



DCOP

Subjectwise Course Outcome - [Pharmaceutics - 2023-24]

First Semester

Modern Pharmaceutical Analytical Techniques [Theory | Regular]

CO ID.	Course Outcome
MPH101T.4	CO.4.To understand the principles involved in various chromatography techniques such as paper,TLC,ion exchange,HPLC,and HPTLC etc
MPH101T.5	CO.5.To know the basic construction and working of chromatographic techniques
MPH101T.1	CO.1.Remember and understand the electromagnetic spectrum, spectroscopy and its importance in Pharmaceutical analysis.
MPH101T.2	CO.2.Describe the instrumentation of various spectro-analytical techniques.
MPH101T.3	CO.3 Explain the applications of different spectro-analytical techniques for the qualitative and quantitative analysis.

Regulatory Affairs [Theory | Regular]

CO ID.	Course Outcome
CO1	Understanding the importance and functions of various regulatory/global organizations like USFDA/ICH/CDSCO etc.
CO2	Acquaint with the concept of innovator and generic drugs pertaining its drug development process from regulatory perspective.
CO3	Proficiency in understanding stages of drug developments and preparation of documents for clinical trial approvals, Pharmacovigilance and various approval processes.
CO4	Elementary knowledge of drug approval process along with submission of global documents in CTD/ eCTD, DMF, CMC formats etc

MPH102T Drug Delivery System [Theory | Regular]

CO ID.	Course Outcome
CO1	To understand Various approaches for the development of CR/SR drug delivery systems.
CO2	To understand Criteria for the selection of drug and polymer for the development of CR/SR drug delivery systems.
CO 3	Various approaches for the development of Rate Controlled drug delivery systems.
Co 4	To Understand Various approaches for the development of Gastroretentive, ocular, Transdermal drug delivery systems.
CO 5	The formulation and evaluation of novel drug delivery system.

MPH103T Modern Pharmaceutics [Theory | Regular]

CO ID.	Course Outcome
CO1	Understand the concept and importance of preformulation parameters
CO2	Understand the formulation consideration of Emulsion, Suspension, SMEDDS & Parenterals
CO3	Know the compression and consolidation parameters for powders and granules in tablet development
CO4	Apply the statistical design in the development of different formulations
CO5	Have knowledge of optimization techniques and their applications in pharmaceutical industries
CO6	Know the scope and merits of validation and different types of validation
CO7	Understand the importance of industrial management principles and GMP Considerations
CO8	Know the ICH and WHO guidelines for calibration and validation of equipments

MPH105P Pharmaceutical Practicals-I [Practical | Regular]

CO ID.	Course Outcome
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CO1	To study and understand the analysis of pharmacopoeial compounds and their formulations, To learn and perform, Simultaneous estimation of multi component containing formulations by UV spectrophotometry.
CO2	To learn, understand and perform, Experiments based on Gas Chromatography and HPLC.
CO3	To understand, perform the experiments based on fluorimetry and flame photometry.
CO4	To perform In-vitro dissolution profile of CR/ SR marketed formulations, to perform formulation and evaluation of sustained release matrix tablets, osmotically controlled DDS, Floating DDS- hydro dynamically balanced DDS and Muco adhesive tablets.
CO5	To perform the formulation and evaluation of trans dermal patches, To carry out preformulation studies of tablets.
CO6	To understand, and study the effect of compressional force on tablets disintegration time, to evaluate Micromeritic properties of powders and granulation, and to determine the effect of particle size on dissolution of a tablet.
CO7	To determine the effect of binders on dissolution of a tablet, to understand and plot Heckal plot, Higuchi and peppas plot and determine similarity factors.