

Code: R7410406

**R7**

IV B.Tech I Semester (R07) Supplementary Examinations, May 2012

**TELEVISION ENGINEERING**  
(Electronics & Communication Engineering)

Time: 3 hours

Max Marks: 80

**Answer any FIVE questions**  
**All questions carry equal marks**

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1. (a) Define
  - (i) Persistence of vision.
  - (ii) Aspect ratio.
  - (iii) Kell factor.
  - (iv) Resolution.(b) Write in brief about the composite video signal.
2. With a neat block diagram explain the working of TV transmitter in detail.
3. Explain about the following:
  - (a) Light transfer characteristics.
  - (b) Sensitivity.
  - (c) Spectral response of monochrome TV.
  - (d) Resolving power.
4. (a) Describe the characteristics and specifications of picture tube in detail.  
(b) What are the standards of TV and compare it with American TV standards.
5. (a) Explain how composite video signal is detected. How the polarity of video output signal is decided?  
(b) Discuss in detail IF sub system in PAL-D colour receiver.
6. (a) Discuss about video and inter carrier and signal detection.  
(b) Explain the operation of tuner.
7. Explain briefly about the operation of following circuits
  - (a) Gated burst amplifier.
  - (b) Color killer circuit.
8. Write short notes on the following:
  - (a) Sync separation.
  - (b) Digital satellite TV.

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