

Total No. of Questions :8]

[Total No. of Printed Pages :2

Roll No

EC-804**B.E. VIII Semester**

Examination, June 2017

TV and RADAR Engineering**Time : Three Hours****Maximum Marks : 70**

Note: i) Answer any five questions.
 ii) All questions carry equal marks.

1. Describe CCD image sensors construction and working with the help of suitable sketch.
2. Explain the following :
 - i) Aspect ratio
 - ii) Interlaced scanning
 - iii) Picture & sound modulation
3. Describe cochannel and adjacent-channel interference. Explain the technique to eliminate such interference in fringe area.
4. Describe working of colour television camera tube in detail.
5. Explain working of video and audio processing unit of digital T.V. receiver.
6. Explain working of digital TV transmitter in brief.

EC-804

PTO

[2]

7. Describe working principle of CW-RADAR in detail.
8. Answer any four of the following:
 - a) Explain the significance of active and blanking periods in horizontal and vertical scanning.
 - b) Describe principle of plasma display.
 - c) Describe basic principle of High performance computer controlled TV.
 - d) What is the peak power of a RADAR whose average transmitted power is 300 W, pulse width of 1 μ s and pulse repetition frequency of 1500 Hz?
 - e) Calculate the effective noise temperature of a receiver consisting of 'n' number of networks in cascade.
 - f) Explain the characteristics of RADAR displays.

EC-804