127 April 2016

Time - Three hours (Maximum Marks: 75)

(N.B: (1) Answer any fifteen questions in PART - A and division (A) or division (B) of each question in PART - B.

(2) Each question carries 1 (one) mark in PART – A and 12 (twelve) marks in PART – B.

PART - A

- What is an equaliser?
- 2. What are the electrical properties of a symmetrical network?
- Define directivity.
- 4. What is an antenna?
- 5. Define modulation.
- State the advantages of VSB.
- 7. State any one reason for the need for modulation.
- 8. State the advantages of SSB system.
- 9. Write an expression for FM signal.
- 10. Expand PPM.
- 11. What is companding?
- 12. What is pulse modulation?
- 13. What is crossover network?
- Mention any one advantage of piezo-electric microphone.
- 15. What is Hi-Fi system?
- 16. What is DTS?
- List the types of TV standards.
- 18. What is interlaced scanning?
- 19. State the elements of composite video signal.
- 20. What is handy cam?

PART - B

21. (A) With a neat diagram explain constant resistance equaliser.

(Or)

- (B) Explain about yagi antenna with a neat diagram.
- 22. (A) With a neat diagram explain diode detector and its waveform.

(Or)

- (B) Explain SSB transmitter with neat block diagram.
- (A) Explain about the direct FM transmitter with neat block diagram.

(Or)

- (B) Explain the generation and detection of PWM.
- 24. (A) Explain the working of carbon microphone with neat constructional detail.

(Or)

- (B) Explain the construction and working of cone type loudspeaker.
- 25. (A) Explain monochrome TV receiver with block diagram.

(Or)

(B) Write short notes on: (i) CCTV (ii) LED display unit.