

**6633**  
**BOARD DIPLOMA EXAMINATION**  
**MARCH/APRIL - 2019**  
**DIPLOMA IN ELECTRONICS AND COMMUNICATION ENGINEERING**  
**INDUSTRIAL ELECTRONICS**  
**FIFTH SEMESTER EXAMINATION**

**Time: 3 Hours**

**Total Marks: 80**

**PART - A (3m x 10 = 30m)**

*Note 1: Answer all questions and each question carries 3 marks*

*2: Answers should be brief and straight to the point and shall not exceed 5 simple sentences*

1. List the applications of DIAC and TRIAC
2. Draw the equivalent circuit of UJT?
3. What is the need of Uninterrupted Power Supply?
4. What is the need of inverter?
5. Classify transducers on the basis of principle of operation and applications
6. Write any three applications of LVDT
7. What is the meaning of skin effect?
8. Write any three advantages of resistance welding?
9. What is the need for PLC?
10. What is the meaning of actuating signal in control system?

**PART - B (10m x 5 = 50m)**

*\*Note 1: Answer any five questions and each carries 10 marks*

*2: The answers should be comprehensive and the criteria for valuation is the content but not the length of the answer*

11. Explain the construction and working of Uni Junction Transistor?
12. Explain SCR triggering using UJT
13. Explain the construction and working of GTO SCR?
14. Explain the working of Online UPS and Offline UPS.
15. Explain the construction and working of piezoelectric ultrasonic generator?

16. Explain the working of Accelerometer?
17. Explain about HF power source for induction heating.
18. Explain an open loop control system with any two examples

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