

Q.P. Code :11990

[Time: 3 Hours]

[ Marks:80]

Please check whether you have got the right question paper.

- N.B:**
1. Questions number 1 is compulsory.
  2. Solve any three questions from the remaining
  3. Illustrate your answer with neat sketches

- Q.1** A Write characteristics of D2 MAC. 4  
 B How is charge image created in image orthicon? 4  
 C Briefly explain NTSC coder? 4  
 D What is the use of front porch and back porch in the composite video signal? 4  
 E What is the need of MUSE system? 4
- Q.2** A Why are color difference signals used in colors transmission? Why (G-Y) is not transmitted in color TV. Elaborate? 10  
 B Explain working of vidicon camera tube? 10
- Q.3** A A draw and explain working principle of LCD display. Compare and contrast LCD and LED televisions? 10  
 B Explain the concept of frequency interleaving. What is the need of interlaced scanning? 10
- Q.4** A Discuss composite video signal with respect to blanking level, pedestal height, active period and black and white level? 10  
 B What is the need of multiplexed analog component? Explain MAC signal? 10
- Q.5** A In relation to digital TV discuss? 10
- 1) Pixel array
  - 2) Viewing angle and distance
  - 3) Digitization
  - 4) Frame rate and refresh rate
- Q.5** B What is need of chroma sub sampling? Explain types of chroma sub sampling? 10
- Q.6** Write short note on 7
- 1 Direct to home television 7
  - 2 Plasma television 7
  - 3 Compatibility and reverse compatibility? 6