# PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

(AUTONOMOUS)

#### **BSc DEGREE EXAMINATION DECEMBER 2018**

(Third Semester)

## **Branch - ELECTRONICS**

## **ELECTRONIC CIRCUITS**

Time: Three Hours Maximum: 75 Marks

#### **SECTION-A (20 Marks)**

Answer ALL questions

**ALL** questions carry **EQUAL** marks  $(10 \times 2 = 20)$ 

- 1 What is a rectifier?
- 2 Define ripple factor.
- 3 Mention the applications of amplifiers.
- 4 List the advantages of direct coupled amplifier.
- 5 What is a power amplifier?
- 6 Define the load power of the push pull amplifier.
- What is meant by positive feedback amplifier?
- 8 What is the advantage of negative feedback amplifier?
- 9 Mention the different types of multivibrators.
- 10 List the uses of Schmitt trigger.

## **SECTION - B (25 Marks!**

Answer ALL Questions

**ALL** Questions Carry **EQUAL** Marks  $(5 \times 5 = 25)$ 

11 a Explain the half wave rectifier.

OR

- b Explain the working of inductor filter.
- 12 a Write a short note on direct coupled amplifier.

OR

- b Explain the working of CE amplifier.
- 13 a Draw and explain the working of push pull amplifier circuit.

OR

- b With a circuit explain the working class B amplifier.
- 14 a Write a short note on negative feedback amplifier.

OR

- b Explain the working of voltage series feedback amplifier.
- 15 a Explain how the oscillations are generated in a Colpitf's Oscillator.

OR

b Explain the working bisable multivibrator.

#### **SECTION - C (30 Marks)**

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks  $(3 \times 10 = 30)$ 

- Explain the working of IC regulated power supply with diagram.
- Explain the various biasing of the transistor amplifier.
- Discuss the working of Class B amplifier with neat diagram.
- Describe the operation of current series and shunt feedback amplifier.
- 20 Explain the monostable and a stable multivibrator.

**END**