

**Q.2 (a)** Explain Horizontal and Vertical Synchronization in the television picture.

**Ans: Page No 32 of Textbook**

(b) Explain 3.58 MHz colour signal in a colour TV system.

**Ans: Page No 33-34 of Textbook**

**Q.3 (a)** Explain magnetic deflection used in picture tubes.

**Ans: Page No 85-86 of Textbook**

(b) Explain electrostatic focus in picture tubes.

**Ans: Page No 58-60 of Textbook**

**Q.4 (a)** Explain odd-line interlaced scanning pattern with neat sketch

**Ans: Page No 127 of Textbook**

(b) In picture tubes, why do we require synchronizing pulses during scanning?

**Ans: Page No 133 of Textbook**

**Q.5 (a)** Explain with block diagram, decoding of the picture information.

**Ans: Page No 175 of Textbook**

(b) Explain the working of Additive color Mixtures & Adding color-voltages.

**Ans: Page No 141-142 of Textbook**

**Q.6 (a)** Why is the color subcarrier frequency made exactly 3.579545 MHz?

**Ans: Page No 188 of Textbook**

(b) Explain various types of colour video signals.

**Ans: Page No 182-184 of Textbook**

**Q.7 (a)** Explain, with a neat diagram, how EIA test pattern can be used for checking the TV receiver.

**Ans: Page No 197-198 of Textbook**

(b) Explain how window signal can be used for testing overshoot, ringing, streaking and smear.

**Ans: Page No 207-208 of Textbook**

**Q.8. (a)** Draw and Explain color band-pass amplified with the ACC.

**Ans: Page No 346 of Textbook**

(b) Explain the need for luminance delay in video detector.

**Ans: Page No 336 of Textbook**

**Q.9.** Write short notes on any two of the following;

- (a) TV safety measures
- (b) Signal Tracing & Injection
- (c) Interference Patterns in the pictures

**Ans: Page No 426-429 of Textbook**

**Text Book**

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