

BSc DEGREE EXAMINATION DECEMBER 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 (10 x 2 = 20)

- i Define ripple factor.
What is the function of capacitor filter?
Why an emitter bypass capacitor is used in amplifier?
- 4 What do you mean by multistage amplifier?
- 5 State the difference between voltage amplifier and power amplifier.
- 6 How do you classify the power amplifiers?
- 7 Name the basic parts of feedback amplifier.
- 8 What do you mean voltage shunt feedback?
- 9 What are the types of oscillators?
- 10 Give the expression for the frequency of oscillation.

SECTION - B (25 Marks)

Answer **ALL** Questions

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

- 11 a Draw the circuit of Half-wave rectifier and explain it.
OR
b With neat diagram explain the working of ICS regulator.
- 12 a Explain with suitable diagram, the working of RC coupled amplifier.
OR
b Draw the circuit of emitter follower and explain.
- 13 a Explain the function of class AB amplifier.
OR
b With the neat diagram explain the function of push pull amplifier.
- 14 a Draw the circuit of current series feed back and explain.
OR
b Compare positive feedback and negative feedback in amplifiers.
- 15 a Explain the working of Hartley oscillator.
OR
b Explain the working of Schmitt trigger.

SECTION - C (30 Marks)

Answer any **THREE** Questions

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

- 16 Explain the function of bridge rectifier and calculate its efficiency. Give necessary diagrams.
- 17 - Draw the circuit of RC coupled amplifier and discuss its frequency response.
- 18 Explain the operation of class A direct coupled amplifier.
- 19 With a neat diagram explain the voltage gain of feed back amplifier.
- 20 Draw the circuit of phase shift oscillator and explain.