Indira Gandhi Delhi Technical University For Women

Department of Electronics and Communication Engineering

COMMUNICATION SYSTEMS LABORATORY

FACULTY INCHARGE	**Dr. Kanchan Sharma**
TECHNICAL ASSISTANT	**Mr. Madhur Gupta**

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FACILITIES (HARDWARE)

S. NO.	EQUIPMENT/ TRAINER KIT	QUANTITY
1	FREQUENCY MODULATION USING ARMSTRONG METHOD (SILICOM)	20
2	PAM / PPM / PWM MOD. & DEMOD. (TEMFLO)	20
3	SCIENTECH FIBRE OPTIC TRAINER	06
4	GSM TRAINER (SILICOM)	02
5	CDMA DSSS TRAINER (SILICOM) – 2115	20
6	FOUR CHANNEL ANALOG TDM MOD & DEMOD TRANIER (SILICOM)	20
7	DELTA, ADAPTIVE DELTA & DELTA SIGMA MOD / DEMOD TRAINER WITH SIMTEL – TEMFOL SYSTEMS	20
8	DATA FORMATING & CARRIER MOD / TRANSMITTER TRAINER WITH SIMTEL – TEMFLO SYSTEMS	20
9	DATA REFORMATING & CARRIER DEMOD / RECEIVER TRAINER WITH SIMTEL – TEMFLO SYSTEMS	20
10	TDM PULSE AMPLITUDE MOD & DEMOD TRAINER WITH SIMTEL – TEMFLO SYSTEMS	20
11	AMPLITUDE MODULATION (SSB/DSB) TRANMITTER TRAINER – 2201 WITH SIMTEL – TEMFLO SYSTEMS	20
12	AMPLITUDE DEMODULATION (SSB/DSB) RECEIVER TRAINER – 2202 WITH SIMTEL – TEMFLO SYSTEMS	20
13	FREQUENCY DIVISION MULTIPLEXER / DEMULTIPLEXER – SILICOM	20
14	ADVANCED DIGITAL COMMUNICATION TRAINING SYSTEM – SILICOM	20
15	PCM, DPCM CVSD MOD & DEMOD – SILICOM	20
16	FOUR CHANNEL TDM PCM TR. & RX. – SILICOM	20
17	DIGITAL COMPANDING A-LAW & LAW – SILICOM	20
18	TWO CHANNEL CDMA (DSSS & FHSS) – SILICOM	20
19	WIRELESS LAN TRAINER WITH 4 WIRELESS NODES – SILICOM	02
20	ADVANCED FIBER OPTIC TRAINER DUAL CHANNEL & PC COMMUNICATION – SILICOM	20
21	SETUP TO STUDY MODE CHARACTERSITICS IN FIBER OPTICS – SILICOM	02
22	AT EXCHANGE / EPABX TR. SYSTEM WITH DTMF TELEPHONE TRAINER – SILICOM	10
23	MSK MOD / DEMOD TRAINER WITH DSO – SILICOM	20
24	16 QAM TRAINER WITH DSO – SILICOM	20

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B.TECH - ECE-AI (SEMESTER-III), ECE (SEMESTER-IV)
SUBJECT CODE : BEC-211, BEC-208

Room No.- E-214

LIST OF EXPERIMENTS

1. To study of DSB / FC Amplitude modulation and observe all the waveforms on DSO.
2. To study the calculation of percentage modulation of DSB / FC Amplitude modulation along with performing demodulation and observe all the waveforms on DSO.
3. To study of SSB / SC Amplitude modulation and demodulation and observe all the waveforms on DSO.
4. To study of Frequency modulation and demodulation, calculation of modulation index, and observe all the waveforms on DSO.
5. To study of Natural and Flat top Sampling techniques, note down the sampling frequency, and observe all the waveforms on DSO.
6. To study of Pulse Amplitude modulation and demodulation (PAM) and observe all the waveforms on DSO.
7. To study of Pulse Width modulation and demodulation (PWM) and observe all the waveforms on DSO.
8. To study of Pulse Position modulation and demodulation (PPM) and observe all the waveforms on DSO.

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DO'S AND DON'TS

DO'S	DON'TS
• Enter and leave the lab as per the time table. • Maintain strict discipline and silence in the lab. • Proper handling of computer systems must be done. • Check the connections properly as per circuit diagram before switching on the power supply. • Be a keen observer while performing experiments in the lab. • Keep your bags in the rack and the consumable items back to their original position after finishing off the experiment in the lab.	• Do not leave the lab without prior permission of the Lab In-charge or Technical Assistant. • Do not bring or eat any eatable item in the lab. • Do not make noise or shout in the lab. • Do not disturb the decorum or aesthetic view of the lab. • Do not tamper with the lab or system settings. • Do not perform the experiment with wet hands on the apparatus.