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BIELE-001

B.Tech. – VIEP – ELECTRONICS AND COMMUNICATION ENGINEERING (BTECVI)

00545

Term-End Examination

June, 2014

BIELE-001 : TELEVISION ENGINEERING

Time : 3 hours *Maximum Marks : 70*

Note : *Attempt any **seven** questions. All questions carry equal marks.*

1. Explain : $4 \times 2\frac{1}{2}$

(a) Positive and negative modulation

(b) Image Rejection Ratio

(c) Image Continuity

(d) Aspect Ratio in TV

2. (a) What is Vestigial Sideband Transmission ? What are its merits and demerits ? 5

(b) Justify the allocation of 7 MHz Bandwidth in our systems and 6 MHz in American system for each TV Channel. 5

3. (a) What is luminance of a signal ? 5

(b) Why is G-Y signal not chosen for transmission ? 5

4. Write points of differences between PAL and NTSC systems. 10

5. (a) In what way do the AGC requirements of a television receiver differ from those of a radio receiver ? 5

(b) Draw the frequency response curve required for the video IF amplifier. 5

6. Explain with the help of neat circuit diagram how horizontal and vertical pulses are separated in TV receiver ? 10

7. (a) How is the colour signal accommodated in the same bandwidth with the help of interleaving ? 5

(b) What type of errors might occur in colour picture tubes ? 5

8. List out EH limitations of the NTSC Standards. 10

9. Discuss the different types of cable distribution networks, the various frequency bands and relative merits and limitations of cable distribution networks. 10

10. Write short notes on any ***two*** of the following : *2×5=10*

(a) CCD Camera

(b) Colour TV antennas

(c) Colour Companding
