METHODOLOGY

In the research methodology, we use this strategy for the synthesis of some compounds in the hope that they may possess potent biological activities.

The propose work will be distributed into following categories: -

A STUDIES ON CHALCONE DERIVATIVES

\[
\text{Br} \quad + \quad \text{R-CHO} \quad \xrightarrow{40\% \text{NaOH}} \quad \text{Br}
\]

\[
\text{methanol, rt, 18hr}
\]

Type (1)

\( R = \text{substituted aryl} \)

B STUDIES ON PYRANONES DERIVATIVES

\[
\text{Br} \quad \text{Br} \quad \text{O} \quad \text{O} \quad \text{Br}
\]

\[
\text{OH} \quad \text{OH}
\]

Type (II), \( R = \text{Aryl} \)

C STUDIES ON PYRIMIDINES DERIVATIVES

\[
\text{Br} \quad \text{Br} \quad \text{N} \quad \text{N} \quad \text{NH}_2
\]

\[
\text{OH} \quad \text{N} \quad \text{N} \quad \text{NH}_2
\]

Type (III), \( R = \text{Aryl} \)
D STUDIES ON PIPERIDINONES DERIVATIVES

Type (IV), R=Aryl

E STUDIES ON CYANO PYRIDONES DERIVATIVES

Type (V), R=Aryl

F STUDIES ON CYANO PYRIDINES DERIVATIVES

Type (VI), R=Aryl

G STUDIES ON CYANO PYRANS DERIVATIVES

Type (VII), R=Aryl

H STUDIES ON PYRAZOLINES DERIVATIVES
I STUDIES ON INDAZOLES DERIVATIVES

Type (VIII) , R=Aryl

Type (IX) , R=Aryl

Type (X) , R=Aryl

J STUDIES ON ISOXAZOLES DERIVATIVES

Type (XII) , R=Aryl

Type (Xll) , R=Aryl

Type (XIll) , R=Aryl

PLAN OF WORK

➢ In first six month planning for literature survey.

➢ In other month understanding the raw materials, procurement of raw materials and methods of synthesis.

➢ Proposed molecules will be synthesized by different routine reactions and various reagents.

➢ To characterize these products for structure elucidation by several spectroscopic techniques like IR, PMR and Mass spectral studies etc.
➢ To evaluate these products for better drug potential against different strains of bacteria and fungi

➢ Study the results and preparation of Thesis work.