

Q 2 (a) Explain the following terms:

- (i) Persistence of vision
- (ii) Flicker in motion pictures

Answer Page Number 30 of Text Book

Q 2 (b) What is meant by blanking? What is the need of blanking pulses? Compare the differences between horizontal and vertical blanking.

Answer Page Number 33 of Text Book

Q 2 (c) List out the applications of Television.

Answer Page Number 34 of Text Book

Q 3 (a) Draw the structure of a Tricolor Picture Tube and explain various components used in it.

Answer Page Number 88 – 90 of Text Book

Q 3 (b) Explain the various problems associated with Picture Tubes.

Answer Page Number 96 - 97 of Text Book

Q 4 (a) Explain the construction of Composite Video Signal for two horizontal lines with neat sketch.

Answer Page 141 to 142 of Text Book

Q 4 (b) Explain Interlaced Scanning Process with the help of a diagram.

Answer Page number 126 to 128 of Text Book

Q 5 (b) Write short notes on the following color TV terms:

- (i) White (ii) Hue (iii) Compatibility

Answer Page Number 168 –170 of Text Book

Q 6 (a) Explain how color sync burst and H deflection sync differ in amplitude and frequency. Also explain the difference in timing between the 3.58 MHz color sync burst and 3.58 MHz chrominance signal.

Answer Page Number 179 –182 of Text Book

Q 6 (b) Why is the color subcarrier frequently made exactly 3.579545 MHz?

Answer Page Number 189 of Text Book

Q 7 (a) Draw the block diagram of a monochrome TV receiver.

Answer Page Number 287 of Text Book

Q 7 (b) Explain the function of the following sections:

- (i) Video Detector Section
- (ii) 4.5 MHz Sound IF Section

Answer Page Number 299 and 303 to 304 of Text Book

Q 8 (a) Explain the safety aspects while servicing a TV receiver.

Answer Page Number 398 to 402 of Text Book

Q 8 (b) Explain the interference patterns in the picture.

Answer Page Number 426 to 429 of Text Book

Q 9 Write short notes on any TWO of the following:

- (i) EIA standard for Color-Bar Signals

Answer Page Number 5 to 6 of Text Book

- (ii) Sine-Squared Test Signals

Answer Page Number 88 to 90 of Text Book

- (iii) Stair-Step Test Signals

Answer Page Number 197 to 199 of Text Book

Text Book

Basic Television and Video Systems, Bernard Grob and Charles E. Herndon, Sixth Edition, 1999, McGraw Hill International Edition.

