PHYSICS DEPARTMENT
PYP100 LABORATORY: GENERAL INSTRUCTIONS

This Laboratory Course comprises of laboratory work in two parts of the lab in the Physics Department. Every student is expected to do 5 experiments in each part of the laboratory. There will be two lab tests, one each in the two parts on completion of the allotted experiments. Students are necessarily required to appear in both lab tests i.e. Electrical and General/Optical, if appeared in only one lab test, they will be declared fail. Students should note the following instructions.

1. One turn (i.e. a laboratory period of 4 hours) is earmarked for performing one experiment. First day is instruction day, 2nd turn to 6th turn one experiment on each and Lab test on 7th turn. If students get absent on any turn due to medical emergency, he/she need to take written permission from the Lab Coordinator to do the experiment in extra turn on any working day between 9 AM to 1 PM in the lab, and the observations/readings are to be checked by the Lab In Charge. The permitting application need to be submitted to the Lab In charge within a week from the date of absence and student need to paste the permission slip in the notebook.

2. Before coming to the laboratory, you must be aware of the experiment allotted to you and you should be well-prepared to perform the experiment in one turn. A booklet/laboratory manual provides write-up for each experiment. The write-up gives a brief description of the experiment including theory, apparatus, procedure, observation and tables etc. For more details, you should consult other reference books. When you come to laboratory class, your laboratory note book should contain the object, apparatus, formula used, outline of the procedure (in brief steps), relevant diagrams and observation tables. The laboratory note book will be checked by the teaching assistants. If your note book is found incomplete, you may not be allowed to perform the experiment.

3. You should note down all observations directly in the tables drawn in your note book, and nowhere else. For each set of measurements, you must get at least one reading checked by one of the teaching assistants present in the class.

4. Once the experiment is over, if time permits, you must try to complete all the calculations in the laboratory itself. Your calculations will be checked by the teacher, and you will be assessed on the understanding of the experiment performed by you in following turn. Therefore, your lab-reports must be complete in all respects on the next turn; they must include all calculations, graphs, possible sources of errors, precautions and log error calculations.

5. If a teacher finds your readings to be faked or copied from others, you will be awarded Zero marks out of the total 20 marks reserved for day-to-day evaluations, and the case may be referred to disciplinary committee for appropriate action. In case of doubt, it will be your responsibility to prove the authenticity of the readings recorded by you.

6. The academic evaluation in each laboratory part would be carried out through day-to-day assessments and a lab test. One experiment out of all the experiments allotted to you would be given during the lab test. There will also be a viva-voce on all the experiments performed by you to determine your understanding of the experiments. The lab note book should be submitted to the teachers at the beginning of the lab test.

7. In each laboratory part, every student should have performed a minimum of 4 experiments (out of the allotted 5 experiments) during his/her regular laboratory turns, failing which the student will be barred from taking the lab test.
8. The distribution of marks in each lab will be as follows:
   (i) Day-to-day assessment: 100 marks
   (ii) Lab test: 100 marks
   **Total** 200 marks

9. Day to day evaluation includes viva voce and notebook checking by faculty comprising of 15 marks and TA’s will give marks out of 5 judging preparedness of student.

10. Mobile phones are not allowed and must be kept on silent mode in the bag.