M.PHARMACY PHARMACOLOGY I SEMESTER

After successful completion of this course students will be able to:

Advanced Pharmacology-I M.I.COL.T.1.	1. Understand the pharmacological actions of different categories of drugs 2. Explain the mechanism of drug action at organ system/sub cellular/ macromolecular levels. 3. Apply the basic pharmacological knowledge in the prevention and treatment of various diseases. 4. Observe the effect of drugs on animals/isolated preparations 5. Appreciate correlation of pharmacology with related medical sciences
Advanced Pharmacology-II M.I.COL.T.2.	1 Understand the pharmacological actions of different categories of drugs 1. Explain the mechanism of drug action at organ system/sub cellular/ macromolecular levels. 2. Apply the basic pharmacological knowledge in the prevention and treatment of various diseases. 3. Appreciate correlation of pharmacology with related medical sciences
Advances in Preclinical Evaluation-I M.I.COL.T.3.	1.Appreciate and demonstrate the various screening methods used in preclinical research. 2 Demonstrate isolation of different organs/tissues from the laboratory animals by simulated experiments 3 Learn about regulations for laboratory animal care and ethical requirement. 4 Understanding the principles of toxicology
PPDM M.I.COL.T.4.	1 Define and differentiate between basic concepts of pharmacokinetics and pharmacodynamics, identify the physiological, physicochemical and dosage form-related factors that affect drug absorption. 2 Analyze different compartmental and non-compartmental models of pharmacokinetics and determine the basic linear and non-linear pharmacokinetic parameters that describe drug absorption and disposition. 3 Describe concept and principles of dissolution studies and in vitro-in vivo correlation for different drug products and pharmacokinetic basis of modified release dosage forms of medications

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M.PHARMACY PHARMACOLOGY II SEMESTER

After successful completion of this course students will be able to:

Clinical Pharmacology & Toxicology	1.Recall the dose calculations in pharmacological experiments, and to relate the antiallergic activity / anti-ulcer activity in rat models. 2.Demonstrate of effect of drugs on gastrointestinal motility and the effect of agonist/antagonists on guinea pig ileum 3.Construct serum biochemical parameters by using semi auto analyzer. 4.Analyze effect of saline purgative on frog intestine, insulin hypoglycemic effect and test for pyrogens using rabbit method. 5.Evaluate acute oral toxicity (LD50), acute skin irritation / corrosion and acute eye irritation / corrosion of a test substance
Advances in Preclinical Evaluation - II	1. Appreciate and demonstrate the various screening methods used in pre clinical research 2. Demonstrate isolation of different organs or tissues from the laboratory animals by stimulated experiments 3. Cell culture technology and its application in relation to preclinical evaluation 4. Understanding the importance of alternative screening techniquess
Clinical Research M.Pharm (Pharmacology / Pharmacy Practice)	1. Discuss the Pharmacological and Toxicological considerations in process of development of new drugs 2. Discuss the principles and phases in clinical trial of drug 3. Explain the guidelines for ethics and safe monitoring in clinical trial of a drug 4. Design the documents of clinical trial 5. Distinguish the guidelines of national and international regulatory bodies for clinical trial 6. Recognise differing roles and obligations of the Investigator, Sponsor and Institutional Review Board
Molecular and Biochemical Pharmacology Basis of Drug Discovery & Development	1. Define and differentiate between basic concepts of pharmacokinetics and pharmacodynamics, identify the physiological, physicochemical and dosage form-related factors that affect drug absorption. 2. Analyze different compartmental and non-compartmental models of pharmacokinetics and determine the basic linear and non-linear pharmacokinetic parameters that describe drug absorption and disposition. 3. Describe concept and principles of dissolution studies and in vitro-in vivo correlation for different drug products and pharmacokinetic basis of modified release dosage forms of medications

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PHARMACY PHARMACOLOGY III SEMESTER & IV SEMESTER

After successful completion of this course students will be able to:

1. Work in team and undertake a project in the area of Pharmacy
2. Apply concepts of pharmaceutical sciences for executing the project
3. Apply appropriate research methodology while formulating a project
4. Define specifications, synthesize, analyse, develop and evaluate a project
5. Present, exhibit and document the project work
6. Develop a project report

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