

(DEC 316)

B.Tech. DEGREE EXAMINATION, MAY - 2015

(Examination at the end of Third Year)

ELECTRONICS & COMMUNICATIONS

Paper - VI : Analog Communication

Time : 3 Hours

Maximum Marks : 75

Answer question No.1 compulsory

(15)

Answer ONE question from each unit

(4 × 15 = 60)

- 1) a) Draw the Block diagram of communication system.
- b) Define modulation.
- c) What are the advantages of VSB over SSB?
- d) Define frequency modulation.
- e) Define selectivity.
- f) Which modulation is suitable for transmission of video signals & why.
- g) Define white noise.
- h) What are the methods for Generation of SSBSC.
- i) Compare PAM & PWM.
- j) Define capture effect.

UNIT – I

- 2) a) Explain the Generation & Regeneration of AM.
- b) Explain the Time domain & freq description of DSB wave.

OR

- 3) a) Draw the circuit of a ring modulator & explain its working. Show that it generates waves.
- b) Explain the working of envelope detector with a neat diagram.

UNIT - II

- 4) a) Compare AM, DSBSC, SSBSC & VSB.
b) Explain how coherent Reception accomplishes the demodulation of SSB wave.

OR

- 5) a) Explain the phase discrimination method for the generation of SSBSC.
b) What are the advantages of multiplexing & Explain with a block diagram of FDM.

UNIT - III

- 6) a) Explain the Indirect method of Generation of FM.
b) Compare FM & AM.

OR

- 7) a) Explain the operation of PLL.
b) Explain zero crossing detector in detail.

UNIT - IV

- 8) a) Explain about TDM.
b) Explain the Generation & Regeneration of PAM.

OR

- 9) a) Derive the equation for Noise figure of FM receiver.
b) Compare PAM, PWM & PPM.

