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 $(3m \times 10 = 30m)$

A.P. A.P. A.P. A.P. 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?

$(10m \ x \ 5 = 50m)$ PART - B

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 soruce for induction heating.
- 18. Explain an open loop control system with any two examples

- XXX -