

Code: 13A04606

R13

B.Tech III Year II Semester (R13) Regular & Supplementary Examinations May/June 2017

TELEVISION & VIDEO ENGINEERING

(Electronics & Communication Engineering)

Time: 3 hours

Max. Marks: 70

PART - A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Define aspect ratio.
 - (b) Define luminance.
 - (c) List the features of PAL color system.
 - (d) What is horizontal resolution?
 - (e) Why do we prefer horizontal polarization for television receiving antenna?
 - (f) Name the essential parts of TV transmitter.
 - (g) What is gamma correction?
 - (h) List out the advantages of IF sections.
 - (i) What is SDTV?
 - (j) List the merits of digital TV receivers.

PART - B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT - I

- 2 Explain in detail about how interlaced scanning takes place.

OR

- 3 Justify why all TV systems have odd number of scanning lines and brief why negative modulation technique is used in TV systems.

UNIT - II

- 4 Explain in detail about color signal encoding.

OR

- 5 Draw the block diagram and explain the operation of PAL encoder.

UNIT - III

- 6 With a neat diagram, explain the construction and working of Trinitron picture tube.

OR

- 7 Write a brief note on flat panel display.

UNIT - IV

- 8 With a neat diagram, explain the various sections in UHF tuner.

OR

- 9 Explain in detail about automatic gain control.

UNIT - V

- 10 Explain with neat diagram about HDTV.

OR

- 11 Explain the concept of sampling rate / video sampling in digital/high definition television systems.
