SUBJECT NO-EC31002, SUBJECT NAME- DIGITAL COMMUNICATION

LTP- 3-1-0,CRD- 4

SYLLABUS :-

Pre-requisites: EC31001Digital signals and their spectra; Concepts of information and entropy; Source coding: Coding theorem, fixed length codes; variable length codes; Quantization of signals; Waveform coding techniques: PCM, DPCM, ADPCM, DM, ADM; Baseband transmission: intersymbol interference, noise, eye pattern, BER analysis, Optimum filtering, equalization techniques; Clock recovery; Line coding techniques: Binary and multilevel line codes; Digital modulation schemes: Binary modulation schemes- ASK, PSK, FSK, DPSK; M-ary modulation schemes: QPSK, ÃÂ/4 QPSK, MSK; QAM: generation and demodulation schemes, carrier recovery techniques, BER analysis of digital modulation systems; ShannonÃ¢ÂÂs capacity theorem and spectral efficiency of digital modulation schemes.