PLAN OF WORK AND METHODOLOGY:
1. Exhaustive Literature survey through journals and e-journal
2. Procurement of Drug(s) and Excipient(s)
3. Identification of Drug(s) and Excipient(s)
4. Preliminary screening of formulation variables
5. Interaction study of drugs with polymer
6. Optimization of formulation variables using factorial design
7. Evaluation of prepared tablets
8. Statistical analysis
9. Kinetic treatment of dissolution profiles
10. Comparison of optimized batch between First and second factorial design
11. Stability study of optimized batch

METHODOLOGY FOR RANITIDINE TABLETS:

Estimation of ranitidine hydrochloride
A solution of ranitidine hydrochloride is prepared in 0.1 N HCl and UV spectrum is taken using Shimadzu UV-1601 UV/Vis double beam spectrophotometer

Preparation of floating matrix tablets
Different tablets formulations are prepared by direct compression technique.

Evaluation Parameters:
Angle of repose
Bulk density
Compressibility Index
Total Porosity
Drug Content

Weight variation test
To study weight variation twenty tablets of the formulation are weighed using a Sartorius electronic balance and the test is performed according to the official method.

Drug content
Five tablets are weighed individually, and the drug is extracted in 0.1 N HCl, the drug content is determined as described above.

Hardness
The hardness of five tablets is determined using the Pfizer hardness tester and the average values are calculated.

Thickness

The thickness of the tables is determined by using vernier calipers. Five tablets are used, and average values are calculated.

METHODOLOGY FOR GLIPIZIDE MICROSPHERES

Preparation of Acrycoat S100 of Glipizide

Glipizide and Acrycoat S100 are dissolved in a mixture of alcohol and Dichloromethane. This mixture is poured in a 500 ml water containing PVA maintained at specified temperature with stirring. Stirring is continued for 1 h. to allow the volatile solvent to evaporate.