4. PLAN OF WORK AND METHODOLOGY

4.1 Literature survey
   It will be done through books, journals, e-books.

4.2 Procurement of drug and excipients

4.3 Characterization of drug and excipients
   - Organoleptic properties and Description
   - Melting Point
   - Determination of solubility of drug candidate
   - UV Spectroscopy
   - IR Characterization
   - Construction of Beer-lambert law

4.4 Formulation and optimization of prepared formulation
   - Ocular film will be prepared using different polymers in different ratios by film casting method
   - In situ gel will be prepared by using different concentration of polymer in which drug is instilled which will give phase transition.

4.5 Evaluation of polymeric ophthalmic film System for
   - Uniformity of weight and thickness
   - Drug content uniformity
   - % moisture absorbed and % moisture loss
   - Drug – excipient compatibility study
   - In vitro – in vivo release study
   - Ocular toxicity test
   - Microbiological study
   - Accelerated Stability study

4.6 Evaluation of in situ gel for
   - Gelling capacity and viscosity
   - Drug content uniformity
   - Rheological study
   - In vitro release study
   - Antimicrobial efficacy test
   - Ocular toxicity test
   - Eye irritation test
   - Effect of sterilization
   - Accelerated Stability study

4.7 Stability study of formulation as per ICH guidelines.

4.8 Statistical application (Factorial Design)