14ELU08

PSG COLLEGE OF ARTS & SCIENCE

(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2017

(Third Semester)

Branch - **ELECTRONICS**

ELECTRONIC CIRCUITS

Time : Three Hours Maximum : 75 Marks

SECTION-A (20 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (1 0 x 2 = 20)

1 What is called filter?
2 Draw the circuit for *n* filter.
3 Write any two characteristics of CC amplifier. "
4 Write any two types of transistor biasing.
5 Draw the input and output signal for class B amplifiers.
6 Write any two difference between class A and class C amplifier.
7 Draw the block diagram of feedback.
8 Define negative feedback.
9 Draw the block diagram for oscillator.
10 Write any two difference between Hartley oscillator and colpits oscillator.

SECTION - B (25 Marks)

Answer **ALL** Questions

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

11 a With a circuit diagram the function of clipping circuit.

OR

b Explain the function inductor filter.

12 a Explain the method of transistor biasing.

OR

b Explain the operations of multistage amplifier.

13 a Write a short note about class C amplifier.

OR

b Explain the stage efficiency and current drain of power amplifiers.

14 a Explain the effects of negative feedback on gain stability and bandwidth.

OR

b Explain the operation of current shunt feedback.

15 a Explain the working of Hartley oscillator.

OR

b Explain about Schmitt trigger.

SECTION - C (30 Marks!

. Answer any **THREE** Questions

ALL Questions Cany **EQUAL** Marks (3 x fO = 30)

16 Draw a circuit diagram and explain the function of bridge rectifier.

17 Explain in detail the frequency response of RC coupled amplifier.

18 Describe the function of class AB amplifier.

19 With a neat circuit diagram explain the function of voltage series feedback and current series feedback.

20 Briefly explain the function of phase shift oscillator. '