

HEMCHANDRACHARYA NORTH GUJARAT UNIVERSITY, PATAN

B. Sc. PHYSICS - SEMESTER – II (PRACTICAL COURSE)

PROGRAMME CODE: SCIUG101

(Effective from June 2023 Under NEP – 2020)

TYPE OF COURSE	CREDIT	COURSE CODE
Multi Discipline Core Course (MDSCP)	2	SC23MDSC P PHY203

Teaching Hours per Week: 04 Hours for 2 Credit practical and Teaching Hours per Semester: 60 Hours

LABORATORY EXPERIMENTS

Multi Discipline Core Course (MDSCP) Practical

1. Numerical Analysis: Jacobi interaction Method.
2. Plotting of a Graph and Error estimation on graphical plot. Linear and nonlinear graph, Logarithmic Graph , Polar Graph
3. To Find the vertical distance between two points using Sextant.
4. Determine Modulus of Rigidity (Moment of Inertia) of Disk using Torsional pendulum
5. Numerical: Gauss Backward Interpolation Formula
6. Determination of angular acceleration (α) and find MI of a Fly wheel using Formula
7. To Determine the value of Cauchy's Constants of material of Prism
8. Study of Parallel Resonance with variable capacitor and Fix Frequency
9. Decay of Potential across Condenser
10. Measurement of Boltzmann constant using Diode.
11. PN Junction IV characteristics and Load Line analysis.
12. Study of Step Down Transformer. To determine Turn Ratio, % of Efficiency, Energy loss due to copper loss for a given transformer