

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2018
(Fifth Semester)

Branch - ELECTRONICS

INDUSTRIAL & 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 are Static Switches?
- 2 Name the terminals of TRIAC and draw its symbol.
- 3 What are the types of Resistance welding?
- 4 Define Induction Heating.
- 5 What precautions should be taken using ultrasonication?
- 6 What is the frequency range of Ultrasonic wave?
- 7 Define Thermistor.
- 8 State the working principle of automatic weighing system.
- 9 Give the names of different soldering techniques.
- 10 Expand PCB.

SECTION - B (25 Marks)

Answer ALL Questions

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

- 11 a With a neat diagram, explain the working of DC chopper.
OR
b Explain the working of Static DC Switch.
- 12 a Explain the Ignitron Contactor.
OR
b State and explain the working principles of dielectric heating.
- 13 a Explain the working of resistive method of level measurements. .
OR
b Explain the working of turbine flow meter,
- 14 a Discuss in detail about strip tension controller.
. OR
b Explain the working of Automatic Weighing System.
- 15 a Explain layout preparation.
OR
b What do you mean by etching? Explain.

SECTION - C (30 Marks!)

Answer any THREE Questions

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

- 16 Explain the working principle of SCR current limiting circuit breaker.
- 17 Draw a neat diagram of synchronous weld timer and explain.
- 18 Explain the working of Turbine flow meter.
- 19 Discuss in detail about the Warehouse humidity controller.
- 20 What are the types of PCB? Explain them with necessary diagrams.