Also explain guard band technique in PCB. **[9]**

b) Explain the role of different types of softwares in PCB designing process. **[9]**

Q5) a) Write short note on “Good Programming Practices.” **[9]**

b) Explain the digital to analog conversion techniques. **[9]**

OR

P.T.O.

- Q6)** a) Compare the conducted EMI and Radiated EMI with example. [9]
b) Explain EMI and EMC issues in details. [9]

- Q7)** a) Explain the need and various methods of documentation. [9]
b) Explain the effective bill of material with suitable example. Also explain the need of bills of materials. [8]

OR

- Q8)** a) What are various visual techniques of documentation. [9]
b) Explain the accountability and liability related to records of documentation. [8]

