3	To realize a self-biased transistor binary circuit.
4	To get the response of Schmitt trigger circuit.
5	To realize a collector coupled monostable.
6	To realize a emitter coupled astable multivibrator.
7	Design and testing of a voltage doubler circuit.
8	Design of a time base generator circuit.

SESSIONAL OUTCOME: After completion of the sessional student should be able to

1. Explain different filter applications in circuit design

2. Work on improvement of frequency response of the amplifiers.

3. Analyze the square wave generator circuits.

4. Separately explain the working principle of different multivibrators.

5. Explain the operation of a time base generator circuit.

ANALOG AND DIGITAL COMMUNICATION LAB (0-0-3)

SESSIONAL OBJECTIVE:

1. To understand the operation of Analog/Digital Transmitter and Receiver

2. To understand the operation of different types of Analog to Digital Converters

3. To Gain knowledge about different digital modulation techniques useful for digital transmission.

Experiment No.	CONTENT
1	Write MATLAB program for generation and detection of i) DSB-SC ii) SSB-SC
2	Study of balanced modulator and detector of AM signal (using H/W Kit-C020).
3	To study amplitude modulated waveforms for different modulation depths and measure the value of modulation index (using H/W Kit- C09A).
4	To study the demodulation process and measure detection efficiency (using H/W Kit- C009).

5	To generate and detect frequency modulation (FM) signals using Kits and MATLAB.
6	PCM Based Transmitter and Receiver(Both using Kit and MATLAB)
7	Delta Modulation and Adaptive Delta Modulation Transmitter and Receiver
8	Generation and Detection of PSK, DPSK and QPSK signal
9	Generation and Detection of FSK and MSK signal
10	To study TDM using commutator and decommutator

SESSIONAL OUTCOME: After completion of the sessional student should be able to

1. Analyze the outputs of different analog modulation techniques
2. Analyze the outputs of different Digital modulation techniques
3. Simulate analog modulators and demodulators
4. Simulate analog modulators and demodulators
5. Design analog and digital modulator.

Design & Testing Lab (0-0-3)

SESSIONAL OBJECTIVE:

1. Practical exposer to various components used to design stable analog circuits.
2. Practice of soldering and handling of bread boards, tag boards etc. in designing electronic circuits.
3. Understand the methods of design, construction and test of electronic circuits.

Experiment No.	CONTENTS
1	Design, Construction and Test of Biasing Circuits.
2	Design, Construction and Test of Voltage Amplifier Circuits.
3	Design, Construction and Test of Rectifier Circuits with Filters.
4	Design, Construction and Test of Voltage Regulator Circuits.
5	Design, Construction and Test of Oscillator Circuits.
6	Design, Construction and Test of Power Amplifier Circuits.