

M 22236

Reg. No. :

Name :

**VII Semester B.Tech. Degree (Reg./Suppl./Improv. - Including Part Time)
Examination, November 2012
(2007 Admn. Onwards)
PT2K6/2K6 EC 704 : TELEVISION ENGINEERING**

Time : 3 Hours

Max. Marks : 100

PART – A

Answer all questions.

1. What is interlaced scanning ? Explain also write the advantages.
2. What is a composite video signal ? Explain.
3. Explain the working principle of plumbicon camera tube.
4. Explain about the formation of chrominance signal in PAL system.
5. Explain about the swinging burst in PAL system.
6. Write the main features of PAL system.
7. Briefly explain the working of Digital TV.
8. What is DVB ? Explain

(8×5=40)

PART – B

9. a) What is the basis for fixing the no. of scanning lines as 625 in European system ? Explain. 8
- b) What is VSB transmission ? How bandwidth is 7 MHz in India for TV transmission. 7

OR

10. a) Why video signals are amplitude modulated and sound signals are frequency modulated in TV system ? Explain. 9
- b) Differentiate between positive and negative modulation. 6

P.T.O.



11. With a neat diagram explain the working of image orthicon camera tube. **15**
- OR
12. a) What is Degaussing ? Explain with a circuit how auto degaussing can be achieved. **7**
- b) Write the main features of PIL picture tube. **8**
13. With a neat block diagram explain the working of PAL coder. **15**
- OR
14. a) With a neat block diagram explain the working of NTSC decoder. **10**
- b) What is the basis for choosing I and U colour difference signals in NTSC system ? Explain. **5**
15. Explain about :
- i) DCT based transform coding **8**
 - ii) Motion compensation. **7**
- OR
16. What is HDTV ? Explain about the different HDTV standards also write the advantages. **15**
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