

Register No.:

2188

October 2024

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 the electrical properties of symmetrical networks?
2. Define antenna.
3. Define modulation index of AM.
4. Write the importance of IF in AM receiver.
5. Give the expression for FM in frequency domain.
6. List the types of FM transmitter.
7. Define quantization noise.
8. List any three applications of DPCM.
9. Define LED.
10. List the advantages and disadvantages of Plasma display.

[Turn over.....

PART – B

11. (a) Explain the working of Yagi antenna and draw its radiation pattern.

(Or)

(b) Explain the effects of various layers of the ionosphere in sky wave propagation.

12. (a) Draw and explain the block diagram of high level AM transmitter.

(Or)

(b) Explain the working of super heterodyne receiver.

13. (a) Explain the working principle of direct FM transmitter.

(Or)

(b) Explain the working principle of stereo phonic FM receiver.

14. (a) Explain about the generation and detection of PWM.

(Or)

(b) Explain the working principle of adaptive delta modulation. Also draw its input and output waveforms.

15. (a) Explain the construction, principle and working of velocity ribbon microphone.

(Or)

(b) Explain the working principle of PAL color TV receiver.
