Code: 13A04606

R13

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)
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1   Answer the following: (10 X 02 = 20 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 X 10 = 50 Marks)

UNIT – I

2   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

6   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.