RAJASTHAN ILD SKILLS UNIVERSITY

(RISU)

General Elective Paper 158 : Experimental Physics (Mechanics and Optics)

Any 15 experiments out of following:

1. Using compound pendulum study the variation of time period with amplitude in large angle oscillations.
2. To study the damping using compound pendulum.
3. To study the excitation of normal modes and measure frequency splitting using two coupled oscillators.
4. To study the frequency of energy transfer as a function of coupling strength using coupled oscillators.
5. To determine Youngs modulus by bending of beam.
6. To determine Youngs Modulus, Shear Modulus and Poisson Ration by Searle's method.
7. To determine modulus of rigidity of a wire using Maxwell's needle.
8. To Study of normal modes of a coupled pendulum system. Study of oscillations in mixed modes and find the period of energy exchange between the two oscillators.
9. To study variation of surface tension with temperature using Jaeger's method.
10. To study the specific-rotation of sugar solution by polarimeter.
11. To determine the Refractive Index of the Material of a given Prism using Sodium Light.
12. To determine Dispersive Power of the Material of a given Prism using Mercury Light
13. To determine the value of Cauchy Constants of a material of a prism.
14. To determine the Resolving Power of a Prism.
15. To determine wavelength of sodium light using Fresnel Biprism.
16. To determine wavelength of sodium light using Newton's Rings.
17. To determine wavelength of (1) Sodium & (2) spectrum of Mercury light using plane diffraction Grating
18. To determine the Resolving Power of a Plane Diffraction Grating.