



GANDHI INSTITUTE OF TECHNOLOGY AND MANAGEMENT (GITAM)

(Declared as Deemed to be University u/s 3 of UGC Act, 1956)

Visakhapatnam | Hyderabad | Bengaluru

Accredited by NAAC with A++ Grade

Website: www.gitam.edu

GITAM SCHOOL OF PHARMACY

PhD in Pharmacy: Pharmaceutical Chemistry

PhD Entrance Test Syllabus - 2024-2025

PhD in Pharmacy: Pharmaceutical Chemistry

- 1. Pharmaceutical Organic Chemistry:** Structure, nomenclature and Stereochemistry of drug molecules.
- 2. Medicinal Chemistry:** Structure, nomenclature, classification, synthesis, SAR and metabolism of the following category of drugs- Hypnotics and sedatives, analgesics, NSAIDs, neuroleptics, antidepressants, anxiolytics, anticonvulsants, antihistaminics, local anaesthetics, cardio vascular drugs, Antianginal agents vasodilators, adrenergic & cholinergic drugs, cardiotonic agents, diuretics, antihypertensive drugs, hypoglycemic agents, antilipemic agents, coagulants, anticoagulants, antiplatelet agents, Chemotherapeutic agents, Antibiotics, antibacterials, sulphadruugs. Antiprotozoal drugs, antiviral, antitubercular, antimalarial, anticancer, antiamebic drugs.
- 3. Biochemistry:** Biochemical role of hormones, vitamins, enzymes, nucleic acids, bioenergetics. General principles of immunology. Immunological. Metabolism of carbohydrate, lipids, proteins. Methods to determine, kidney & liver function. Lipid profiles.