

April 2014

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

1. Define the characteristic impedance of symmetrical network.
2. List the types of equaliser.
3. Define directive gain of an antenna.
4. What is a radiation pattern?
5. Define an amplitude modulation.
6. What is an AM VSB signal?
7. What is a diode detector?
8. What is an image frequency?
9. Write an expression for FM signal.
10. Define phase modulation.
11. List the types of pulse modulations.
12. Define companding.
13. Mention two types of microphones.
14. What is a crossover network?
15. What is MP3?
16. Compare DVD with CD.
17. Define aspect ratio.
18. List the types of TV standards.
19. Expand PAL.
20. What is handy cam?

[Turn over.....

PART - B

21. (A) Explain about broadside array and end fire array with neat diagrams.
(Or)
(B) Explain about sky wave propagation with ionospheric layers.
22. (A) Explain AM balanced modulator with a diagram.
(Or)
(B) Explain high level AM transmitter with block diagram.
23. (A) Explain FM receiver with block diagram.
(Or)
(B) Explain generation and detection of PCM signal.
24. (A) Explain the working of moving coil microphone with neat diagram.
(Or)
(B) Explain audio recording and reproduction in compact disc (CD) system.
25. (A) Explain the monochrome TV transmitter with block diagram.
(Or)
(B) Write notes on: (i) LCD display unit (ii) LED display unit.