

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2018
(Fifth Semester)

Branch – ELECTRONICS

INDUSTRIAL AND POWER ELECTRONICS

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 2 = 20)

- 1 What is Cyclo converter?
- 2 Expand UPS and HDVC.
- 3 List the types of Resistance welding.
- 4 Name 2 applications of Induction heating.
- 5 Define Strain gauge.
- 6 What is the frequency rang for X-rays?
- 7 Define thermistor.
- 8 What is Relative humidity?
- 9 Expand PCB.
- 10 Define etching in PCB.

SECTION - B (25 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 5 = 25)

- 11 a Explain the principle of single phase inverter.
OR
b Discuss the working Flasher circuits.
- 12 a Explain Electronic control in Resistance welding.
OR
b Explain working of Dielectric heating.
- 13 a Explain the production of X-rays.
OR
b Explain the resistive method for level measurements.
- 14 a What is proportional mode pressure control system? Define.
OR
b Discuss warehouse humidity system in brief.
- 15 a Bring out the importance of Artwork in PCBs.
OR
b Explain the etching process in PCBs.

SECTION - C (30 Marks)

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3 x 10 = 30)

- 16 Explain TRIAC as Fan regulator with suitable circuit diagram.
- 17 Explain Synchronous and Non-Synchronous weld timers.
- 18 Explain the Electro Magnetic Flow meter ad Turbine flow meter with block diagram.
- 19 Explain the function of Automatic weighing system and Relative humidity in a textile moistening process.
- 20 Explain the soldering techniques with neat diagram.