# BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI HYDERABAD CAMPUS SECOND SEMESTER 2019-2020 COURSE HANDOUT (PART-II)

Date: 06-01-2020

In addition to part I (General handout for all courses appended to the timetable) this portion gives further details regarding the course.

Course No. : PHY F110

Course Title : Physics Laboratory

**Instructor In charge** : **Prasant Samantray** 

**Instructors Name**: Asrarul Haque, Vicky Singh, Haridev S. R, Nobleson, Sabur Ahmed, Kannan Ramaswamy, Rahul Kumar Takur, Souri Banerjee, Waseem Ahmed Wani, Sarmistha Banik, Rahul Nigam, Yuganand Nellambakam, Ronit Mahapatra, Sajia Yeasmin, Surabhi Yadav.

# 1. Aims and Learning Outcomes:

Familiarize the students to the experimental methods in physics and also to integrate theoretical knowledge with practical experience. Students will learn operation of scientific equipment for collecting data and the analysis of collected data.

# **Learning outcomes:**

- Identifying and quantifying sources of error in an experiment.
- Fitting experimental data to an expected theoretical expression.
- Error analysis.
- Use of logarithmic graph sheets.
- Usage of optical instruments such as microscopes and spectrometers.
- Reading a Vernier scale.

### 2. TEXT BOOK:

Lab manual for Physics

Reference: Relevant reference materials are specified in the lab manuals.

## 3. EVALUATION SCHEME:

EVALUATION COMPONENT	DURATION	WEIGHTAGE	DATE & TIME
DAY TO DAY PERFORMANCE	1 hour 50 min per class	20 %	
Practical EXAM	50 minutes	45%	
Comprehensive	1.30 hours	35%	15/05 FN
Written Exam			

### 4. DAY-TO-DAY PERFORMANCE FOR EACH LAB class:

OBSERVATION	10
CALCULATION	10
AND GRAPH	
TOTAL	20

The total marks for day-to-day performance of the labs will be scaled down to the corresponding total marks mentioned in the first row of the previous table.

Students must submit lab report for each experiment done in the lab on the following turn. Students are expected to read the allotted experiments from the manuals before coming to the lab.

### 5. MAKE-UP:

The schedule of the experiment is very strict: the students are expected to attend all the labs regularly. Make-up will be given only in case of hospitalization.

**6. NOTICE:** Notices concerning this course will be displayed on **Physics** notice board and on CMS.

**7.ACADEMIC HONESTY AND INTEGRITY POLICY**: Academic honesty and integrity are to be maintained by all the students throughout the semester and no type of academic dishonesty is acceptable.

Instructor-In-Charge PHY F110