METHODOLOGY
These chapters discuss the materials, procedure and the treatment that will be employed in the present study.

FIRST EXPERIMENT: In the First experiment, Lantana Camera Linn (verbenaceae) plant will be identified. Different parts of Lantana Plant (Leaves, stem, fruits and flowers) will be subjected for washing, drying, pulverizing and treated with boiling solvents separately. The extract was concentrated in vacuum followed by suspended in water and then consequently extracted with ethylacetate and n- butanol. The ethyl acetate fraction will be loaded on a silica gel column using a mixture of CHCl₃-Methanol with increasing solvent polarity as eluent to give three layers. Neutral layer may examine with n-Hexane and Acetone to yield Lantadene A and B. It will be confirmed by M.P., T.LC and spectroscopic methods with standard compound. Quantitative analysis of Lantadene will be verified by statistical method (± S.D.Dunnett’s test for the evaluation).

SECOND EXPERIMENT: Lantadene bioactive molecule will be analyzed by polymorphism. As per the literature review, output of Lantadene from the respective plant parts is quite low. Therefore there will make attempt to verify polymorphism and conformation by Nanotechniques.

THIRD EXPERIMENT: Lantadene molecule will be study for it’s Chemical kinetics, with range of wavelengths of light and statistical evaluation will be carried out.

FORTH EXPERIMENT: Potential of Bioactive molecule Lantadene will be analyzed by potentiometer.

FIFTH EXPERIMENT: To check the behavior of plant cell with Lantadene molecule by Electron microscope. Further Cytotoxicity can be determined by drug disc method.

WORK PLAN
1) In the first eight months of the first year-
Dried, powdered of Different parts of Lantana camara Linn plant will be treated with boiling solvents separately. And by using column chromatography, Lantadene compound will be separated out. Compound will be analysed by M.P., T.L.C.and spectroscopic methods.

2) In the next four months of the first year-
Lantadene compound will be subjected to different solvents for detection of polymorphism. Conformation will be identified by nanotechniques.

3) **In the first three months of the second year**-
   Chemical Kinetics of Lantadene will be determined by using different wavelengths of light.

4) **In the second three months of the second year**-
   Potential of Lantadene will be analysed by potentiometer.

5) **In the next three months of the second year**-
   Behavior of plant cell with Lantadene will be checked by electron microscope and cytotoxicity will be determined by drug disc method.

6) **In the last three months of the second year**-
   Statistical data of all five experiments will be complied and preparative work of thesis will be carried out.