

April 2019

Time – Three hours
(Maximum Marks: 75)

- [N.B: (1) Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory. Answer any FOUR questions from the remaining in each PART – A and PART – B
(2) Answer division (a) or division (b) of each question in PART – C.
(3) Each question carries 2 marks in PART – A, 3 marks in Part – B and 10 marks in PART – C.]*

PART – A

1. Define an attenuator.
2. List the types of filters.
3. Write a relationship between wavelength and frequency.
4. List the types of AGC circuits.
5. What are the basic colors of a color TV signal?
6. List the types of microphones.
7. What is a surround sound system?
8. Define a PAM signal.

PART – B

9. Define directive gain of an antenna.
10. How does ground wave getting propagated?
11. Compare DSB, SSB and VSB signals.
12. Draw a diagram for the generation of PAM signal.
13. Compare carbon and condenser microphones.
14. Draw a diagram of electro-static loud speaker.
15. Draw a diagram of composite video signal with components.
16. Draw a diagram of a cable TV system.

[Turn over.....

PART - C

17. (a) Explain about monopole and dipole antennas.
(Or)
(b) Compare space wave and sky wave propagation methods.
18. (a) Explain low level AM transmitter of its working with a block diagram.
(Or)
(b) Explain about super heterodyne AM receiver with a block diagram.
19. (a) Explain the working of stereophonic FM receiver.
(Or)
(b) Explain the generation and detection of PWM signal.
20. (a) Explain the working of moving coil microphone with a diagram.
(Or)
(b) Explain about the recording process in compact disc system.
21. (a) Explain the block diagram of mono chrome TV receiver.
(Or)
(b) Explain how a LCD display functions in a TV receiver.
