General notes

- All solvents and reagents were purified and dried according to procedures given in Vogel's Text Book of Practical Organic Chemistry.
- All reactions were carried out under an inert atmosphere unless mentioned otherwise, and standard syringe-septa techniques were followed.
- All reactions were monitored by Thin Layer Chromatography (TLC) performed on E-Merck 0.25 mm precoated silica gel plates (60 F_{254}). Visualization of the spots on TLC plates was achieved either by exposure to UV light or iodine vapor or by dipping the plates in phosphomolybdic acid-ceric (IV) sulphate- sulphuric acid solution (PMA solution) and heating the plates at 120 ^{o}C.
- NMR Spectra were recorded on Varian Gemini 200 MHz, Bruker AVANCE 300 MHz and Varian Unity 400 MHz, or Varian Unity 500 MHz spectrometers with TMS as internal standard and the chemical shifts are expressed in δ values. The abbreviations such as s, d, t, q, m, dd, br s, refer to singlet, doublet, triplet, quartet, multiplet and doublet of doublet, broad singlet respectively.
- Mass spectra were recorded on Thermo Finnigan ESI ion traps, HRMS (ESI) were recorded on QSTAR XL High resolution mass spectrometer; VG Micromass 7070 H (EI) and a GC-MS system on an Agilent 6890 series (column: Varian CP-Sil 8 CB, 5% phenyl, 95% PDMS, 30.0 m × 250 µm × 0.30 µm nominal).
- IR spectra were recorded using a Thermo Nicolet Nexus 670 FTIR spectrometer and values are given in cm^{-1}.
- All the melting points were determined on a Mel-Temp II apparatus and were uncorrected.
- The optical rotations were measured on Perkin-Elmer 241 and JASCO DIP-360 digital polarimeters.
- Silica gel (60-120 and 100-200 mesh) used for column chromatography was purchased from ACME Chemical Company, Mumbai.
- All the nomenclature was given according to Chemical Abstract Index. For the unpublished compounds the nomenclature was given following Chemdraw, version 11.0.

- UV-Visible absorption spectra were recorded on Jasco V-550 UV-Visible spectrophotometer and values are given in nanometers (nm).
- Fluorescence spectra were recorded on Horiba Jobin Vyon Fluorolog instrument with double spectrometer.
- HPLC analyses were carried out on Jasco instrument using Kromasil 100 C-18 column.
- References are given separately at the end of each section.
- Structures, Figures, Schemes and Tables are numbered separately for each chapter.