

SYLLABUS: PHARMACEUTICS ✓

1. Importance of the following analytical methods in the qualitative, quantitative and structural elucidation of pharmaceutical compounds:
 - a) Optical Rotatory Dispersion
 - b) Spectrophotometric methods with emphasis on NMR including 2D & C¹³
 - c) Mass and HPLC
2. Formulation and evaluation of Novel drug delivery dosage forms with importance to their targeting & release mechanisms. ✓
3. Pharmacokinetics: ✓
Basic considerations, Pharmacokinetic models, Compartment modelling, Applications of pharmacokinetics in designing of dosage forms and novel drug delivery systems (including dose calculations), Therapeutic drug monitoring (importance & considerations).
4. Production management and Documentation:
ISO 9000 series, Total quality management, Guide to pharmaceutical manufacturing facilities, Productivity, GMP considerations, Quality assurance & Process control, Stress control on documentation practices, Validation aspects.