## BACHELOR OF SCIENCE in PHYSICS (HONS) SEMESTER – IV

### ATOMIC AND NUCLEAR PHYSICS PRACTICAL

### Paper Code: PHY-404P

### PHY – 404P: ATOMIC AND NUCLEAR PHYSICS PRACTICAL

#### 25 MARKS

# Laboratory:

1. To draw the (i-D) curve for a prism using a spectrometer and to find the minimum deviation using sodium light.

2. To draw (i-D) curve for a prism using a spectrometerand to find the refractive index of the prism using sodium light (angle of the given prism).

3. Determination of radius of curvature of a convex lens using by Newton's ring method.

4. Determination of dispersive power of a prism for sodium light using a spectrometer.

5. Determination of width of a single slit of from a diffraction pattern and verification of the value by means of a travelling microscope.

6. Determination of wavelength of sodium light using a plane transmission grating.

7. Determination of internal resistance of a cell using a potentiometer.

8. To measure current in an external circuit with the help of a potentiometer.

9. Calibration of an ammeter with the help of a potentiometer.

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