

DEPARTMENT OF PHARMACEUTICAL SCIENCES

TEACHING FACULTY

Professor

Preet Mohinder Singh Bedi, Ph.D (GNDU)
Subheet Kumar Jain, Ph.D (Central Univ. Sagar)

(Head)

Assistant Professor

Neena Bedi, M. Pharm, Ph.D (GNDU)
Rajbir Bhatti, M. Pharm, Ph.D (GNDU)
Balbir Singh, M. Pharm, Ph.D (GNDU)
Sarabjit Kaur, M. Pharm.
Amrit Pal Singh, M. Pharm.

Courses offered

- * B. Pharmacy
- * M. Pharmacy
- * Ph.D.

Course Details: B. Pharmacy

Distribution of seats

Course	Duration (years)	System	Total Seats	Reserved Categories			
				SC/ST	BC	RA	Others
B. Pharmacy	4	Semester	60	15	3	4	8

Eligibility

- Senior Secondary Examination (12th grade) with Physics, Chemistry and Biology or Mathematics with at least 50% marks (45% for SC/ST) in aggregate.
- Any other examination recognized equivalent thereto.

Mode of Admission

Admission will be based on merit of the candidate in the qualifying examination. The Coordinator of admission shall be Dr. Kamaljit Singh, Prof., Department of Chemistry.

Dates

a)	Fee deposit date in State Bank of Patiala (Any Branch)	02.06.2017 to 20.06.2017
b)	Last Date for Online application Form submission	05.06.2017 to 23.06.2017
c)	Admission Counseling	06.07.2017 to 09.07.2017

Venue: Guru Nanak Bhavan, GNDU, Amritsar.

Contact No.

Coordinator/Head(M) 99140-06662 Extn. 2258802-09 (3508)

Fee (Approximate) Rs. 56810/- 1st.Sem.) Rs.40250/- (2nd.Sem.)

Course Details: M. Pharmacy

Distribution of seats

Course	Duration (year)	System	Total Seats	Reserved Categories			
				SC/ST	BC	RA	Others
M. Pharmacy	2	Semester	26	6	1	2	4

Eligibility

- B. Pharmacy degree examination of Guru Nanak Dev University or any other recognized University/Institution with *55% marks (50% for SC/ST). *seeking approval from syndicate & regulation section as per Pharmacy Council of India (PCI) admission eligibility norms.
- 80% seats are reserved for candidates who have qualified GPAT and passed B. Pharmacy examination of Guru Nanak Dev University. However, if eligible candidate(s) are not available under above category, the vacant seats shall be open to the candidates who have qualified GPAT and B.Pharm. examination from other universities.

Mode of Admission

The admission will be made, in the order of preference for specialization, on the basis of score in the GPAT and in case of non-availability of GPAT qualified candidates the admission will be based on merit in the Entrance Test to be conducted by the Department.

GPAT qualified candidates must indicate their GPAT score and rank in admission form under the column "Any other Qualification".

Syllabus for M. Pharmacy Entrance Test

Important Note: The Entrance Test will be based on multiple choice questions and carries 100 marks and there will be no negative marking.

Natural Products: Pharmacognosy & Phytochemistry–Chemistry, tests, isolation, characterization and estimation of phytopharmaceuticals belonging to the group of Alkaloids, Glycosides, Terpenoids, Steroids, Bioflavonoids, Purines, Guggul lipids. Pharmacognosy of crude drugs that contain the above constituents. Standardization of raw materials and herbal products. WHO guidelines. Quantitative microscopy including modern techniques used for evaluation. Biotechnological principles and techniques for plant development, Tissue culture. Pharmacology: General pharmacological principles including Toxicology. Drug interactions. Pharmacology of drugs acting on Central nervous system, Cardiovascular system, Autonomic nervous system, Gastro intestinal system and Respiratory system. Pharmacology of Autocoids, Hormones, Hormone antagonists, chemotherapeutic agents including anticancer drugs. Bioassays, Immuno Pharmacology. Drugs acting on the blood & blood forming organs. Drugs acting on the renal system.

Medicinal Chemistry and Pharmacology: Structure, nomenclature, classification, synthesis, SAR and Pharmacology of the following category of drugs, which are official in

Indian Pharmacopoeia and British Pharmacopoeia. Introduction to drug design. Stereochemistry of drug molecules. 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, Antiamoebic drugs. Diagnostic agents. Preparation and storage and uses of official Radiopharmaceuticals, Vitamins and Hormones. Eicosonoids and their application.

Pharmaceutics: Formulation, preparation and evaluation of solid, liquid and semi-solid dosageforms. Manufacturing standards, Quality control limits, labeling as per the Pharmacopoeial

requirements, Storage conditions of different dosage forms. Concept of microencapsulation and its applications. Introduction to Novel drug delivery systems such as Nanoparticles, Liposomes, Niosomes etc. Biopharmaceutics and Pharmacokinetics and their importance in drug product design. Formulation and preparation of cosmetics products, Sterilization techniques, Pharmaceutical calculations. Pharmaceutical Jurisprudence: Drugs and Cosmetics Act and rules with respect to manufacture, sales and storage. Pharmacy Act, Pharmaceutical ethics.

Pharmaceutical Analysis: Principles, instrumentation and applications of the following: Absorptionspectroscopy (UV, visible & IR). Fluorimetry, Flame photometry, Potentiometry. Conductometry and Polarography. Pharmacopoeial assays. Principles of NMR, ESR, Mass spectroscopy. X-ray diffraction analysis and different chromatographic methods.

Biochemistry. Biochemical role of hormones, Vitamins, Enzymes, Nucleic acids, Bioenergetics. General principles of immunology. Metabolism of carbohydrate, lipids, proteins. Methods to determine, kidney & liver function and lipid profiles.

Microbiology : Principles and methods of microbiological assays mentioned in the Pharmacopoeia. Methods of preparation of official sera and vaccines. Serological and diagnostics tests. Applications of microorganisms in Bio Conversions and in the Pharmaceutical industry.

Clinical Pharmacy : Therapeutic Drug Monitoring, dosage regimen in pregnancy and lactation, pediatrics and geriatrics, renal and hepatic impairment. Drug – Drug interactions and drug – food interactions, adverse Drug reactions. teratogenicity, prescription writing, clinical trails(Overview), patient counseling.

Dates

a)	Fee deposit date in State Bank of Patiala (Any Branch)	05.06.2017 to 27.06.2017
b)	Last Date for Online application Form submission	07.06.2017 to 30.06.2017

c)	Entrance Test	11.07.2017 at 02.00 p.m. - 04.00 p.m.
d)	Admission Counseling	27.07.2017 at 9.30 A.M. (Dept. of Pharmaceutical Sciences).

Venue: Department of Pharmaceutical Science, GNDU, Amritsar.

Contact No.

Coordinator/Head: 0183-2258802-09, 2450601-14 Ext. 3459, 3457

Mob.:09815899705, 9815698249

Fee (Approximate) Rs. 86560/- (1st.Sem.) Rs.69000/- (2nd Sem.)
