3 **OBJECTIVE:**

The general objective of this work was to synthesize heterocyclic derivatives of indane-1,3-dione and formulate the compound exhibiting anti-inflammatory, analgesic and antimicrobial activity in a single component.

The following specific objectives were established

- To synthesis benzodiazepine, pyrimidine, thiopyrimidine and oxazole derivatives of indane-1,3-dione.
- To monitor the purity and progress of the reaction by TLC.
- To purify the synthesized compounds by recrystallization technique using suitable solvents.
- To characterize the newly synthesized compounds on the basis of IR, $^1$H NMR, mass spectral data and Elemental analysis.
- To screen the synthesized compounds for its analgesic, anti-inflammatory, antibacterial and antifungal activities.
- To formulate the best-hit pharmacologically active compound.
- To carry out anti-inflammatory activity of the formulated ointment.