



PART B — (5 × 16 = 80 marks)

11. (a) (i) Derive the expressions for the input resistance, voltage gain, current gain, and output admittance of a transistor amplifier in terms of h-parameters. (8)

- (ii) Explain about Cascode and Darlington connections. (8)

Or

- (b) (i) Explain the operation of the transformer coupled power amplifier. (8)

- (ii) Explain the operation of the Class-B push pull power amplifier. (8)

12. (a) Explain in detail about the operation of the Emitter coupled differential amplifier.

Or

- (b) Explain the operation of the single and double tuned amplifiers.

13. (a) With topologies compare the performance of voltage/current of the series and shunt feedback amplifiers.

Or

- (b) Explain the operation of the Wein-bridge oscillators. What are the advantages of crystal oscillators?

14. (a) (i) Explain with circuit diagram and waveforms positive and negative Clamper circuits. (8)

- (ii) Explain the operation of a UJT saw tooth oscillator. (8)

Or

- (b) Explain the operation of a monostable multivibrator circuit.

15. (a) Explain in detail about the operation of the Half wave rectifier, full wave rectifier and Bridge rectifiers.

Or

- (b) (i) Compare the ripple factor for the inductor filter and capacitor filter. (4)
- (ii) Explain the operation of the series voltage regulators. (12)
- 

www.Maanavan.com