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	BP107P	Course Name	General Pharmacy (Practical)

Scheme	Teaching Scheme (Per week)					Examination Scheme (Marks)			
	L	TU	P	TW	Total		CE	SEE	Total
Credit	0	0	1	--	1	Theory	-	-	-
Hours	0	0	3	--	--	Practical	20	30	50

Pre-requisites	Nil / Basic knowledge of Chemistry and Biology

COURSE OBJECTIVES

The objectives of this course are to:

1. 1. Familiarize students with essential pharmaceutical calculations including dilution, concentration, and allegation methods required for accurate formulation of dosage forms.
2. Impart practical skills in the preparation of official and non-official dosage forms such as solutions, syrups, powders, granules, suppositories, semisolids, gargles, and mouthwashes in accordance with pharmacopeial standards.
3. Develop understanding of formulation principles related to selection of ingredients, dosage form design, stability, and patient acceptability.
4. Train students in the application of pharmacopoeial specifications (IP, BPC, WHO) during compounding, labeling, and evaluation of pharmaceutical preparations.
5. Enhance hands-on competency and professional confidence required for dispensing practice and pharmaceutical compounding in hospital and community pharmacy settings**.**

Course Outcomes

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

CO1	Perform accurate pharmaceutical calculations using dilution and allegation principles for the preparation of various dosage forms.
CO2	Prepare and dispense liquid dosage forms such as solutions, syrups, gargles, and mouthwashes following official pharmacopeial procedures.
CO3	Formulate solid dosage forms including powders, divided powders, dusting powders, and effervescent granules as per standard guidelines.
CO4	Prepare semisolid and specialized dosage forms such as ointments, liniments, and suppositories using appropriate bases and techniques.
CO5	Compile and evaluate a compendium of marketed dosage forms, demonstrating compliance with pharmacopeial standards, labeling requirements, and patient-centric considerations.

Practical Content

Minimum 12 experiments must be performed covering all dosage forms.

Pharmaceutical Calculations

Solutions based on allegation and dilution methods.

Solutions
a) Strong solution of ammonium acetate – IP
b) Cresol with soap solution – IP
c) Lugol's solution – BPC

Syrups
a) Simple Syrup – IP

Powders & Granules
a) ORS powder – WHO
b) Effervescent granules – IP
c) Dusting powder – IP
d) Divided powders – IP

Suppositories
a) Glycerogelatin suppository – BPC
b) Cocoa butter suppository – IP
c) Zinc Oxide suppository – IP

Semisolids
a) Sulphur ointment – IP
b) Non-staining iodine ointment with methyl salicylate – BPC

Gargles & Mouthwashes
a) Iodine gargle – BPC
b) Chlorhexidine mouthwash – IP

Note: Preparation of compendia of dosage forms (marketed products) is recommended. Any other practical relevant to the syllabus can be introduced.

Text Books

1. Carter, S.J. Cooper and Gunn's Dispensing for Pharmaceutical Students. 12th ed. CBS Publishers, New Delhi.
2. Indian Pharmacopoeia Commission. Indian Pharmacopoeia, Vol. I. Ghaziabad: IPC.

Reference Books

3. United States Pharmacopeial Convention. United States Pharmacopeia–NF. Rockville, MD.
4. British Pharmacopoeia Commission. British Pharmacopoeia Codex. London.
5. World Health Organization. Oral Rehydration Salts (ORS) Formulation Guidelines. Geneva: WHO.

ICT / MOOCs Reference

6. Virtual lab resources – pharmacy compounding simulations
7. IP online (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	2	3	1	1	-	-	-	-	1	2	3	3	1	-	3
CO2	3	2	3	1	1	-	-	-	-	1	2	3	3	1	-	2
CO3	3	2	3	1	1	-	-	-	-	1	2	2	3	1	-	2
CO4	3	2	3	1	1	-	-	-	-	1	2	-	3	1	-	2
CO5	3	2	3	1	1	-	-	-	-	1	3	2	3	1	-	3