PLAN OF WORK AND METHODOLOGY

1. **Review Literature:**

2. **Characterization and identification of the Ranitidine Hydrochloride:**
   Characterization and identification will be carried out by official monographs given in IP and IR.

3. **Preformulation Study of the Ranitidine Hydrochloride:**
   a. Solubility Study.
   b. Melting point.
   c. Bulk density
   d. Tapped density.
   e. Compressibility index.
   f. Compatibility study of ranitidine with polymers.

4. **Preparation of different formulations:**
   • By using polymers with different polymers combinations.

5. **Optimization of the formulation:**
   a. By Floating property study.
   b. By Drug Release study.
   c. Buoyancy lag time.

6. **Evaluation parameters of the optimized formulation:**
   a. Tablet characteristics.
   b. Floating property study.
   c. Swelling study.
   d. Buoyancy lag time.
   e. In vitro dissolution studies of tablets.
   f. Comparison with marketed product.

7. **Stability studies according to ICH guidelines.**