

LIST OF PRACTICALS (EVEN SEMESTER)

C3P / DSC1B-P / GE4P: Electricity and Magnetism

Instructor: AB, RS, BM + SC

1. RC circuit
2. LRC series
3. LRC parallel
4. Thevenin and Norton's theorem
5. Superposition, max. power transfer
6. Carey Foster
7. Multimeter

C4P/ DSC1D-P: Waves and Optics

Instructor: SR, AB

1. Schuster's focusing: Determine the angle of prism
2. Refractive index of prism
3. Dispersive power and Cauchy constant
4. Newton's ring
5. Cauchy constants
6. Dispersive power & resolving power of plane grating
7. Lissajous Figures

C9P: Elements of Modern Physics

Instructor: SR + PKS

1. Photoelectric effect
2. Plank's constant using LEDs
3. Tunnelling effect in tunnel diode using I-V characteristics
4. Wavelength of a Laser source using single slit
5. Wavelength of a Laser source using double slit

C10P: Analog Systems and Applications

Instructor: RS + SS

1. V-I Ch. Of PN junction diode, LED
2. V-I Ch. Of Zener Diode, Voltage Regulator
3. BJT in CE mode
4. OP-AMP as Inverting amplifier
5. OP-Amp as non-inverting amplifier
6. OP-AMP as Differentiator
7. OP-AMP as Integrator
8. Frequency Response of inverting amplifier
9. Frequency response of non-inverting amplifier
10. Wien bridge oscillator
11. Phase shift oscillator
12. Zero crossing detector, Comparator

SEC2P: Renewable Energy & Energy Harvesting

Instructor: AB

1. Solar cell module
2. Thermoelectric module

Electromagnetic Theory (C13P)

Instructor: SS

1. Polarimeter.
2. Babinet's compensator
3. Stefan's constant
4. Boltzmann constant

Communication electronics (DSE3P)

Instructor: BM

1. Analog Pulse Modulation and demodulation
2. Pulse amplitude modulation and demodulation
3. Pulse position modulation and demodulation
4. Pulse width modulation and demodulation

Experimental Techniques (DSE4P)

Instructor: PKS

1. Design and analyze the Clippers and Clampers Circuits

Digital and Analog Circuits and Instrumentation (DSE2P)

Instructor: SS, BM

1. CRO
2. PN diode, Zener and LED
3. Transistor characteristics in CE configuration
4. AND, OR, NOT, XOR gates
5. To minimize a given logic circuit.
6. Half adder, Full adder
7. Adder-Subtractor using Full adder IC
8. A stable multi-vibrator
9. Mono-stable multi-vibrator
10. AND, OR, NOT, XOR gates