M 26157 Reg. No.: Name : VII Semester B.Tech. Degree (Reg./Sup./Imp. – Including Part Time) Examination, November 2014 (2007 Admn. Onwards) PT 2K6/2K6 EC 704: TELEVISION ENGINEERING Time: 3 Hours Max. Marks: 100 PART-A Answer all questions: 1. Explain about horizontal resolution and vertical resolution in 625-B TV system. 2. Write the advantages of negative modulation. 3. Draw the block diagram of a colour TV camera tube and explain the working. 4. What is the need of dc restorer circuit in TV transmitter? Explain.

PART-B

9. What is composite video signal? Also explain how the horizontal retrace period and vertical retrace period are effectively utilized in 625-B system and the need

a) Draw the basic block diagram of a monochrome TV receiver and explain it.

b) What is interlaced scanning? Explain also write the advantages.

 $(8 \times 5 = 40)$

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P.T.O.

5. What is colour burst? What is the need? Explain.

6. Write the characteristics of PAL system.

OR

7. Explain about HDTV.

of different pulses.

8. What is DPCM? Explain.

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11.	a)	Draw a PIL tube and explain its different characteristics.	6
	b)	Explain about :	9
		i) Astigmatism	
		ii) Comma effect	
5		iii) Degaussing. OR	
12.	a)	With a neat diagram explain the working of plumbicon camera tube.	9
	b)	Write the disadvantages of delta gun picture tube.	6
13.	a)	Draw the block diagram of a PAL decoder and explain the different blocks.	9
	b)	Write the demerits of NTSC system.	6
		OR	
14.	a)	Why the colour sub carrier frequency is odd multiple of half the line frequency in NTSC system? Explain.	6
	b)	Draw and explain the working of a SECAM coder.	9
15.	W	nat is the need of video compression? Explain the different types. OR	15
16.	i) ii)	plain the following : Digital TV DVB T-Satellite.	15