

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
Minor Discipline Core Course (MIDSCP)	2	SC23MIDSC P PHY202

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

LABORATORY EXPERIMENTS

Minor Discipline Core Course (MIDSCP) Practical

- 1 Bar Pendulum: Determination of 'K' and 'g'
- 2 Melde's Experiment. T/L^2 constant
- 3 Find out Refractive Index of the prism using spectrometer.
- 4 To determine the ratio of magnetic moments of two magnets by using Vibrational Magnetometer.
- 5 To determine the magnetic moment of a given Bar magnet using Deflection Magnetometer in Gauss A and B position.
- 6 Numerical: Gauss Backward Interpolation Formula
- 7 Determination of self-inductance 'L' of Inductor.
- 8 Study of parallel Resonance with variable frequency and Fix capacity
- 9 P-N Junction diode as Full Wave Rectifier (i) Without filter. (ii) With Series Inductor Filter, (iii) With Shunt Capacitor Filter. Calculation of Percentage of Regulation.
- 10 Study of Parallel Resonance with variable capacitor and Fix Frequency
- 11 Decay of Potential across Condenser
- 12 Study of Step Down Transformer. To determine Turn Ratio, % of Efficiency, Energy loss due to copper loss for a given transformer.