

UNIVERSITY OF MADRAS
B.Sc. DEGREE PROGRAMME IN COMPUTER SCIENCE
SYLLABUS WITH EFFECT FROM 2023-2024

Elective Physics-I & II (Practicals) (Semester I & II) Common for B.Sc.-SA, B.Sc.-CSc , B.Sc.-CSc-wAI	225E41
Credits 2	Lecture Hours: 2 + 2 = 4
Learning Objectives: <ul style="list-style-type: none">• The students can acquire practical knowledge on the given experiments.	

ELECTIVE PHYSICS-I & II – (PRACTICALS)
(Examination will be held at the end of even Semester - Any Fifteen Experiments)

1. Young's Modulus by Non-uniform bending using Pin and Microscope
2. Young's Modulus by Non-uniform bending using Optic lever–Scale and telescope
3. Rigidity modulus by Static torsion method.
4. Rigidity modulus by Torsional oscillations without mass
5. Surface tension and Interfacial Surface tension–Drop Weight method
6. Comparison of Viscosities of two liquids–Burette method
7. Specific heat Capacity of a liquid–Half time correction
8. Sonometer–Determination of a.c frequency
9. Newton's Rings-Radius of curvature
10. Air wedge–Thickness of aware.
11. Spectrometer–Grating–Wavelength of Mercury lines–Minimum deviation method
12. Potentiometer–Voltmeter Calibration
13. P.O. Box–Specific resistance
14. B.G.–Figure of Merit (table galvanometer)
15. Construction of AND, OR, NOT gates–using diodes and Transistor
16. Zener Diode–Characteristics
17. NAND gate as a universal gate

Note: Use of Digital Balance Permitted.