

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

	EECEVAC02 Basic Communication Systems	L	T	P
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UNIT – I: Amplitude Modulation: Introduction to Modulation, Need for Modulation, Ordinary Amplitude Modulation – Modulation index, Side bands, AM Power, Double Side Band Suppressed Carrier Modulation, Single Side Band Modulation, Vestigial Side Band Modulation, AM demodulation, Applications of AM.

UNIT – II: Angle Modulation: Angle Modulation fundamentals, Frequency Modulation – Modulation index and sidebands, Narrowband FM, Wideband FM, Principles of Phase Modulation, Frequency Modulation verses Amplitude Modulation, FM demodulation, Frequency Division Multiplexing, Applications of FM.

UNIT – III: Signal Sampling and Analog Pulse Communication: Ideal Sampling, Pulse Amplitude Modulation, Pulse Width Modulation, Pulse Position Modulation.

UNIT- IV: Digital Communication Techniques: Quantization, Digital Transmission of Data, Parallel and Serial Transmission, Data Conversion, Time Division Multiplexing, Pulse Code Modulation, Delta Modulation.

UNIT – IV: Transmission of Binary Data in Communication Systems: Digital Codes, Principles of Digital Transmission, Transmission Efficiency, Modem Concepts and Methods – FSK, BPSK, Error Detection and Correction.

LEARNING RESOURCES:

1. Louis E. Frenzel, “Principles of Electronic Communication Systems”, 3rd Edition. Tata Mcgraw Hill 2002.
2. Wayne Tomasi, Electronic Communications Systems, 5th Edition, Pearson Education (1 January 2008).