

**Far Western University**

Four Years B.Sc. in CSIT

Course of Study 2069

**Course Title:** Physics Practical (Mechanics and Electrodynamics PR)

Year: First

**Course No.:** CSIT.124

Semester: II

**Nature of the Course:** Practical

Credit: 1

**Objectives:**

By the end of the course the student should be able to:

- measure correctly the basic physical quantities
- determine errors in measurements
- analyze raw data and make valid conclusions
- validate corresponding theoretical component
- develop proper laboratory skills
- design basic physics experiments
- interpret experimental results and draw logical conclusions
- relate theoretical concepts to practical skills

**Laboratory works:**

- To determine inter planer spacing of given crystal by electron diffraction method
- To determine the band gap of given sample
- To determine the nature of charge carrier of a given simple by Hall apparatus
- Study NOT, AND, OR, NAND, NOR, EX-OR, EX-NOR gates
- To study the characteristic of simple junction diode and Zener diode
- To construct and study CE amplifier
- To construct and study CC amplifier
- To construct and study CB amplifier
- To study output input and transfer characteristics of NPN transistor.

**Note:**

- Student must perform 6 Hours of lab work (2 Hours x 3 times or 3 Hours x 2 times) every week
- In every semester, at least Eight experiments are to be performed. Additional experiments may be added subject to availability of time.
- The practical exam will be graded on the basis of the following marking scheme:

In-Semester Evaluation	25 %
Final Exam Written	50%
Final Exam Oral	25%

**Books:**

1. *B.Sc. Practical Physics*: C. L. Arora, S Chand and Company Ltd.
2. *Practical Physics*: G. L. Squires, Cambridge University Press.
3. *Practical Physics*, P. K. Shukla and A. Srivastava, New Age International (P) Limited