904

Register No.:

November 2022

Time – Three hours
(Maximum Marks: 100)

[N.B. 1. Answer all questions under Part-A each question carries 3 marks.
2. Answer all the questions either (A) or (B) in Part-B each question carries 14 marks.]

PART – A

1. What are Filters?
2. What is Inductor filter?
3. What is meant by transistor biasing?
4. What is meant by Collector to base bias?
5. Define amplifier.
6. What are the types of negative feedback connections?
7. Draw the symbol of SCR, DIAC and TRIAC.
8. Draw the two transistor analogy of SCR and indicate the name of its terminals.
9. What do you mean by wave shaping?
10. What do you mean by Clipper?

PART – B

11. (a) Explain the various types of filters with necessary waveform.

(Or)

(b) Explain the working and the characteristics of Zener diode in Reverse bias condition.

[Turn over.....

12. (a) Explain the construction and working of fixed bias circuit and state it advantages and Disadvantages.

(Or)

(b) Explain the construction and working of Common source FET Amplifier.

13. (a) Explain the effects of negative feedback on gain, input and output impedance, bandwidth, distortion and noise.

(Or)

(b) Explain the working and frequency response characteristics of RC coupled amplifier.

14. (a) Explain the forward and reverse bias of SCR and draw its VI characteristics.

(Or)

(b) Explain the working of DIAC and draw its VI characteristics. List out its applications and advantages.

15. (a) Explain the working of Series and Shunt positive clippers with input and output waveforms.

(Or)

(b) Explain the working of Astable Multivibrator and draw its output waveforms.
