Examination Nov/Dec 2019

H-1330

Total No. of Printed Pages:2

SUBJECT CODE NO:- H-1330
FACULTY OF SCIENCE AND TECHNOLOGY
Final B.Tech. (ETC) (Sem-VII)
Ele-II- Electronics Product Design
[OLD]

[Time: Three Hours]   [Max.Marks: 80]

Please check whether you have got the right question paper.

N.B
1. Q.no.1 and Q.no.6 are compulsory.
2. Solve any two questions from remaining from each section.

Section - A

Q.1   Attempt <u>any five</u>   10
   a) Enlist the different noises in electronic products.
   b) Draw i) DIP   ii) GFP package
   c) Draw bath tub curve.
   d) What are parasiticelements?
   e) Mention different soldering techniques
   f) Write the stages in product design

Q.2   a) Explain product design stages.   08

       b) Describe data acquisition system.   07

Q.3   a) Give the classification of redundancy. Explain any one redundancy.   08

       b) Explain mounting of components with diagram.   07

Q.4   a) Give the classification of switching regulator. Explain Boost (step up) regulator.   08

       b) Explain ergonomics by giving proper example.   07

Q.5   a) Give the application and advantages of mante- Carlo analysis.   08

       b) What are different noises present in the circuit explain shot noise and thermal noise.   07

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Section – B

Q.6	Attempt <u>any five</u>	10
	a) What is finite state machines?	
	b) What is radiated emission test?	
	c) Define shielding	
	d) Mention phases of software design.	
	e) Mention EMC regulations.	
	f) Give the functions of shielding	
Q.7	a) Describe in detail phases of software design.	08
	b) Explain conducted emission test with neat diagram.	07
Q.8	a) Explain Finite state machine with proper example.	08
	b) Describe noise coupling methods.	07
Q.9	a) Explain software structure design with example.	08
	b) Describe radiated emission test with neat diagram.	07
Q.10	Write short notes on (<u>any three</u>)	15
	a) Shielding and grounding	
	b) Protection against electrostatic discharge	
	c) Materials used for electronic system	
	d) Heat sinkselection	

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