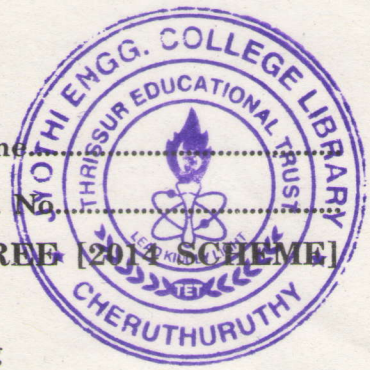


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Name

Reg. No.



SEVENTH SEMESTER B.TECH. (ENGINEERING) DEGREE [2014 SCHEME]
EXAMINATION, NOVEMBER 2017

Electronics and Communication Engineering

EC 14 704 B—TELEVISION AND RADAR ENGINEERING

Time : Three Hours

Maximum : 100 Marks

Part A

Answer any eight questions.

1. Draw the Composite Video Signal and identify its constituents.
2. Briefly explain CCD camera.
3. State and explain Grassman's Laws.
4. Define Luminance, Hue and Saturation.
5. Briefly explain the features of HDTV.
6. What is pulse repetition frequency ? Explain.
7. What is range ambiguity ? Explain.
8. Explain Doppler Effect.
9. Draw the block diagram of a CW Radar.
10. Explain A-scope and PPI display.

(8 × 5 = 40 marks)

Part B

11. (a) With block diagram explain TV Transmitter.
Or
(b) With block diagram explain TV receiver.
12. (a) Explain the working of a colour TV camera tube.
Or
(a) Discuss the features of NTSC, PAL and SECAM Coders.
13. (a) Derive the RADAR range equation.
Or
(b) With block diagram explain the RADAR system.
14. (a) Discuss the working of IF-CW Radar and FM-CW radar.
Or
(b) Discuss the working principle of Pulse doppler MTI Radar.

(4 × 15 = 60 marks)