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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

 $4 \times 5 = 20$

- **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.
 - Classify the electronic products. 1.
 - 2. List reasons for failure of a product.
 - List important properties of Laminates.
 - Define cross talk. 4.
 - What is the use of logic analyser? 5.
 - 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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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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