



C14-EC-603

4737

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH/APRIL—2021

DECE - SIXTH SEMESTER EXAMINATION

ELECTRONIC PRODUCT DESIGN AND QUALITY ASSURANCE

Time : 3 hours ]

[ Total Marks : 80

**PART—A**

4×5=20

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

1. Classify the electronic products.
2. List reasons for failure of a product.
3. List important properties of Laminates.
4. Define cross talk.
5. What is the use of logic analyser?
6. List two types of signal integrity issues.
7. State the importance of product testing.
8. Define bump testing.
9. List types of documentation.
10. List rules for preparing effective document.

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**PART—B**

15×4=60

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

11. Explain factors for reliability of equipment.
12. Explain the concept of product development.
13. Explain the general layout considerations for analog circuits.
14. Explain routing for better decoupling.
15. Explain the use of digital storage Oscilloscope in testing.
16. Explain environmental testing.
17. Explain dry heat testing.
18. Explain the importance of documentation.

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