



C14-EC-503

4629

**BOARD DIPLOMA EXAMINATION, (C-14)
OCTOBER/NOVEMBER-2018
DEC-FIFTH SEMESTER EXAMINATION**

INDUSTRIAL ELECTRONICS

Time : 3 Hours]

[Total Marks: 80

PART-A

3X10=30

- Instructions :**
1. Answer **All** questions.
 2. Each question carries **THREE** marks
 3. Answer should be brief and straight to the point

1. Sketch the circuit symbols of for the devices
(a) SUS; (b) SBS; (c) LASCR
2. List any three applications of SMPS.
3. List any thee used of piezo electric transducer.
- * 4. Mention the methods of generating ultrasonic waves.
5. List three types of Electrical Welding.
6. Mention the applications of Dielectric Heating.
7. List the Ladder logic symbols.
8. List the major sections in a PLC unit.
9. Give any three examples of open loop control system.
10. Define transfer function.

PART-B

10X5=50

Instructions :

1. Answer any **five** questions.
2. Each question carries **ten** marks.
3. Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer

11. Explain the working and volt-ampere characteristics of TRIAC.
12. Explain PWM voltage control of UPS.
13. Explain the working principle construction and application of strain gauge.
14. Draw and explain Pulsed echo Ultrasonic flaw detector.
15. Draw the circuit of AC resistive welding and explain its working.
16. (a) Explain the principle of Induction Heating.
(b) Explain the used of statement list.
17. Explain power supply module and CPU module used in PLC.
- * 18. Draw and explain the basic block diagram of control system.
