Teerthanker Mahaveer University
College of Pharmacy

M.Pharm. (Pharmaceutics)

Programme Specific Outcome

PSO-1	:	Understanding the novel concepts of design, different approaches to be followed, pre-formulation elements, pharmacokinetic parameters, criteria for selection of polymers/stabilizers and selection of drugs to formulate their stable pharmaceutical dosage forms/cosmeceuticals with its standardization process.
PSO-2	:	Understanding industrial management with GMP considerations, pilot plant scale-up techniques, stability testing, and packaging of pharmaceutical dosage forms.
PSO-3	:	Understanding regulatory affairs pertaining to manufacturing, distribution and sale of drug and pharmaceuticals.
PSO-4	:	Evaluating drug and pharmaceuticals/cosmeceuticals in its pure as well as dosage forms using modern analytical instrumentation techniques to assure its safety and efficacy.
PSO-5	:	Applying pharmaco-informatics, pharmacokinetic parameters with computational modelling/approaches, preclinical & clinical development approaches, Artificial Intelligence and Robotics in design and development of conventional as well as novel pharmaceutical dosage forms with fixation of dosage regimen.
PSO-6	:	Creating solution to the therapeutic requirements emerging out of new disease outbreak or community health problems arising out of practicing existing medications.

Course Outcomes

MPH101T	CO-1	Understanding the basic concepts and advances in analytical techniques and theoretical skills of the analytical instruments.
	CO-2	Applying advanced analytical instrumental techniques for identification, characterization and quantification of drugs.
	CO-3	Performing quantitative & qualitative analysis of drugs using various analytical instruments in single and combination dosage forms
	CO-4	Evaluating given samples with respect to official standards.
MPH102T	CO-1	Understanding various approaches forth development of novel drug delivery systems.
	CO-2	Defining the criteria for selection of drugs and polymers for development of novel drug delivery systems.
	CO-3	Formulating various novel drug delivery systems.
	CO-4	Evaluating various novel drug delivery systems.
MPH103T	CO-1	Understanding the elements of pre-formulation study, Drug product development, Physics of tablet compression and compaction profile, Pilot plant scale up techniques, Good Manufacturing Practice (GMP), Stability Testing, Sterilization process, and Packaging of dosage form.
	CO-2	Able to design pre-formulation study, optimize the drug product development process
	CO-3	Analyzing the drugs and pharmaceuticals.
	CO-4	Evaluating the given samples with respect to official standards.
MPH104T	CO-1	Understanding the concepts of innovator and generic drug, and drug

		development process, pharmacovigilance, and process of monitoring clinical trials.
	CO-2	Recognizing regulatory authorities and agencies governing the manufacturing, sales and distribution of pharmaceutical products.
	CO-3	Demonstrating regulatory approval process and their registration in Indian and international markets.
	CO-4	Evaluating given samples with respect to official standards.
MPH105P	CO-1	Understanding the elements of pre-formulation study design, basic concepts and advances in analytical techniques, approaches for the development of drug delivery systems.
	CO-2	Formulating various novel drug delivery systems.
	CO-3	Analyzing drugs and pharmaceuticals.
	CO-4	Evaluating different drug delivery systems.
MPH201T	CO-1	Understanding various approaches in development of nano and targeted drug delivery systems.
	CO-2	Defining the criteria for selection of drugs and polymers for development of nano and targeted drug delivery systems.
	CO-3	Formulating various nano and targeted drug delivery systems.
	CO-4	Evaluating various nano and targeted drug delivery systems.
MPH 202T	CO-1	Understanding basic concepts in bio-pharmaceutics and pharmacokinetics and their significance.
	CO-2	Describing the concepts of bioavailability and bioequivalence of drug products and their significance.
	CO-3	Applying pharmacokinetic parameters in calculation and fixation of dosage regimen.
	CO-4	Analyzing plasma drug concentration versus time data to calculate pharmacokinetic parameters and profiles of drug/formulations.
MPH 203T	CO-1	Understanding the role of Computer in Preclinical, Clinical, and Post clinical stages of drug product
	CO-2	Recognizing the concept of Computational modeling of drug disposition, optimization technique, and computational fluid dynamics.
	CO-3	Application of computers across the entire drug research and development process.
	CO-4	Evaluating pharmacokinetics and pharmaco dynamic parameters of drug product using computer simulation
MPH 204T	CO-1	Understanding concepts of cosmetics and cosmeceuticals.
	CO-2	Describing basic requirements for formulation and development of skin care, hair care, oral and dental care cosmetic products.
	CO-3	Formulating different cosmetic preparation with desired safety, stability, and efficacy
	CO-4	Evaluating different cosmetic preparations.
MPH205P	CO-1	Understanding the concepts of novel drug delivery systems and cosmetics.
	CO-2	Applying various techniques in the development of drug product.
	CO-3	Formulating novel drug delivery system and cosmetics
	CO-4	Evaluating different types of novel drug delivery system and cosmetics preparation.