

Television & Video Engineering

P. Pages : 2

Time : Three Hours



TKN/KS/16/7539

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No.2.
 3. Solve Question 3 OR Questions No.4.
 4. Solve Question 5 OR Questions No.6.
 5. Solve Question 7 OR Questions No.8.
 6. Solve Question 9 OR Questions No.10.
 7. Solve Question 11 OR Questions No.12
 8. Due credit will be given to neatness and adequate dimensions.
 9. Assume suitable data whenever necessary.
 10. Illustrate your answers whenever necessary with the help of neat sketches.
 11. Use of non programmable calculator is permitted.

1. a) Justify the choice of a rectangular frame with width to height ratio of 4/3 for T.V Transmission and reception. **3**
b) Explain VSB transmission and reception that includes necessary correction on account of the discrepancy caused by VSB transmission. **7**
c) Draw giving complete details composite video signal. **4**
- OR**
2. a) Explain how the 'Y' and colour difference signal are developed from camera output. **7**
b) Explain chromaticity diagram? Give its advantages. **7**
3. a) Explain PAL Encodes and Decodes. **8**
b) Give the block diagram to explain the working of SECAM encoder. **5**
- OR**
4. a) Write short note on Remote control. **6**
b) Explain Different T.V Transmitter Antennas. **7**
5. a) Give the advantages of Digital video broadcasting. **5**
b) Explain different sampling structure use in Digital television. **8**

OR

6. a) What was the need of MAC encoding? Explain the general format of MAC signal for transmitting colour T.V Signal. 6
- b) Explain basic principles of Digital video compression Techniques. 7
7. a) Explain with block diagram HDTV transmitter and receiver. 10
- b) Define HDTV. What are different standards used in HDTV. 4

OR

8. Write short note on **any four**. 14
- i) CCTV
- ii) CATV
- iii) DTH
- iv) Set top Box with recording facility.
- v) 3DT system.

9. a) Write short notes on IP TV 6
- b) What are the different objective of mobile TV. 7

OR

10. Write short note on **any two**. 13
- i) Digital video Recorders.
- ii) Video projectors.
- iii) Video Intercom system.

11. a) Explain in detail camcorder. 7
- b) Write short note on Digicams. 6

OR

12. a) Explain in detail principles of operation & liquid crystal cell. 7
- b) Explain in detail with block diagram DVD playback system. 6
