OBJECTIVES
3. OBJECTIVES

It is proved from the literature that, apart from possessing several biological activities, carbazole and chalcones were useful intermediates for the synthesis of several chemical and pharmacological classes of therapeutic agents. Based on these observations, it was considered worthwhile to synthesize some new substituted chalcones of carbazole by Claisen-Schmidt condensation reaction in the present study.

The objectives of the study are

1. To synthesize and characterize some new chalcones of 9-acetyl carbazole and their derivatives by reaction with various aromatic/heterocyclic aldehydes.

2. To characterize the synthesized chalcones of carbazole and their derivatives using IR, $^1$H NMR, Mass spectra and Elemental analysis data.

3. Biological evaluation of synthesized chalcones of carbazole and their derivatives for their toxicity, analgesic, anti-inflammatory and anti microbial activities.

4. To identify the active compounds for further exploitation.

5. To publish the work in peer reviewed journals.