



Program	Master of Pharmacy (M.Pharm)	Semester - 1
Type of Course	-	
Prerequisite		
Course Objective	-	
Effective From A.Y.	2023-24	

Teaching Scheme (Contact Hours)				Examination Scheme				
Lecture	Tutorial	Lab	Credit	Theory Marks		Practical Marks		Total Marks
				External Marks (T)	Internal Marks (T)	External Marks (P)	Internal Marks (P)	
4	-	-	4	75	25	-	-	100

SEE - Semester End Examination, CIA - Continuous Internal Assessment (It consists of Assignments/Seminars/Presentations/MCQ Tests, etc.)

Course Content		T - Teaching Hours W - Weightage	
Sr.	Topics	T	W
1	General Pharmacology a. Pharmacokinetics: The dynamics of drug absorption, distribution, biotransformation and elimination. Concepts of linear and non-linear compartment models. Significance of Protein binding. b. Pharmacodynamics: Mechanism of drug action and the relationship between drug concentration and effect. Receptors, structural and functional families of receptors, quantitation of drug receptors interaction and elicited effects.	12	20
2	Neurotransmission a. General aspects and steps involved in neurotransmission. b. Neurohumoral transmission in autonomic nervous system (Detailed study about neurotransmitters Adrenaline and Acetyl choline). c. Neurohumoral transmission in central nervous system (Detailed study about neurotransmitters histamine, serotonin, dopamine, GABA, glutamate and glycine). d. Non adrenergic non cholinergic transmission (NANC). Cotransmission	12	20
3	Central nervous system Pharmacology General and local anesthetics, Sedatives and hypnotics, drugs used to treat anxiety. Depression, psychosis, mania, epilepsy, neurodegenerative diseases. Narcotic and non-narcotic analgesics.	12	20
4	Cardiovascular Pharmacology Diuretics, antihypertensives, antiischemics, anti- arrhythmics, drugs for heart failure and hyperlipidemia. Hematinics, coagulants, anticoagulants, fibrinolytics and anti- platelet drugs.	12	20
5	Autocoid Pharmacology The physiological and pathological role of Histamine, Serotonin, Kinins. Prostaglandins Opioid autocoids. Pharmacology of antihistamines, 5HT antagonists.	12	20
Total		60	100



Suggested Distribution Of Theory Marks Using Bloom's Taxonomy

Level	Remembrance	Understanding	Application
Weightage	40	40	20

NOTE : This specification table shall be treated as a general guideline for the students and the teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Course Outcomes

At the end of this course, students will be able to:

C01	Knowledge about general pharmacology, classification of drug and body system function
C02	knowledge on various aspects like epidemiology, etiology, pathophysiology, sign and symptoms, treatment and management of disease, MOA of drugs
C03	Knowledge of various class of drugs

Reference Books

1.	The Pharmacological Basis of Therapeutics By Goodman and Gillman's
2.	Principles of Pharmacology. The Pathophysiologic basis of drug Therapy By David E Golan, Armen H, Tashjian Jr, Ehrin J, Armstrong, April W, Armstrong, Wolters Kluwer-Lippincott Williams & Wilkins Publishers.
3.	Basic and Clinical Pharmacology By Bertram G. Katzung McGraw-Hill Education
4.	Robbins and Cotran Pathologic Basis of Disease By Vinay Kumar, Abbas, Aster Elsevier
5.	Essentials of Medical Pharmacology By K.D.Tripathi Jaypee Brothers Medical Publishers
6.	Modern Pharmacology with Clinical Applications By Charles R. Craig Lippincott Williams and Wilkins
7.	Pathophysiology (TextBook) By Dr. Chirag Desai Technical Publication