

Digital Communication Laboratory (0-0-3) Subject code: ECC308

SL No	Name of the Experiments	No of Week
1	Performance analysis, in terms of BER and bandwidth requirement, of binary polar signaling with different pulses (optimum detection and channel is AWGN).	01
2	Performance analysis, in terms of BER and bandwidth requirement, of on-off binary signaling with different pulses (optimum detection and channel is AWGN).	01
3	BPSK - Modulation and demodulation, BER for transmission over AWGN channel with different levels of E_b/N_0 .	02

4	BFSK - Modulation and demodulation, BER for transmission over AWGN channel with different levels of E_b/N_0 .	02
5	M-ary QAM - Modulation and demodulation, BER for transmission over AWGN channel with different levels of E_b/N_0 , studying the effect of varying M	02
6	Transmission of an M-ary PSK (or, QAM) signal over a bandlimited channel (represented by a filter) and observing the eye pattern, studying the effect of varying M and cut-off frequency of the filter	01
7	Linear equalization under 16-QAM baseband transmission over a multipath AWGN channel	01
8	Linear-block coding (e.g. using Hamming code) a message bit sequence and transmitting it using polar signaling over AWGN channel, comparison of performance (in terms of BER) with uncoded polar transmission.	01
9	Symbol timing recovery in (i) a binary PAM, (ii) a QAM system	01
10	Mini project based on Digital Communication Systems	01
11	End Semester Lab Examination and Viva – Voce	01