

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION MAY 2017
(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 is meant by Converter?
- 2 What is meant by circuit breaker?
- 3 Mention any applications of dielectric heating.
- 4 What is a Flasher circuit?
- 5 • Mention any two uses of X - rays.
- 6 What is the physical quantity that is measured using strain gauge?
- 7 What is flow meter?
- 8 What is the function of a strip tension controller?
- 9 What are the types of PCBs that are available?
- 10 Mention the different types of soldering methods.

SECTION - B (25 Marks)

Answer **ALL** Questions

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

- 11 a Explain with a neat circuit, the battery charger. _
OR
b Write short notes on over voltage protection.
- 12 a * Explain Synchronous Weld Timer in detail.
OR
b Explain the principle behind induction heating.
- 13 a • Explain the generation of Ultrasonic waves.
OR₁
b Explain the Strain Gauge method of displacement measurement.
- 14 a Explain the proportional mode pressure control system in detail.
OR
b Explain Strip Tension Controller.
- 15 a Write a note on the Art Work preparation for a.PCB.
OR
b Explain in detail the Etching process. * ■ •

SECTION - C (30 Marks)

Answer any **THREE** Questions

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

- 16 Explain with a neat diagram the,principle of single phase inverter.
- 17 • Write a note on the various types of Resistance welding.
- 18 . Explain in detail the various applications of Ultrasonic waves.
- 19 Explain in detail about the Control of Relative Humidity in Textile Moistening process.
- 20 . Write short note on soldering techniques.