WORK PLAN & METHODOLOGY:

A) Literature Survey
By searching different research articles & patents.

B) Selection of Drug Candidate

C) Selection of Biodegradable Polymers
Chitosan, Starch etc.

D) Preformulation Study
Analysis of drug & polymer:
1. Physicochemical Properties
2. *In Vitro* drug determination by U. V. Analysis
3. FTIR Analysis
4. Particle Size Analysis
5. XRD
6. DSC

E) Preparation of Implants By Different Methods
1. Direct Compression or wet granulation

F) Comparative Evaluation of Biodegradable Polymers in sustaining release.
1. Effect of different polymers
2. Effect of polymer & its ratio
3. Effect of conc. of crosslinking agents
4. Effect of Swelling

G) EVALUATION OF IMPLANTS
1. Thickness and Diameter
2. Weight variation test
3. Hardness
4. Drug content
5. Water uptake
6. Percent erosion

H) In Vitro Drug Release Studies

I) In Vivo Drug Release Studies

J) Stability Study
   As per ICH guidelines

K) Data Treatment
   a) Zero order release kinetic treatment
   b) First order release kinetic treatment
   c) Higuchi square root kinetic treatment
   d) Korsmayerpeppas treatment

L) Statistical Application
   Statistical methods based in the analysis of variance or in t-student tests.