UV Electronic spectroscopy:

Introduction to spectroscopy, Beer's Lambert's Law, it's numericals,Electronics transitions, red and blue shifts, hyperchromic and hypsochromic effects, Woodward Fieser rules, it's numericals,

IR spectroscopy:

Introduction, degrees of freedom, IR frequency chart,

NMR

Fundamental principles and theory, chemical shift calculation and definition, no of signals factors affecting chemical shift, shielding deshielding , TMS, interpretation of Proton NMR spectra