

Shree H. N. Shukla Institute of Pharmaceutical Education & Research

(Affiliated to Gujarat Technological University, Approved by PCI)

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M.Pharm PHARMACEUTICS SEMESTER: I

Subject Name: PHARMACEUTICS PRACTICALS - I **Subject Code:** MPH105T

Teaching scheme and examination scheme:

Teaching Scheme				Evaluation Scheme			
Theory	Tutorial	Practical	Total	Theory		Practical	
				External	Internal	External	Internal
0	0	12	6	0	0	100	50

List of Practicals:

PART A:

- 1. Analysis of pharmacopoeial compounds and their formulations by UV Vis spectrophotometer
- 2. Simultaneous estimation of multi component containing formulations by UV spectrophotometry
- 3. Experiments based on HPLC
- 4. Experiments based on Gas Chromatography
- 5. Estimation of riboflavin/quinine sulphate by fluorimetry
- 6. Estimation of sodium/potassium by flame photometry

PART B:

- 1. To perform In-vitro dissolution profile of CR/ SR marketed formulation
- 2. Formulation and evaluation of sustained release matrix tablets
- 3. Formulation and evaluation osmotically controlled DDS
- 4. Preparation and evaluation of Floating DDS- hydro dynamically balanced DDS
- 5. Formulation and evaluation of Muco adhesive tablets.
- 6. Formulation and evaluation of trans dermal patches.
- 7. To carry out preformulation studies of tablets.
- 8. To study the effect of compressional force on tablets disintegration time.
- 9. To study Micromeritic properties of powders and granulation.
- 10. To study the effect of particle size on dissolution of a tablet.
- 11. To study the effect of binders on dissolution of a tablet.
- 12. To plot Heckal plot, Higuchi and peppas plot and determine similarity factors.
- 13. To perform stability testing of drug in liquid formulation.
- 14. To prepare and evaluate self-micro emulsifying drug delivery system (SMEDDS).
- 15. To perform calibration study of dissolution test apparatus.
- 16. To calculate standard deviation; perform Chi square test, students T-test and ANOVA test for given data.