



C14-EC-603

4737

BOARD DIPLOMA EXAMINATION, (C-14)
SEPTEMBER/OCTOBER - 2020
DECE—SIXTH SEMESTER EXAMINATION
ELECTRONIC PRODUCT DESIGN AND
QUALITY ASSURANCE

Time : 3 hours]

[Total Marks : 80

PART—A

3×10=30

Instructions : (1) Answer **all** questions.
(2) Each question carries **three** marks.
(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. Define noise reduction.
2. What is thermal management?
3. List two types of power supply protection devices.
4. List the layout considerations for analog and digital circuits.
5. Define cross talk.
6. State the use of logic analyzer.
7. State the limitations of different types of analysis.
8. State the importance of product testing.
9. Mention dry heat testing.
10. List the types of documents.

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PART—B

10×5=50

- Instructions :** (1) Answer *any five* questions.
(2) Each question carries **ten** marks.
(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Explain shielding and guarding techniques.
12. Explain product packaging and storage.
13. Explain component mounting considerations.
14. Explain routing for better decoupling.
15. Explain the use of software tools for simulation and testing.
16. Explain vibration and temperature cycling.
17. Explain random testing.
18. Explain the details of service manual.

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