

Register No.:

G13  
ECE-06  
5

**477**

**October 2017**

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. List the types of equaliser.
2. Define a filter.
3. Define amplitude modulation.
4. Define VSB signal.
5. List the types of FM transmitters.
6. What is MP3 system?
7. What is an aspect ratio?
8. What is the use of cable TV?

PART - B

9. Compare symmetrical and asymmetrical networks.
10. List the types of antennas.
11. Draw a diagram for amplitude modulation signal with components.
12. Write down the expressions of amplitude modulation and modulation index for the same.
13. Draw a circuit diagram for DPCM transmitter.
14. List the principles of Hi-Fi system.
15. Compare LED and LCD displays.
16. Draw a diagram for CCTV system.

PART – C

17. (a) Explain about the different types of filters.

(Or)

(b) Explain about dipole arrays.

18. (a) Explain the working of SSB transmitter. Write its advantages.

(Or)

(b) Explain the working of superheterodyne AM receiver.

19. (a) Explain about stereophonic FM transmitter.

(Or)

(b) Explain the generation and detection of PPM signal.

20. (a) Explain the working of dynamic cone type loudspeaker.

(Or)

(b) Explain the working of stereophonic system.

21. (a) Explain the working of LCD display unit.

(Or)

(b) Explain the working of handy cam.

-----

✓  
**October 2018**

*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 a symmetrical network.
2. Define directive gain.
3. Define modulation.
4. Define AGC.
5. List the types of pulse modulation schemes.
6. What is crossover network?
7. What is meant by scanning?
8. What is DTS system?

PART – B

9. Compare equaliser and attenuator.
10. Write about need for modulation.
11. Compare high level and low level AM transmitters.
12. Define frequency modulation and draw signal diagram for FM.
13. Draw a diagram for PAM signal generation.
14. Compare carbon and condenser microphones.
15. Compare woofer and tweeter.
16. Draw a diagram for composite video signal.

PART - C

17. (a) Explain about parabolic antenna with a diagram.

(Or)

(b) Explain about sky wave propagation.

18. (a) Explain the working of high level AM transmitter.

(Or)

(b) Explain the working of SSB receiver.

19. (a) Explain the working of direct FM transmitter.

(Or)

(b) Explain the working of stereophonic FM receiver.

20. (a) Explain the working of moving coil microphone.

(Or)

(b) Explain the working of DVD system.

21. (a) Explain the working of monochrome TV transmitter.

(Or)

(b) Explain the working of colour CCD camera.

-----

578

Register No.:

**April 2018**

*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. What is an equaliser?
2. Define directivity of an antenna.
3. Draw the spectrum of AM.
4. State the advantages of SSB system.
5. Define frequency modulation.
6. What is crossover network?
7. What is loud speaker?
8. What is interlaced scanning?

PART - B

9. Define characteristic impedance.
10. Define amplitude equaliser.
11. State the need for modulation.
12. What is AM VSB system?
13. Compare AM and FM.
14. What is pulse modulation?
15. Write short notes on tweeter.
16. What is aspect ratio?

PART - C

17. (a) Derive the iterative impedances of symmetrical T network.  
(Or)  
(b) Explain about yagi antenna with a neat diagram.
18. (a) Explain SSB transmitter with block diagram.  
(Or)  
(b) Explain superheterodyne receiver with neat block diagram.
19. (a) Explain the working of ratio defector.  
(Or)  
(b) Explain generation, detection of PPM signal.
20. (a) Explain the working of piezoelectric microphone with a diagram.  
(Or)  
(b) Explain the construction and working of cone type loudspeaker.
21. (a) Draw the block diagram of monochrome TV transmitter and explain it.  
(Or)  
(b) Write short notes on: (i)Cable TV (ii)CCTV.

-----

**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.



**October 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 a symmetrical network.
2. Define radiation pattern.
3. List the types of various side band signals in AM.
4. What is meant by AGC?
5. List the components of composite video signal.
6. Define a microphone.
7. List any two advantages of velocity ribbon microphone.
8. List the types of pulse modulation schemes.

**PART – B**

9. Compare LPF and HPF.
10. List the components of Yagi antenna.
11. Draw a diagram of TRF receiver.
12. How do you select an IF signal?
13. Define AFC.
14. Compare woofer and tweeter.
15. List the various TV broad casting standards.
16. Write a note on DTS system.

[Turn over.....

PART - C

17. (a) Explain about parabolic antenna.

(Or)

(b) Explain about ground wave propagation.

18. (a) Explain the working of HL AM transmitter with a block diagram.

(Or)

(b) Explain the working of an AGC circuit.

19. (a) Explain the working of direct FM transmitter.

(Or)

(b) Explain the generation of PCM signal.

20. (a) Explain the working of condenser microphone with a diagram.

(Or)

(b) Explain the working of DVD system.

21. (a) Explain the working of color CCD camera.

(Or)

(b) Explain about plasma display system process.

-----