

Code: 9A04705

**R09**

B.Tech IV Year I Semester (R09) Supplementary Examinations June 2017

**T.V. ENGINEERING**

(Electronics &amp; Communication Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

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- 1 (a) Explain the differences between interlaced scanning and sequential scanning.  
(b) Explain in detail about PAL system.
- 2 (a) Why negative modulation technique is used in TV system?  
(b) What is ghost image in TV? Differentiate leading and trailing ghost images.
- 3 (a) Draw the constructional details and explain the operation of Silicon Diode Array Vidicon.  
(b) Explain the block diagram of monochrome TV receiver.
- 4 (a) Explain in detail about beam deflection.  
(b) Describe the features & principles of NTSC colour system.
- 5 (a) Draw and explain PAL-D colour receiver.  
(b) What is raster circuit? Explain.
- 6 (a) Explain about vision IF subsystem of black and white receivers.  
(b) List out the advantages of infrared remote control and discuss the technique.
- 7 (a) Discuss delay line method of separating U and V signals in PAL receiver.  
(b) Describe working of a sub-carrier reference oscillator with a neat circuit diagram.
- 8 (a) Distinguish between digital TV, digital satellite TV, direct to home satellite TV.  
(b) Write four special features of digital TV that cannot be easily incorporated into analog TV.

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