INSTRUMENTATION AND METHODOLOGY

Melting Points:

Melting points were determined in open capillaries and are uncorrected. Melting points are expressed in degree celsius.

Infrared Spectra:

The IR spectra were recorded on Nicolet 5700 FT-IR spectrophotometers using KBr pellets. Wave numbers are expressed in cm$^{-1}$.

$^1$H NMR and $^{13}$C NMR Spectra:

The $^1$H NMR and $^{13}$C NMR spectra were recorded on Bruker-Avanace 300 MHz spectrophotometer using CDCl$_3$ or DMSO-$d_6$ as solvent and TMS as internal standard reference, chemical shifts are expressed in parts per million.

Mass Spectra:

The mass spectra were recorded on Shimadzu-2010A spectrophotometers.

Elemental Analysis:

The elemental analysis was carried out using Heraus CHN rapid analyzer

Purity:

Purity of the compounds was checked by TLC.
Nomenclature:

Nomenclatures for all the compounds were done by using ChemDraw/Sketch Software.

Biological Evaluation:

Anti-microbial activities of the compounds were carried out in the Department of Microbiology, Luqman College of Pharmacy, Gulbarga.

Pharmacological Evaluation:

Anti-inflammatory, analgesic, anti-pyretic, anti-convulsant and anti-diabetic activities of the compounds were carried out in the Department of P.G. Studies in Pharmacology, Luqman College of Pharmacy, Gulbarga.