

## Question Bank (I scheme)

Name of subject : Applied Electronics

Subject code : 22329

Semester : 3

Unit Test : I

Course : EJ3I

### Chapter 1: Low Power Amplifiers (16 marks)

#### 2 marks

- 1) Classify amplifiers.
- 2) Draw graphical analysis or representation of amplification process.
- 3) Draw AC load line and label it.
- 4) State the need of tuned amplifier.
- 5) List four applications of tuned amplifier.

#### 4 marks

- 6) Draw and describe single stage RC coupled CE amplifier with frequency response.
- 7) Describe working of single stage amplifier with input output waveforms.
- 8) Draw and describe two stage RC coupled CE amplifier with frequency response.
- 9) Draw and describe transformer coupled amplifier with frequency response.
- 10) Compare RC coupling, transformer coupling and direct coupling.
- 11) Draw and describe working of common source FET amplifier with waveforms.
- 12) Draw and describe single tuned CE amplifier with frequency response.
- 13) Draw and describe stagger tuned CE amplifier with frequency response.
- 14) Compare single tuned, double tuned and stagger tuned amplifier.

### Chapter 2: High Power Amplifiers ( 18 marks)

#### 2 marks

- 15) Classify Power amplifiers.
- 16) Draw graphical representation of class AB amplifier using DC load line.
- 17) Draw Cross Over distortion with waveform and transfer characteristic.
- 18) Compare push pull and complementary symmetry amplifiers on the basis of
  - i) Type of transistors
  - ii) Transformer required

19) State two advantages and two disadvantages of class B power amplifier.

20) Draw circuit diagram of class C power amplifier.

**4 marks**

21) Compare small signal amplifiers and Power amplifiers.

22) Compare Class A , Class B, Class AB, and Class C power amplifiers on the basis of

i) Position of Q point ii) Efficiency iii) Angle of conduction iv) Distortion

23) Draw and describe transformer coupled class A power amplifier.

24) Draw and describe class B push pull amplifier with input output waveforms.

25) Derive efficiency of class A power amplifier.

26) Derive maximum efficiency of class B power amplifier.