GANPAT UNIVERSITY

FACULTY OF PHARMACY

Programme	Bachelor of Pharmacy	Branch/Spec.	General
Semester	I	Version	3.0.0.0
Effective from Academic Year	2026-27	Effective for the Batch admitted in	July 2026
Course Code	BP102T	Course Name	General Pharmacy (Theory)

Scheme	Teaching Scheme (Per week)					Examination Scheme (Marks)			
	L	TU	P	TW	Total		CE	SEE	Total
Credit	3	0	0	--	3	Theory	30	45	75
Hours	3	0	0	--	--	Practical	-	-	-

Pre-requisites	Nil / Basic knowledge of Chemistry and Biology

COURSE OBJECTIVES

The objectives of this course are to:

1. Provide knowledge about evolution and development of Pharmacy profession in India and the growth of the Pharmaceutical Industries over the years.
2. Provide understanding of different types of pharmacopoeias and other official books in maintaining the standards of medicines.
3. Provide knowledge about the basic pharmaceutical calculations used in dispensing and compounding.
4. Understand the role of active pharmaceutical ingredients and pharmaceutical excipients in drug formulations
5. Impart basic knowledge about formulation and preparation of Various solid, liquid and semisolid dosage forms

Course Outcomes

On successful completion of the course, the students will be able to:

CO1	Describe the history and evolution of the pharmacy profession, including pharmacopeial practices and prescription handling.
CO2	Perform accurate pharmaceutical calculations required in the formulation and preparation of various types of dosage forms.
CO3	Explain the properties and functions of active pharmaceutical ingredients (APIs) and excipients and demonstrate the methods of preparation of solid dosage forms.
CO4	Illustrate the formulation principles of liquid dosage forms by analyzing the role of APIs and excipients involved.
CO5	Compare and evaluate the formulation of semisolid dosage forms based on the characteristics of APIs, excipients, and preparation methods.

Theory Syllabus

Unit	Content	Hrs.
I	Introduction to the Profession of Pharmacy • History of the Profession of Pharmacy in India: In relation to pharmacy education, pharmaceutical industries and organizations – evolution, development and milestones. • Scope of the Pharmacy Profession: Role and responsibilities of pharmacists in retail/community pharmacy, hospital and clinical pharmacy, and industrial pharmacy including R&D.	09

	• Pharmacopoeias: Introduction to IP, BP, USP, BPC, International Pharmacopoeia and the National Formulary of India; structure and content of the Indian Pharmacopoeia; study of one model IP monograph. • Introduction to Prescription: Structure and format/parts of prescription, handling of prescriptions, Latin terminology related to prescriptions.	
II	Introduction to Pharmaceutical Calculations and Dosage Forms • Metric system of weights and measures; calculations based on alligation, proof spirit, isotonic solutions, dilute solutions (percentage and ratio) and geometric dilution; scientific notation of units. • Posology: Definition and dose calculation based on age, body weight and body surface area. • Introduction to Dosage Forms: Routes of administration and classification of dosage forms. • Introduction to Active Pharmaceutical Ingredients and Excipients: Definition, ideal characteristics and importance.	09
III	Solid Dosage Forms • Powders: Classification, advantages and disadvantages; dusting powders, effervescent powders, efflorescent powders, hygroscopic powders and eutectic mixtures; introduction to excipients and methods of preparation. • Tablets: Definition, types including moulded tablets and pills with examples; advantages and disadvantages; introduction to excipients and methods of preparation. • Capsules: Definition, types, advantages and disadvantages, capsule sizes; introduction to excipients and methods of preparation.	09
IV	Monophasic and Biphasic Liquids • For internal use – aromatic waters, syrups, elixirs and linctus (definition and preparation). • For external use and body cavities – liniments, lotions, throat paints, applications, gargles, mouthwashes, enemas, eye drops, ear drops, nasal drops and tinctures. • Study of official preparations – introduction to excipients and methods of preparation. • Suspensions – Definition and types (flocculated and deflocculated), advantages and disadvantages, formulation excipients and general methods of preparation. • Emulsions – Definition and types, emulsifying agents, tests for identification of emulsion type, formulation excipients and general methods of preparation.	09
V	Semisolid Dosage Forms • Definitions, classification, advantages and disadvantages, ointment bases and other excipients; general methods of preparation of ointments, pastes, creams and gels. • Suppositories/Pessaries: Definition, types, advantages and disadvantages, formulation excipients, properties of ideal suppository bases, types of suppository bases, displacement value and general method of preparation.	09

Text Books

1. Ansel, H.C., Allen, L.V. and Popovich, N.G. Pharmaceutical Dosage Forms and Drug Delivery Systems. Lippincott Williams & Wilkins, New Delhi.
2. Carter, S.J. Cooper and Gunn's Dispensing for Pharmaceutical Students. CBS Publishers, New Delhi.
3. Indian Pharmacopoeia Commission. Indian Pharmacopoeia. Ghaziabad.

Reference Books

4. Indian Pharmacopoeia Commission. National Formulary of India. Ghaziabad.
5. British Pharmacopoeia Commission. British Pharmacopoeia. London.
6. Gennaro, A.R. Remington: The Science and Practice of Pharmacy. Lippincott Williams & Wilkins.
7. Lachman, L., Lieberman, H.A. and Kanig, J.L. The Theory and Practice of Industrial Pharmacy. Lea & Febiger.
8. Rawlins, E.A. Bentley's Textbook of Pharmaceutics. Elsevier Health Sciences.
9. Nieloud, F. and Marti-Mestres, G. Pharmaceutical Emulsions and Suspensions. Marcel Dekker Inc.

ICT / MOOCs Reference

10. NPTEL – Pharmaceutical Technology courses
11. Indian Pharmacopoeia online resources (ipc.nic.in)

Mapping of CO with PO and PSO:	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PEO1	PEO2	PEO3	PEO4	PEO5
CO1	3	1	3	-	-	2	-	-	2	-	1	3	1	1	2	1
CO2	2	3	3	-	1	-	–	-	-	-	3	2	3	2	-	1
CO3	3	1	3	-	1	-	-	-	1	-	1	2	3	1	-	1
CO4	3	1	3	-	1	-	-	-	1	-	1	2	3	1	-	1
CO5	3	1	3	-	1	-	-	-	1	-	1	2	3	1	-	1