Practical MJ-PH (PRA) – 404 (2 Credits)

Sr. No.	Title
1.	To determine wavelength of spectral lines by plane transmission grating. (For normal incidence)
2.	To determine spherical aberration of a plano-convex lens.
3.	To determine refractive endex of different transparent liquids using a hollow prism.
4.	To determine the resolving power of a telescope.
5.	To determine stopping potential of a metal using photocell.
6.	To determine k_B/e using a power transistor.
7.	To study the characeristics of JFET.
8.	To study the characeristics of D-MOSFET.
9.	To study the characeristics of E-MOSFET.
10.	To study FET amplifier.
11.	To study MOSFET amplifier.
12.	To determine lattice parameters of a cubic single crystals structure. (From XRD pattern).

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.

Bajaj