



K15F 0232

Reg. No. :

Name :



**VII Semester B.Tech. Degree (Reg./Sup./Imp. – Including Part Time)
Examination, November 2015
(2007 Admn. Onwards)
PT2K6/2K6EC 704 : TELEVISION ENGINEERING**

Time : 3 Hours

Max. Marks : 100

PART – A

Answer **all** questions.

1. a) What is resolution ? Explain vertical resolution.
- b) Why video signals are AM modulated and audio signals are FM modulated in TV transmission ? Explain.
- c) Write the disadvantages of delta gun picture tube.
- d) Write the working principle of image orthicon camera tube.
- e) Write the characteristics of PAL system.
- f) What is the need of ident circuit in PAL receiver ? Explain.
- g) Briefly explain about MPEG Video Compression.
- h) Write a short note on DCT based transform coding. (8×5=40)

PART – B

2. a) What is negative modulation ? Write its advantages. 8
- b) With a neat diagram explain the working of CCD camera. 7

OR

3. What is a composite video signal ? Explain how the vertical and horizontal retrace periods are effectively utilized in 625 line system. 15

P.T.O.



4. a) With a diagram explain the working of PIL picture tube. 7
b) What is convergence ? Explain the different types. Also explain the method used to achieve convergence. 8

OR

5. a) With a block diagram explain the working of a monochrome TV transmitter. 9
b) Write a short note on LCD Screen. 6
6. a) Why PAL burst is called swinging burst ? Explain with phasor diagram. 7
b) Write the advantages and disadvantages of SECAM system. 8

OR

7. a) Draw the block diagram of a NTSC receiver and explain its working. Also write the demerits of NTSC system. 10
b) What is a colour killer circuit ? Explain. 5
8. a) What is HDTV ? Explain. 6
b) Write a note on Video Coding and Compression. 9

OR

9. Draw the block diagrams of Digital TV transmitter and receiver and explain its operation. Also write the advantages of digital transmission. 15
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