

UNIVERSITY OF MADRAS
B.Sc. DEGREE COURSE IN PHYSICS
SYLLABUS WITH EFFECT FROM 2020-2021

BPS-CSC02

CORE-II: CORE PRACTICAL – I
(Common to B.Sc.Physics with Computer Applications)
(At the end of the Second semester - Any Fifteen Experiments)

Credits:4

1. Young's modulus – Non-uniform Bending – Pin and microscope.
2. Young's modulus – Uniform Bending – Scale and Telescope
3. Rigidity modulus – Torsional pendulum (without symmetrical masses)
4. Rigidity modulus and Moment of Inertia – Torsional pendulum (With symmetric masses)
5. Surface Tension and Interfacial Surface Tension – Drop Weight Method
6. Coefficient of Viscosity of Liquid – Graduated Burette (radius of capillary tube by Mercury pellet method).
7. Sonometer–Frequency of Tuning Fork
8. Sonometer – Relative Density of a Solid and Liquid
9. Specific heat capacity of liquid–Method of Mixtures (Half-time correction).
10. Comparison of Viscosities of two Liquids–Burette Method
11. Focal length, Power, R and Refractive Index of a long Focus Convex Lens
12. Focal length, Power, R and Refractive Index of a Concave Lens
13. P.O. Box – Temperature coefficient of resistance
14. Spectrometer – Refractive index of a Glass Prism
15. Spectrometer – Hollow Prism- Refractive index of a liquid.
16. Newton's law of cooling-Specific heat Capacity of the Liquid
17. Carey Foster's Bridge-Resistance and Specific Resistance
18. Potentiometer – Calibration of a Low Range Voltmeter
19. Deflection magnetometer – Tan A Position
