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Reg. No. Co.

## SIXTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION, JUNE 2011

AI 04 604—ELECTRONIC COMMUNICATION SYSTEMS

(2004 admissions)

Time: Three Hours

Answer all questions.

- I. (a) Briefly describe the propagation of RF wave.
  - (b) List the basic types of antenna.
  - (c) What is meant by AGC? Write its significance.
  - (d) Write short notes on AM demodulation.
  - (e) Write the concept of delta modulation.
  - (f) Explain the features of FDM.
  - (g) Write the components of fiber optic link.
  - (h) Write the concepts of landline telemetry.

 $(8 \times 5 = 40 \text{ marks})$ 

II. (a) Explain the theory and generation of FM and PM.

Or

- (b) Explain the communication system elements with neat diagrams.
- III. (a) Explain the modulation and demodulation of PAM and PWM.

Or

- (b) Explain the operation of SSB receiver, with neat diagrams.
- IV. (a) Compare the digital modulation schemes ASK, FSK and PSK with neat waveforms.

Or

- (b) Explain the concepts of PCM and DPCM.
- V. (a) Discuss the principle and applications of satellite communication.

Or

(b) Discuss the frequency reuse concept used in cellular systems.

 $(4 \times 15 = 60 \text{ marks})$