Sankalchand Patel University

Faculty of Science and Humanities

Master of Science(SEM-1)(Physics)

In Effect from Academic Year 2021-22

Subject Code:1SC2050105	**Subject Title:** Practical

COURSE OBJECTIVE:

Physics is a science to understand the nature. This course is designed to get basic understanding of the physical world.

LEARNING OUTCOMES:

- To understand the application of physics in real world.

Teaching scheme (hours) per week		**Credit**		**University Examination**		**Internal Examination**		**Total**
Theory	**Practical**	**Theory**	**Practical**	**Theory**	**Practical**	**Theory**	**Practical**	
---	**8**	**---**	**8**	**---**	**120**	**---**	**80**	**200**

Physics Practical

1. Frequency response of LDR using different filters
2. Determination of resistivity of a semiconductor using four probe method
3. Arithmetic operations through combinational logic circuits
4. LCR damped harmonic oscillator
5. Wave shaping circuits (using R,C,D)
6. Determination of e/k using a power transistor
7. Thermistor characteristics and estimation of the band gap of the semiconducting material
8. Measurement of dielectric constant of solid materials by resonance method
9. Determination of the Planck's constant using LED
10. Dead time determination of a Geiger-Muller counter
11. Analysis of solar absorption spectra using hart-Mann formula
12. Study of chaos through the logistic map of a population growth