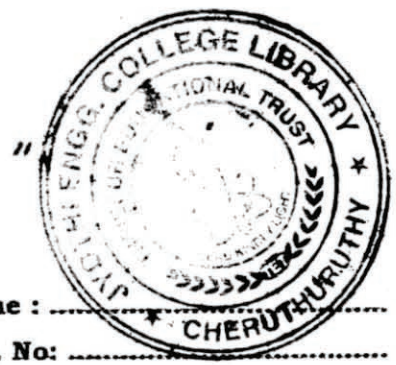


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Name : .....

Reg. No: .....

**EIGHTH SEMESTER B.TECH DEGREE (SUPPLEMENTARY) EXAMINATION, JUNE 2013**

**EC 04 805 (D) TELEVISION ENGINEERING AND RADAR SYSTEMS**

**Time : Three Hours**

**Maximum : 100 Marks**

1. (a) What is interlaced scanning? Explain.  
(b) Explain the operation of a CCD Camera  
(c) Define Luminance, hue and saturation.  
(d) Explain Vestigial Side band modulation.  
(e) Explain the concept of Video Bit reduction.  
(f) Write a note on Cable TV.  
(g) What is a Radar System? Explain.  
(h) What is a tracking radar? Explain.

(8 x 5 = 40 marks)

2. (a) Explain the various components of a Composite Video Signal

**OR**

- (b) With block diagram explain the TV transmitter.

3. (a) Explain Color perception and color signal transmission.

**OR**

- (b) Explain the principles of NTSC encoder.

4. (a) Explain MPEG standard.

**OR**

- (b) (i) Explain Cable distribution system  
(ii) Explain Wave traps and scrambling methods.

- V. (a) Derive the Radar Range Equation

**OR**

- (b) Explain in detail about (i) Frequency Modulated CW radar and (ii) MTI Radar.

(4 x 15 = 60 marks)

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