PRACTICAL COURSE FOR CLASS 11

SYLLABUS OF THE EXPERIMENTS

1. To find the length, breadth and height of a regular rectangular block by using vernier calipers and hence find its volume
2. To find the internal diameter and depth of a regular cylindrical object by using vernier calipers and hence find its volume
3. To find the diameter of a given wire by using screw gauge
4. To find the thickness of a given sheet by using screw gauge
5. To find the radius of curvature of a spherical convex surface by using the sphero-meter
6. To draw the graph between the normal reaction force and the friction force and hence to find the coefficient of friction between the block and the horizontal surface
7. To plot the 'l-T' and '$l-T^2$' graph of a simple pendulum and to find the effective length of a second's pendulum
8. To find the values of 'v' for different values of 'u' for a concave mirror and hence to find its focal length.
9. To find the values of 'v' for different values of 'u' for a convex lens and hence to find its focal length by plotting the graph between 'u' and 'v'
10. To find the minimum angle of deviation of a glass prism by plotting a graph between angle of incidence and the angle of deviation and hence to find the refracting index of the prism
11. To find the refractive index of a glass slab by using travelling microscope
12. To find the spring constant of a helical spring by plotting a graph between the load and the extension
13. To draw the graph of Newton's law of cooling
14. To find the coefficient of viscosity of a given fluid of known density

PRACTICAL COURSE FOR CLASS 12

SYLLABUS OF THE EXPERIMENTS

1. To find the resistance per unit length of a given wire by plotting a graph between the potential difference (V) and current (I)
2. To find the specific resistance of a given wire by using meter bridge
3. Verify the combination of resistance in series by using meter bridge
4. Verify the combination of resistance in parallel by using meter bridge
5. To find the resistance of a galvanometer and its figure of merit by the half deflection method
6. To convert a galvanometer of known resistance and known figure of merit in to a voltmeter
7. To convert a galvanometer of known resistance and known figure of merit in to a ammeter
8. To compare the emf of two primary cells using potentiometer
9. To find the values of ‘v’ for different values of ‘u’ for a concave mirror and hence to find its focal length.
10. To find the values of ‘v’ for different values of ‘u’ for a concave mirror and hence to find its focal length by plotting the graph between ‘u’ and ‘v’
11. To find the minimum angle of deviation of a glass prism by plotting a graph between angle of incidence and the angle of deviation and hence to find the refracting index of the prism
12. To find the refractive index of a glass slab by using travelling microscope
13. To find the refractive index of a liquid by using convex lens and plane mirror
14. To draw the V-I characteristic graph of the p-n junction diode in forward and reverse bias and hence to find the resistance in forward and reverse bias
15. To draw the V-I characteristic graph of the p-n junction diode in reverse bias and hence to find the resistance in reverse bias