General remarks

- Progress of the reaction was monitored by TLC and visualized by UV absorption by florescence quenching or I$_2$ staining or by both.
- Solvents for anhydrous reactions were dried by standard procedures. All organic layers obtained after extractions were dried over anhydrous Na$_2$SO$_4$. All evaporations were carried out under reduced pressure on Buchi rotary evaporator. Silica gel for column chromatography was 60-120 mesh and 230-400 mesh.
- Optical measurements were recorded on a JASCO digital polarimeter.
- All the temperatures are in °C (degree celsius). All the melting points and boiling points are in °C and are uncorrected. Melting points were recorded on Buchi B-540 melting point apparatus.
- IR spectra were recorded on a Perkin-Elmer infra-red spectrometer model 599-B and model 1620 FT-IR ($v_{\text{max}}$ in cm$^{-1}$).
- Unless otherwise stated, $^1$H-NMR spectra were recorded using TMS as internal reference on Bruker AC-200, AC-300, and 400 instruments using CDCl$_3$ as solvent. All chemical shifts are reported in parts per million (ppm) downfield from TMS. The coupling constants ($J$ values) are reported in Hertz (Hz).
- $^{13}$C-NMR spectra were recorded on Bruker AC-200, AC-300, and 400 instruments operating at 50 MHz, 75 MHz and 125 MHz respectively.
- Mass spectra were recorded on Shimadzu GCMS-QP5050 or Finnigan-Mat 1020C mass spectrometer and were obtained at an ionization potential of 70 eV.
- GC analysis was carried out on Agilent 6890N; unless otherwise stated.
- Microanalysis was carried out in the micro-analytical section of NCL.
- The compound numbers, scheme numbers and references given in each section separately refer to that particular section only.