

Q.2 a. Explain with the block diagram, the working of TV broadcasting System.

Answer: Page Number 4 to 6 of Text Book 1

b. Explain the horizontal and vertical synchronization.

Answer: Page Number 32 of Text Book 1

Q.3 a. Explain the basic construction of electron gun.

Answer: Page Number 82-83 of Text Book 1

b. Describe briefly an arrangement for projection television. Why is brightness the main problem?

Answer: Page Number 93 of Text Book 1

Q.4 a. Define:

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|----------------------|----------------------------|
| (i) Scanning raster | (ii) The pincushion effect |
| (iii) Line pairing | (iv) Interline flicker |
| (v) The noise effect | |

Answer: Page Number 125-135 of Text Book 1

b. Explain why the synchronizing pulses inserted during blanking time.

Answer: Page Number 160 of Text Book 1

Q.5 a. How does colorplexed video signal indicate hue, saturation and luminance of the picture information.

Answer: Page Number 194 of Text Book 1

b. Show the calculation for Y luminance values of blue, red, green and white.

Answer: Page Number 195 of Text Book 1

Q.6 a. Explain the following terms:

- | | |
|------------------|------------------|
| (i) Luminance | (ii) Hue |
| (iii) Saturation | (iv) Chrominance |

Answer: Page Number 169 of Text Book 1

b. Explain the types of colour video signals.

Answer: Page Number 164 of Text Book 1

Q.7 a. Explain the Ball Chart for checking camera linearity.

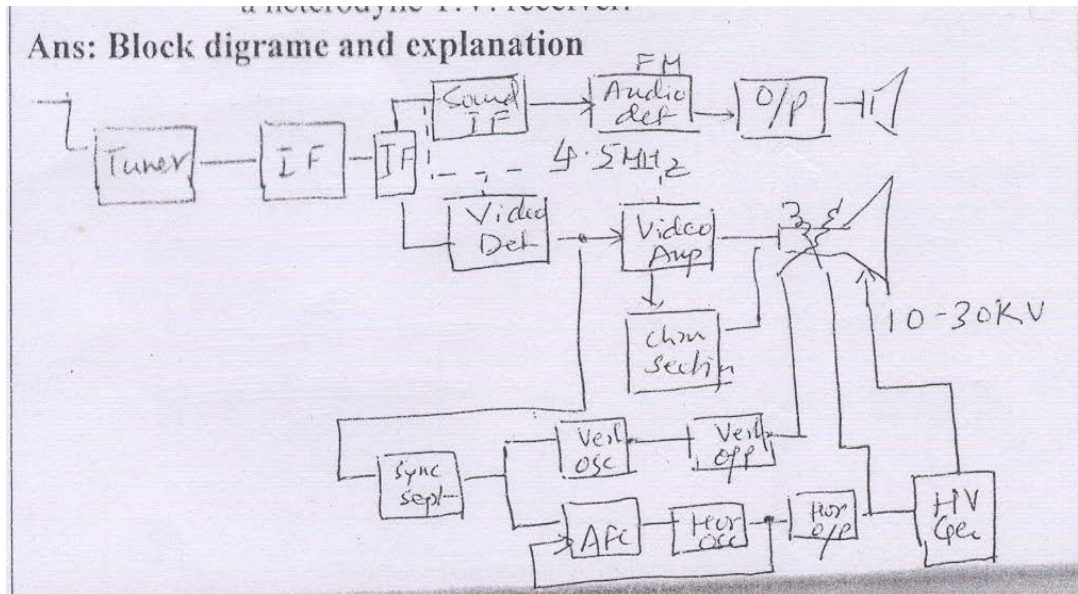
Answer: Page Number 202-203 of Text Book 1

b. Define the following sine squared test signals: T, 2T, 12.5T and 20T

Answer: Page Number 220 of Text Book 1

Q.8 a. With the help of a block diagram explain the working of a heterodyne T.V. receiver.

Answer:



- b. With the help of a diagram give details of color bandpass amplifier with Automatic Color Control (ACC).

Answer: Page Number 346 of Text Book 1

Q.9 Write short notes on the following:-

- (i) Interference patterns in the picture
- (ii) Safety during TV servicing

Answer: Page Number 426-429 and 398 of Text Book 1

TEXT BOOK

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