# 6633
## BOARD DIPLOMA EXAMINATION
## JUNE - 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. Draw the circuit symbols of GTOSCR, SUS, SCS?
2. Define intrinsic stand–off ratio of UJT.
3. Write any 3 applications of UPS?
4. Draw the output voltage waveforms of Sinusoidal pulse width modulation inverter?
5. Explain magnetostriction effect.
6. Write any three disadvantages of LVDT?
7. What is the principle of induction heating?
8. Draw the block diagram of a resistance welding system that uses sequence timer
9. Write any three features of open loop control system?
10. Define transfer function.

## 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 about construction and working of Uni Junction Transistor?
12. Explain the working of SCR using two transistor analogy?
13. Explain about the speed control of D.C Motor using single Phase half wave SCR rectifier?
14. Explain the working of MOSFET based Inverter circuit?
15. Explain the construction and working of LVDT?

16. **Explain the construction and working of magnetostriction oscillator and how ultrasonics are generated?**

17. **Explain the basic circuit of AC resistance welding and explain its working?**

18. **Explain an closed loop control system with any two examples**

- xxx -