Teerthanker Mahaveer University
College of Pharmacy

M.Pharm. (Pharmacology)

Programme Specific Outcome

PSO-1	**:**	Understanding the application of pharmacological information of active chemical entity (Drug) present in a medicine that is used for diagnosis, prevention, treatment/cure of a disease.
PSO-2	**:**	Illustrating pharmacodynamic and pharmacokinetic investigation to evaluate the efficacy and safety of drugs in animal models.
PSO-3	**:**	Demonstrating mechanism of action of drug in preclinical research involved in Neurotransmission and Neurohumoral transmissions apply in biomedical research.
PSO-4	**:**	Practicing animals handling of different species / strains along with their breeding and maintenance as per CPCSEA/international Guidelines/Good laboratory practice (GLP).
PSO-5	**:**	Identifying the in vivo, in vitro, and other possible animal alternative models for screening of new substances.
PSO-6	**:**	Developing the core concept of establishing toxicological profile of a new drug while evaluating during research.

Course Outcomes

MPL 101T	**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.
MPL 102T	**CO-1**	Understanding the basic knowledge in the field of pharmacology pertaining to the drugs and its therapeutic applications for the treatment of various diseases.
	CO-2	Analysing the mechanism of drug actions at cellular and molecular level.
	CO-3	Evaluating the adverse effects, contraindications and clinical uses of drugs used in treatment of various diseases
MPL103T	**CO-1**	Understanding and evaluating the recent experimental techniques in the drug discovery and development.
	CO-2	Understanding the maintenance of laboratory animals as per the guidelines, and various in-vitro and in-vivo preclinical evaluation processes.
	CO-3	Applying the various screening methods involved in the drug discovery process
MPL104T	**CO-1**	Understanding the fundamental knowledge on the structure and functions of cellular components.
	CO-2	Appreciating the interaction of cellular components with drugs and

		applying the knowledge in drug discovery process.
	CO-3	They would have learnt to explain the molecular pathways affected by drugs.
	CO-4	Applying the molecular pharmacology and biomarkers in drug discovery process.
MPL 201T	**CO-1**	Understanding the basic knowledge in the field of pharmacology pertaining to the drugs and its therapeutic applications for the treatment of various diseases.
	CO-2	Analysing the mechanism of drug actions at cellular and molecular level.
	CO-3	Evaluating the adverse effects, contraindications and clinical uses of drugs used in treatment of various diseases.
MPL 202T	**CO-1**	Understanding and evaluating the recent experimental techniques in the drug discovery, development and importance of ethical and regulatory requirements for toxicity studies.
	CO-2	Understanding the maintenance of laboratory animals as per the guidelines, and various in-vitro and in-vivo preclinical and toxicological evaluation processes.
	CO-3	Applying the various screening methods involved in the drug discovery process and Demonstrate the practical skills required to conduct the preclinical toxicity studies
MPL 203T	**CO-1**	Understanding the importance of the role of genomics, proteomics and bioinformatics in drug discovery
	CO-2	Understanding and Explain various targets for drug discovery.
	CO-3	Evaluation of various lead seeking method and lead optimization
	CO-4	Applying the various computer aided drug design in drug discovery
MPL 204T	**CO-1**	Understanding the regulatory requirements for conducting clinical trial.
	CO-2	Understanding the types of clinical trial designs and Explain the responsibilities of key players involved in clinical trials.
	CO-3	Applying the safety monitoring, reporting and close-out activities in clinical trials
	CO-4	Evaluation Pharmacovigilance, detect new adverse drug reactions and their assessment, reporting of ADR.