Pharmacology Curriculum with Themes for PhD Entrance examination

Sr. No.	Themes	Topic	Contents
1	General & Clinical Pharmacology	General Pharmacology	**Introduction**: Pharmacology: A Foundation to Clinical Practice. **Pharmacokinetics**: Absorption, Distribution, Biotransformation, Elimination. **Pharmacodynamics**: Principles of Drug Action,Mechanism of DrugAction, Receptors. **Combined Drug Administration**: Indifference, Synergism, and Antagonism. **Adverse Drug Reactions.** **Drug interactions.** **Factors Modifying Drug Action**. **History** of Pharmacology and medicine with reference to Pharmacology. **Pharmacogenomics and Pharmacogenetics.** **Therapeutic drug monitoring.**
		Clinical pharmacology	Protocol for a clinical trial. Informed consent. Pharmacovigilance program of India.
2	Drugs acting on ANS, PNS & CNS	Autonomic Pharmacology and P.N.S.	General Considerations and Neurohumoral Transmission Adrenergic Drugs Antiadrenergic drugs Parasympathomimetic drugs Parasympatholytic drugs Skeletal muscle relaxants Local anaesthetics.
		Neuropsychiatric and Perioperative Pharmacology	General Anaesthetics Hypnosedatives Preanaesthetic Medication Pharmacotherapy of Epilepsy Analgesics : Opioids and N.S.A.I.Ds Antiparkinsonian Drugs Drug abuse and drug dependence.

			Ethyl & Methyl alcohol. Drug therapy of Rheumatoid arthritis, Gout. Psychopharmacology CNS stimulant,Analeptics& cognition enhancers.
3	Cardiovascular, Renal & Haematological pharmacology	Cardiovascular and Renal Pharmacology	Antihypertensives and Pharmacotherapy of Hypertension Antianginal Drugs and Pharmacotherapy of Angina Pectoris Management of Congestive Cardiac Failure Antiarrhythmic drugs Diuretics and Antidiuretics Pharmacotherapy of Shock &Vassopressor agents Drugs used in Dyslipidemias.
		Haematological Pharmacology	Haematinics Coagulants,Anticogulants, Antiplatelets, Thrombolytic and Antifibrinolytic drugs. Haematopoietic growth Factors.
4	Drugs acting on GIT, Respiratory & Endocrine System	Gastrointestinal Pharmacology	Pharmacotherapy of Acid Peptic Disease Antidiarrhoeals and Management of Diarrhoea Antiemetics and Management of Vomiting Purgatives and Management of Constipation Emetics
		Respiratory System	Drugs used in cough, Bronchial Asthma and COPD.
		Endocrine Pharmacology	Adrenohypophyseal hormones Thyroid and Antithyroid Drug Pharmacotherapy of Diabetes Mellitus Corticosteroids Estrogen, Progestins and their Antagonists Hormonal Contraceptives Testosterone and Anabolic Steroids. Drugs acting on uterus. Paratharmone and Drugs affecting Calcium Metabolism
5	Chemotherapy & Miscellaneous	General Chemotherapy	General Considerations Sulfonamides, Cotrimoxozole, Fluoroquionolones Beta-Lactam Antibiotics Aminoglycosides Broad Spectrum Antibiotics

			Macrolides Miscellaneous antibiotics. Principles of Cancer Chemotherapy.
		Chemotherapy of Specific Infections	Chemotherapy of Tuberculosis Chemotherapy of Leprosy Chemotherapy of Malaria Chemotherapy of Viral Infection Chemotherapy of U.T.I Chemotherapy of Amoebiasis Chemotherapy of fungal infections Chemotherapy of S.T.Is Anthelminntic drugs Anticancer drugs.
		Miscellaneous	Immunomodulators - immunosuppressants and immunostimulants. Dermal & Ocular Pharmacology Antiseptic and disinfectants Heavy metal poisoning Geriatric Pharmacology. Use of drugs in pregnancy. Dietary supplements and herbal medicines. Perinatal and paediatric Pharmacology. Histamine &antihistaminics 5-HT & it's agonist,antagonists& ergot alkaloids.