

Total No. of printed pages = 2

Et-501/CE-II/5th Sem/2014/N

COMMUNICATION ENGINEERING – II

Full Marks – 70

Pass Marks – 28

Time – Three hours

The figures in the margin indicate full marks for the questions.

Answer any *five* questions.

1. (a) Draw the circuit diagram of a Foster seeley discriminator and explain its principle of operation. 8
- (b) Explain how modulating signal can be detected from an AM signal using a practical linear diode detector circuit. 6
2. Draw the block diagram of an AM transmitter and explain its working principle. 5+9=14
3. (a) What are the advantages of superhet receivers over TRF receivers ? 5

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- (b) Draw the block diagram of an FM super heterodyne receiver and explain its principle of operation. $3+6=9$
4. Draw the block diagram of a space diversity receiving system and explain how it can be used to overcome fading. $5+9=14$
5. Explain PAM, PWM, PPM and PCM with proper waveform diagram. 14
6. What is noise ? Classify noise. Explain briefly different kinds of noise. $2+3+9=14$
7. What is multiplexing ? Explain any one of it with the help of proper diagram. $2+12=14$
8. Write short notes on any *two* : $7 \times 2 = 14$
- (a) ASCII and binary codes
 - (b) ASK, FSK and PSK
 - (c) Pre-emphasis and de-emphasis circuit
 - (d) PM demodulator
 - (e) AGC.