IMMUNOLOGY Antigen, antibody, epitope, hapten and adhesion molecules. Innate and acquired immunity. Type I, type II, type III, and type IV hypersensitivity reactions. Classification of the immunodeficiency disorders. Autoimmunity.	8

SYLLABII AND COURSE DETAILS FOR:

GENERAL PHARMACOLOGY:

Introduction:

It is the science that deals with the origin, nature, chemistry, effects, and uses of drugs. it includes pharmacognosy, pharmocokinetics, pharmacodynamics, pharmacotherapeutics and toxicology.

Course Description & Objectives:	Suggested Lecture Hours
Introduction to Concepts & Principles of General Pharmacology: Definition of drug and drug nomenclature. Branches / Divisions of Pharmacology Sources of drugs Active principles of drug and Pharmacology Dosage forms and doses of drugs. Drug administration. Absorption of drugs and processes involved in drug absorption Factors modifying absorption of drugs. Transport of drugs across cell-membrane Bioavailability, its clinical significance and factors affecting bioavailability Drugs reservoirs, distribution and redistribution of drugs, plasma protein binding Pro-drug, Biotransformation of drugs, enzyme induction, enzyme inhibition and entero-hepatic circulation Plasma half-life of drugs, steady state concentration, its clinical importance and factors affecting it. Excretion of drugs. Mechanism of drug action. Dose response curves, structure-activity relationship. Factors modifying action and doses of drugs. Pharmacokinetics, pharmacodynamics and	3

Receptors	
Locally Acting Drugs Demulcents, Emollients, Irritants, Counter irritants, Astringents, anti-seborrhoeics, locally acting enzymes. Antiseptics and Disinfectants Ectoparasiticides	2
Drugs Acting on Gastrointestinal Tract Anti Emetics Drugs affecting motility of GIT Ulcer Healing drugs Purgatives / Laxatives	3
Cardiovascular Drugs Antiarrhymic Drugs Ionotropic Drugs Antianginal Drugs Thrombolytics Antihyperlipidemic Drugs	5
Diuretics	1
Alkaloids	1
Drugs Acting on Autonomic Nervous system **Cholinergic Drugs** Choline Esters Anticholine-esterases Cholinimimetic Alkaloids **Anti- Cholinergic Drugs** Anti Muscarinic Non catecholamine **Sympatholytics / Antiadrenergics** Alpha Adrenergic Blockers Beta Adrenergic receptor Blockers **Adrenergic Neuron Blockers** Autonomic Ganglionic Blockers Skeletal Muscle Relaxants a) Neuromuscular Blocking Agents – D-tubocurarine, Suxamethanin b) Central Muscle Relaxants, Meprobromate, Mephenesim , Diazepam etc.	3
Central Nervous System a) Sedative-Hypnotics b) Antiepileptics c) General Anaesthetics d) Local Anesthetics e) Drugs for movement Disorder/Muscle Relaxant f) Alcohol g) Drugs for Migraine h) Stimulants of the Central Nervous System:	4

• Caffeine, Theophyline, Theobromine • Brain stem stimulants: Picrotoxin, Nikethamide, Ethamivan, Doxapram i) Psychopharmacology • Anti-psychotics • Anxiolytics • Anti-Depressant / Anti mania	
Analgesics a) Drugs-Hypothalamic Drugs b) Adrenocorticoids c) Sex Hormones d) Thyroid / Parathyroid Drugs e) Pancreatic Hormones and Oral hypoplyglcemic Agents	4
ANTIBIOTICS: Parameters: Provisional Diagnosis, Investigation, Empirical Therapy, prescribing after culture and sensitivity.	4
VITAMINS: Parameters: Groups of vitamins prescribed Vitamins prescribed on basis of therapeutic indication or empirical Single / multiple vitamins prescribing Rational with use of vitamins.	3
ANALGESICS: Parameters: Various groups of analgesics prescribed Single / multiple adverse drug prescription. Non specific indications of analgesic prescribed	4
ADVERSE DRUG REACTIONS Anti-microbials, cytotoxic drugs, steroids etc.	3