

# GUJARAT TECHNOLOGICAL UNIVERSITY

## M.Pharm PHARMACEUTICS SEMESTER: I

**Subject Name:** PHARMACEUTICS PRACTICALS - I

**Subject Code:** MPH105T

### 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.