Practical: MJ-PH (PRA) – 303 (2 Credits)

Sr. No.	Title
1.	To study simple and damped harmonic motions.
2.	To study oscillations of a bar pendulum.
3.	To study coupled oscillator and its modes.
4.	To determine "Y" by the method of vibration.
5.	To determine self-inductance of an inductor using Maxwell's bridge.
6.	To determine the ratio of capacitances using de Sauty's bridge.
7.	To determine figure of merit of a BG.
8.	To find resonance frequency of an LCR ac series network.
9.	To determine Young's modulus of a beam by the method of elevation.
10.	To determine moment of inertia of a flywheel.
11.	To find energy band gap of a semiconducting material.
12.	To verify Stefan's fourth power law.

Reference Books:

1. D. C. Tayal, University Practical physics, Edited by Ila Agarwal, Himalayan Publishing House
2. B. L. Worsnop and H. T. Flint, Advanced Practical Physics, Asia Publishing House, New Delhi.
3. D. P. Khandelwal, A Laboratory Manual of Physics for Undergraduate Classes, Vani Publication House, New Delhi.
4. Geeta Sanon, B. Sc. Practical Physics, 1st Ed. (2007), R. Chand & Co.

Note:

1. The duration of each experiment is of 2 hours.
2. There should not be more than 10 students per batch as per NEP 2020 guidelines.
3. In the external exam, a student will have to perform two experiments. The experiment will be of 2-hour duration.
4. There should be two examiners per batch in the external examination.
5. There should not be more than 10 students per examiner per session in the external examination.