Instructions to students

Introduction:

Experiments provide a way of scientific enquiry and probing nature through observations. A physics laboratory course should ideally give exposure to this. Physics experiments have also led to important technological applications. Therefore any educational program in science and technology can't be complete without a good experience in laboratory work.

As a technologist you will deal with instruments and apparatus of various kinds throughout your carrier. You will be greatly benefited from the beginning if you take a enthusiastic attitude towards experimental work. There is no substitute for the experience that you gain by conducting even simple laboratory measurements.

In addition to improve understanding of Physics, a laboratory course certainly exposes you to the technology of measurements, use of basic instruments and methodology of data analyses and the scientific documentations. Moreover it offers the student a unique opportunity of learning science by doing rather than by reading.

Specific Instructions:

- 1. Assessment in the course is based on i) your performance in the laboratory class ii) your laboratory report, iii) the semester examination and iv) Regular attendance.
- 2. A prior study about the experiment is essential for good performance in the class. Read the instruction manual carefully before coming to the lab. If you come unprepared to the lab; your performance would be accordingly affected.
- 3. You are expected to perform the experiment, complete the calculations and get the results corrected for every experiment on the same day within the laboratory slot assigned for it.
- 4. You must bring with you the following material to the lab: Observation book, writing materials, graph sheets and calculator.
- 5. At least one set of observation should be checked by the faculty.
- 6. Each graph should be well documented; abscissa and ordinate along with the units should be mentioned clearly. The title of the graph should be stated on the top of each graph paper.
- 7. Tentative Scheme of evaluation:

Continuous internal evaluation (CIE) - 80marks semester end examination (SEE) - 20marks

- 8. Allotment of marks for the lab examination for the SEE:
 - 1. Write up:
 - a) Formula with units b) Circuit diagram c) Observations& tabular columns (self explanatory) d) Nature of graph

Write up: 05+05=10 marks

2. Conducting Practical:

Performance 12+12=24 marks
Calculations, graphs, results
Viva-voce 03+03=06 marks
25+25=50 marks