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)
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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.

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