

**(OLD COURSE)**

Q.P. Code : 4419

(3 Hours)

[ Total Marks : 100

N.B.: (1) Question No.1 is compulsory.

(2) Attempt any four out of the remaining six questions.

1. (a) Explain interlaced scanning and calculate the number of lines used in tv receiver. 10  
(b) Explain the basic troubleshooting steps that must be employed to find fault in a tv receiver. 10
2. (a) Explain RTSP and RTCP. 10  
(b) Describe the working of direct broadcasting satellites. 10
3. (a) What are the significances of AFC and AGC in colour tv system. 10  
(b) Draw chromaticity diagram and explain its significance. 10
4. (a) With a neat diagram explain the working of vidicon. 10  
(b) How is video bandwidth and interlace scanning related. 10
5. (a) Explain VSB and elaborate why correction is required. 10  
(b) Explain the function of a colour picture tube with a neat diagram. 10
6. (a) Explain sync separation in a TV system. 10  
(b) Explain PAL encoder and decoder. 10
7. Write short notes (any two) 20
  - (a) CCTV
  - (b) Aspect ratio, KELL factor
  - (c) SMPs
  - (d) kF tuner