

**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 x 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?
- 7 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?
- 10 What is a monostable multivibration?

**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 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.  
OR
- 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 x 10 = 30)

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