PSG COLLEGE OF ARTS & SCIENCE

(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 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 the function of Resistor?
- 2 Why do we need filters in power supply?
- 3 Draw the circuit of CE amplifier.
- 4 State the various methods of transistor biasing.
- 5 Why power amplifier is called large signal amplifier?
- 6 What do you mean by the term distortion in amplifier?
- What are the types of feed back?
- 8 What do you understand by the term negative feedback in amplifiers?
- 9 What do you mean by electronic oscillator?
- What is a monostable multivibration?

SECTION - B (25 Marks)

Answer ALL Questions

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

11 a With a neat diagram explain the working of clamping circuit.

OR

- b Draw the circuit of IC regulated power supply and explain.
- 12 a Draw the circuit of transformer coupled amplifier and explain.

OR

- b What do you mean by multistage amplifier? Explain it briefly.
- 13 a With neat diagram explain the function of class C amplifier.

OF

- b Explain the function of push pull amplifier. Give necessary diagrams.
- 14 a Explain the effect of negative feed back on the band with and distortion in an amplifier.

OR

- b Draw the block diagram of voltage shunt feedback and explain.
- 15 a Explain the function of Colpitts oscillator.

OR

b Draw the circuit of monostable multivibrator and explain.

SECTION - C (30 Marks)

Answer any **THREE** Questions

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

- With a neat diagram, explain the function of full wave rectifier.
- Draw the circuit of RC coupled amplifier and explain.
- Describe the function of complementary pair operation.
- Enumerate the effects of negative feed back on the various characteristics of amplifier.
- 20 Draw the circuit of Astable Multivibrator and explain.

Z-Z-Z

END