R13

Code: 13A04606

B.Tech III Year II Semester (R13) Supplementary Examinations December 2016

TELEVISION & VIDEO ENGINEERING

(Electronics and Communication Engineering)

Time: 3 hours Max. Marks: 70

PART - A

(Compulsory Question)

- 1 Answer the following: $(10 \times 02 = 20 \text{ Marks})$
 - (a) Why width is kept longer than height in television?
 - (b) Determine height and width of a T V screen of 30 cm size.
 - (c) Compare number of scanning lines of PAL and NTSC systems.
 - (d) What are the merits of SECAM system?
 - (e) Write short notes on plasma display.
 - (f) Write short notes on TFT LCD.
 - (g) List out the uses of IF sections.
 - (h) What is a gamma correction?
 - (i) What is AVC motion compensation decoder?
 - (j) List some merits of high definition television.

PART - B

(Answer all five units, $5 \times 10 = 50 \text{ Marks}$)

[UNIT – I]

What is colour temperature? How colour temperature is useful in video processing?

OR

3 Explain in detail about television broadcasting.

UNIT - II

4 Explain in detail about colour signal generation and encoding.

OR

- 5 (a) Discuss in detail about PAL -D Color system.
 - (b) How the phase error is cancelled in the PAL system?

(UNIT - III)

With neat sketch, explain about Trinitron picture tube.

OR

7 Discuss in detail about TN LCD display advantages and disadvantages.

UNIT - IV

8 Draw the block diagram of analogue receiver and briefly explain the blocks.

OR

9 Explain briefly the operation of IF subsystem.

UNIT - V

- 10 Explain in detail about:
 - (a) SDTV sampling rate.
 - (b) Video sampling.

OR

11 Explain in detail about intra-prediction operation.