

No. of Printed Pages : 03

Roll No.

834

B. Tech. EXAMINATION, May 2017

(Eighth Semester)

(Old Scheme) (Re-appear Only)

(ECE)

ECE-418

TV ENGG.

Time : 3 Hours]

[Maximum Marks : 100

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt any *Five* questions. All questions carry equal marks.

1. (a) Explain the following terms : **10**

(i) Scanning

(2-36) M-834

P.T.O.

- (ii) flicker
- (iii) Image continuity.
- (b) Why is an odd no. of lines used for scanning ? How does interlaced scanning help reduce the bandwidth of the video signal ? **10**
- 2. (a) Explain the basis for keeping picture to sync ratio 7 : 3. **10**
- (b) Draw a composite video signal neatly and label all parts. **10**
- 3. (a) What are the advantages and disadvantages of using VSB modulation ? Explain, how the VSB reception of TV signal is compensated for its frequency response. **15**
- (b) What is frequency modulation ? **5**
- 4. (a) What are the various controls on the picture tube ? Explain. **5**
- (b) Draw a neat diagram of any picture tube labelling it property and explain its working. **15**

- 5. (a) What is a Yagi-Uda Antenna ? **6**
- (b) Why is frequency of local oscillator kept greater than incoming frequency ? **7**
- (c) Explain the sound section of a TV receiver. **7**
- 6. (a) How is colour TV receivers are compatible to receive monochrome transmission and vice-versa ? What is compatibility ? **10**
- (b) What is three colour television camera ? **10**
- 7. (a) Explain the difference in NTSC, PAL and SECAM coloured systems. **12**
- (b) What is frequency interleaving ? **8**
- 8. Write short notes on any *two* of the following :
 - (a) TV via Satellite
 - (b) Remote Control
 - (c) Digital TV Technology. **10,10**