1) **Sonometer**

Aim: To determine the frequency of AC mains by using a sonometer

http://vlab.amrita.edu/?sub=1&brch=201&sim=366&cnt=1
http://www.olabs.edu.in/?sub=1&brch=6&sim=151&cnt=4

2) **Hall Effect**

Aim: To study the Hall effect and hence determine the Hall coefficient (R_h) and carrier density (n) of a given semiconductor material.

http://vlab.amrita.edu/?sub=1&brch=282&sim=879&cnt=1

3) **Young's Modulus**

Aim: To determine the Young's Modulus of elasticity of the given material by using Non-uniform bending.

https://vlab.amrita.edu/?sub=1&brch=280&sim=1509&cnt=1

4) **Variation of Magnetic Field**

Aim: To study the variation of magnetic field with distance along the axis of a current carrying circular coil and hence estimate the radius of the coil.

http://vlab.amrita.edu/?sub=1&brch=192&sim=972&cnt=1

5) **Photoelectric Effect**

Aim: (a) To understand the Photoelectric effect,

(b) To draw the Kinetic energy of Photoelectrons as a function of frequency of incident radiation,

(c) To plot a graph connecting Photocurrent and applied voltage, and

(d) To determine the stopping potential from the photocurrent versus applied potential graph.

http://vlab.amrita.edu/?sub=1&brch=195&sim=840&cnt=1

6) **Optical Fiber**

Aim: To determine the Numerical Aperture of an optical fiber and thus find the acceptance angle.

Study about the bending losses.

http://vlab.amrita.edu/?sub=1&brch=189&sim=343&cnt=1

7) **Laser Diffraction**

Aim: To Measure the diameter of a thin wire (human hair) by Laser Diffraction.

http://vlab.amrita.edu/?sub=1&brch=189&sim=342&cnt=1

8) **Resistivity by Four Probe method**

Aim: To determine the resistivity of semiconductors by Four Probe Method.

https://vlab.amrita.edu/?sub=1&brch=282&sim=1512&cnt=1

9) **Plank's Constant**

Aim: To find the Planck's constant by using LEDs.

http://vlab.amrita.edu/?sub=1&brch=195&sim=547&cnt=1

Introduction to common measuring methods

1. Vernier Calipers : http://amrita.olabs.edu.in/?sub=1&brch=5&sim=16&cnt=1
2. Screw Gauge: http://amrita.olabs.edu.in/?sub=1&brch=5&sim=156&cnt=1
3. Spherometer: http://amrita.olabs.edu.in/?sub=1&brch=5&sim=168&cnt=1