



College of Pharmaceutical
Sciences and Drug Manufacturing
A college accredited by "NAQAAE"



PAC 202

COURSE DESCRIPTION:-

This course includes UV /VIS Spectrophotometry electromagnetic radiation, Beer's Lambert's Law, Different factors affecting absorption spectra, Visual Colorimetry, Instrumentation, Deviation from Beer's Law (Real, instrumental & Chemical deviation, stray light) Application of Spectrophotometry Determination of physical constants (pKa, metal/ligand ratio in complexes, two-component analysis, use of Spectrophotometry in quality control (determination of impurities). Spectrofluorimetry: Theory of molecular fluorescence, Quantum yield, Modes of deactivation. Excitation and emission spectra, Quantitative fluorimetry Factors affecting fluorescence, Instrumentation Application of Spectrofluorimetry Flame spectroscopy Flame emission (Theory, Factors affecting it and its instrumentation). Atomic absorption: Theory, instrumentation, hollow cathode lamp, and its application. Chromatographic methods: Theories of chromatographic methods, different chromatographic techniques TLC, HPLC, GC.