

566

Register No.:

April 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. Define aspect ratio.
2. Define chrominance.
3. What are the types of camera tube?
4. Define automatic degaussing.
5. List the merits of PAL system.
6. State the need for ACG in receiver.
7. List the merits of LED TV.
8. Compare Flat panel display and plasma TV.
9. Define 3D TV.
10. List the TV connector ports.

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PART - B

11. (a) (i) Explain the interlaced scanning with diagram. (10)  
(ii) Write short notes on Flicker. (4)

(Or)

- (b) Draw the block diagram of Monochrome TV transmitter. Also explain its operation.

12. (a) List the characteristics of camera tube. Also explain the operation of vidicon camera tube.

(Or)

- (b) Explain the operation of Trinitron color picture tube with diagram.

13. (a) Draw the block diagram of monochrome TV receiver. Also explain RF and IF sections.

(Or)

- (b) (i) Explain the different methods of high frequency compensation. (10)  
(ii) List down the Video amplifier requirements.(4)

14. (a) (i) Explain the construction and working of LCD TV. (10)  
(ii) Write down the merits of LCD TV. (4)

(Or)

- (b) (i) Draw the block diagram of set top box and explain its working mechanism. (10)  
(ii) What are the advantages of DTH? (4)

15. (a) Explain the working principle of HDTV systems.

(Or)

- (b) Draw the schematic diagram of CCTV setup. Also list down its blocks.