

INDIRA GANDHI UNIVERSITY
MEERPUR-REWARI, HARYANA-122502

(A State University Established under Haryana Act No.29 of 2013)

(Recognized u/s 12(B) & 2(f) of UGC Act, 1956)

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REGULATION & SCHEME OF EXAMINATION

(in accordance with National Education Policy 2020)

for

4-Year Undergraduate Programme

In

Pharmacy (Scheme-D)

w.e.f.

Academic Session 2026-27

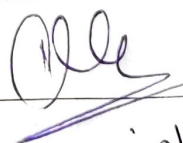
Department of Pharmaceutical Sciences

Faculty of Pharmaceutical Sciences

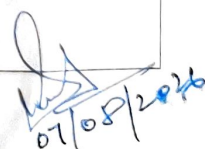
Indira Gandhi University, Meerpur, Rewari-122502

Haryana, India

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07/08/2026


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VISION AND MISSION OF THE UNIVERSITY

VISION

To be a globally renowned university, recognized for excellence in teaching, innovative research, and welfare of the society, imbibing the spirit of “*Vasudhaiv kutumbkam*”.

MISSION

- To introduce and implement innovation in teaching and learning process matching up the global standards to strengthen academic delivery through curriculum design, teaching pedagogy and usage of ICT.
- To develop a mechanism that attracts talented, qualified and experienced faculty from across the globe for pursuing their academic and research careers at the University.
- To offer academic programs at UG, PG, doctoral, post-doctoral levels which are learner-centric, industry focused, and adhere to outcome based international models.
- To create an ambiance that is conducive for undertaking sponsored research, innovation and consultancy services to a wide spectrum of societal and industrial requirements while encouraging interdisciplinary approach of learning, team work, and research.
- To establish state of art centres of excellence in frontier areas of research and design innovation through industry collaboration to innovate and incubate the products and services.
- To establish smart campus and promote e-governance activities in the university for the digitally empowered society and knowledge economy.
- To provide a hygienic, modern, environment friendly and vivacious campus attuned to the urgent needs of Green Technology.
- To consider and implement norms, metrics, standards, procedures and benchmarks for assessing and improving the quality in every aspect of University system and achieve quality certifications by National and International bodies.
- To make society self-reliant by organizing various programmes including literacy, gender sensitization, health awareness, and dissemination of information about livelihood generation.

Scheme of Examination for Undergraduate Programme	
Programme	Bachelor of Pharmacy
Semester	8
Total Marks	5600
Total Credit	193
Framework	Choice Based Credit System (CBCS)
Scheme	D

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

The Bachelor of Pharmacy (B. Pharm) programme aims to prepare graduates with strong knowledge of pharmaceutical sciences, practical skills, professional ethics, and a commitment to patient care and public health. The graduates of the programme are expected to achieve the following Programme Educational Objectives (PEOs):

PEO 1	Apply fundamental knowledge of pharmaceutical sciences to work effectively in pharmacy practice, pharmaceutical industry, research, and related healthcare fields.
PEO 2	Demonstrate practical skills in drug formulation, manufacturing, pharmaceutical analysis, quality control, and pharmacy practice.
PEO 3	Use scientific reasoning and problem-solving skills to address challenges related to medicines, drug development, and patient care.
PEO 4	Practice pharmacy with ethical responsibility, good communication, teamwork, and concern for patient safety and public health.
PEO 5	Pursue continuous learning and professional development to keep pace with advances in pharmaceutical sciences and healthcare.

PROGRAMME OUTCOMES (POs)

PO 1	Pharmacy Knowledge	Apply comprehensive knowledge of pharmaceutical sciences, biomedical sciences, pharmacology, pharmacognosy, pharmaceutical chemistry, pharmacy practice, and manufacturing processes to understand drug actions, disease mechanisms, and therapeutic interventions and solve professional problems across diverse pharmacy domains.
PO 2	Problem Analysis, Critical Thinking and Evidence-Based Decision Making	Identify, formulate, analyze, and interpret complex pharmaceutical problems using principles of scientific inquiry, critical thinking, biostatistics, and evidence-based reasoning to arrive at defensible solutions and informed decision-making.

PO 3	Pharmaceutical Skills & Practice	Demonstrate proficiency in formulation development, analysis, quality assurance, pharmacovigilance, clinical pharmacotherapy, and pharmacy practice through laboratory work, simulations, internships, and experiential learning.
PO 4	Modern Tools, AI & Digital Competence	Select, apply, and evaluate modern pharmaceutical tools, analytical instruments, digital technologies, artificial intelligence, machine learning, and computational techniques with awareness of their limitations and ethical use.
PO 5	Research & Innovation	Design and conduct basic research, analyze data, interpret results, and contribute to innovation through research projects, startup initiatives, and problem-based learning relevant to industry, healthcare, and society.
PO 6	Professional Ethics & Human Values	Apply ethical principles, professional integrity, regulatory frameworks, intellectual property rights, and universal human values while addressing professional, legal, and societal responsibilities in pharmacy practice.
PO 7	Communication & Interpersonal Skills	Communicate effectively with patients, healthcare professionals, industry personnel, and society through clear documentation, reports, presentations, counseling, teamwork, and interdisciplinary collaboration.
PO 8	Leadership, Management & Entrepreneurship	Demonstrate leadership, teamwork, planning, and managerial skills in pharmaceutical organizations, healthcare systems, quality systems, and entrepreneurial ventures, including innovation and startup ecosystems.
PO 9	Pharmacist & Society	Evaluate public health, patient safety, legal, and societal issues related to pharmacy practice and contribute responsibly to healthcare delivery, rational use of medicines, and improvement of community health outcomes.
PO 10	Environment and sustainability	Recognize and address the environmental impact of pharmaceutical manufacturing, use, and disposal, and promote environmentally responsible practices, green pharmacy principles, and sustainable healthcare aligned with the United Nation's Sustainable Development Goals (SDGs).
PO 11	Life-Long Learning & Professional Development	Recognize the need for continuous learning and demonstrate the ability to engage in self-directed, life-long learning to adapt to technological advancements, evolving healthcare needs, and professional growth.

VISION OF THE DEPARTMENT

The Department of Pharmaceutical Sciences is committed to reach to the highest echelons of professionalism by imparting quality education and focusing on socially and environmentally relevant research, at par with the highest global standards.

MISSION OF THE DEPARTMENT

Our mission is to:

- Educate and train young minds into quality pharma personnel who can be an asset to the pharmaceutical profession.
- Provide an integrated, multidisciplinary education in pharmaceutical sciences to students enrolled in the different programs of the department, abiding all statutory guidelines.
- Provide a conducive and creative atmosphere in which higher studies and research thrive in tandem amongst students and the faculty.
- Inspire all faculty members to contribute to nation building by serving as resource persons in areas of their expertise.
- Encourage innovative research programs in emerging areas of drug research and sustainable development, by championing collaboration and interdisciplinary learning and research.
- Promote inclusion of all stakeholders to participate in the activities

REGULATION

1. Short title and commencement

This regulation shall be called as “The Regulation for the B. Pharm. Degree Programme Choice Based Credit System (CBCS) as per National Education Policy 2020 of the Pharmacy Council of India, New Delhi”. It shall come into effect immediately upon notification by the Pharmacy Council of India. The regulations framed are subject to modification from time to time by Pharmacy Council of India.

2. Minimum qualification for admission

2.1 First year B. Pharm:

- i. A candidate shall have passed the 10+2 examination conducted by the respective State or Central Government authorities, or any equivalent examination recognized by bodies such as the Association of Indian Universities (AIU) or the Council of Boards of School Education in India (COBSE), including wings such as IGNOU and NIOS, with English as one of the subjects and with Physics and Chemistry as compulsory subjects, along with either Mathematics or Biology.
- ii. Any other qualification approved by the Pharmacy Council of India as equivalent to any of the above examinations.

2.2 B. Pharm lateral entry (to third semester):

Candidate shall have passed in D. Pharm. course from an institution approved by the Pharmacy Council of India under section 12 of the Pharmacy Act.

3. Duration of the Programme

The course of study for B. Pharm shall extend over a period of eight semesters (four academic years) and six semesters (three academic years) for lateral entry students. The curricula and syllabi for the Programme shall be prescribed from time to time by Pharmacy Council of India.

4. Medium of instruction and examinations

Medium of instruction and examination shall be in English.

5. Working days in each semester

Each semester shall consist of not less than 90 working days. The odd semesters shall be conducted from the month of June/July to November/December and the even semesters shall be conducted from December/January to May/June in every calendar year. A break of not less than 7 days shall be provided between the semesters.

6. Attendance and progress

A candidate must maintain a minimum of 75% attendance in each individual course. Attendance for theory and practical components shall be considered separately. Only candidates who satisfactorily complete the prescribed course requirements shall be eligible to appear for the respective examinations.

7. Programme/Course credit structure

As per the Choice Based Credit System (CBCS), certain quantum of academic work viz. theory classes, practical classes etc. are measured in terms of credits. On satisfactory completion of the courses, a candidate earns credits. The amount of credit associated with a course is dependent upon the number of hours of instruction per week in that course. Similarly, the credit associated with any of the other academic, co/extra- curricular activities is dependent upon the quantum of work expected to be put in for each of these activities per week.

7.1. Credit assignment**7.1.1. Theory and Practical courses**

Courses are broadly classified as Theory, Practical, Project and Internship. Theory (T) courses consist of lecture (L) hours, while Practical (P) courses consist of hours spent in the laboratory. The Credits (C) assigned to a course dependent on the number of instructional hours per week and are calculated using a multiplier of one (1) for lecture hours, and a multiplier of one-half (1/2) for practical (laboratory) hours. For example, a theory course having three lectures per week throughout the semester carries 3credits. Similarly, a practical course with four laboratory hours per week throughout semester carries 2 credits. If the calculated credit value results in a fraction of 0.5 or below, the lower integer value will be assigned as the credit. Every 30 hours spent on internship (I) and projects shall be considered equivalent to 1 credit.

7.1.2 Minimum credit requirements

The minimum credit points required for award of a B. Pharm. degree is 193. These credits are distributed across Theory courses, Practical courses, Internship and Project over the duration of eight semesters. The semester-wise distribution of credits is presented in Table IX. Courses generally progress in sequences, building competencies and their positioning indicate certain levels of academic maturity on the part of the learners. Learners are expected to follow the semester-wise schedule of courses given in the syllabus.

The lateral entry students shall take additional courses, namely Healthcare Psychology and Communication Skills (Theory and Practical) and Basics of Python Programming for Pharmaceutical Sciences (Theory) during Semester III, and Applied Biostatistics and Data Analytics for Pharmaceutical Sciences (Theory) during Semester IV of the programme. The lateral entry student shall be awarded 47 credit points, equivalent to the cumulative credits earned as per the scheme of their Diploma in Pharmacy (D. Pharm.) programme, upon successful completion of the above-mentioned courses. Out of the total 47 credits, 41 credits shall be accounted for the Diploma programme, and the remaining 6 credits shall be awarded for the above-mentioned additional courses. The 41 credits accounted for the lateral entry students shall be recorded in the Semester III marks sheet.

8. Academic work

A regular record of attendance in Theory, Practical, Internship and Research Projects shall be maintained by the teaching staff of respective courses.

9. Course of study

The course of study for B. Pharm shall include Semester wise Theory & Practical as given in Tables- I to VIII. The number of hours allotted to each theory and practical course in any semester shall not be less than that shown in Tables- I to VIII

Table-I: Course of study for semester I

Course Code	Nomenclature of course	No. of hours per week L/P)	Credit Points
26L4.5-PHR-101T	Basics of Python Programming for Pharmaceutical Sciences (Theory)	2	2
26L4.5-PHR-102T	General Pharmacy (Theory)	3	3
26L4.5-PHR-103T	Healthcare Psychology and Communication Skills (Theory)	1	1
26L4.5-PHR-104T	Human Anatomy, Physiology and Pathophysiology I (Theory)	4	4
26L4.5-PHR-105T	Introduction to Pharmacognosy (Theory)	3	3
26L4.5-PHR-106T	Pharmaceutical Inorganic and Analytical Chemistry (Theory)	3	3
26L4.5-PHR-107P	General Pharmacy (Practical)	3	1
26L4.5-PHR-108P	Healthcare Psychology and Communication Skills (Practical)	2	1
26L4.5-PHR-109P	Human Anatomy, Physiology and Pathophysiology I (Practical)	3	1
26L4.5-PHR-110P	Introduction to Pharmacognosy (Practical)	3	1
26L4.5-PHR-111P	Pharmaceutical Inorganic and Analytical Chemistry (Practical)	3	1
Total		30	21

Table-II: Course of study for semester II

Course Code	Nomenclature of course	No. of hours per week (L/P)	Credit Points
26L4.5-PHR-201T	Applied Biostatistics and Data Analytics for Pharmaceutical Sciences (Theory)	2	2
26L4.5-PHR-202T	Biochemistry (Theory)	3	3
26L4.5-PHR-203T	Human Anatomy, Physiology and Pathophysiology II (Theory)	4	4
26L4.5-PHR-204T	Pharmaceutical Organic Chemistry (Theory)	4	4
26L4.5-PHR-205T	Pharmacognosy and Phytochemistry (Theory)	4	4
26L4.5-PHR-206T	Physical Pharmaceutics (Theory)	3	3
26L4.5-PHR-207P	Biochemistry (Practical)	3	1
26L4.5-PHR-208P	Human Anatomy, Physiology and Pathophysiology II (Practical)	3	1
26L4.5-PHR-209P	Pharmaceutical Organic Chemistry (Practical)	3	1
26L4.5-PHR-210P	Pharmacognosy and Phytochemistry (Practical)	3	1
26L4.5-PHR-211P	Physical Pharmaceutics (Practical)	3	1
26L4.5-PHR-212P SEC*	26L4.5-PHR-212P SEC1	2	1
	26L4.5-PHR-212P SEC2		
	26L4.5-PHR-212P SEC3		
Total		37	26

*Only one elective course shall be selected

Table-III: Course of study for semester III

Course Code	Nomenclature of Course		No. of hours per week (L/P)	Credit Points
26L5.0-PHR-301T	Introduction to Machine Learning in Pharmaceutical Sciences (Theory)		2	2
26L5.0-PHR-302T	Environmental Sciences (Theory)		1	1
26L5.0-PHR-303T	Ethics and Universal Human Values (Theory)		1	1
26L5.0-PHR-304T	General Pharmacology (Theory)		3	3
26L5.0-PHR-305T	Heterocyclic Compounds and Stereochemistry (Theory)		3	3
26L5.0-PHR-306T	Pharmaceutical Dosage Forms I (Theory)		3	3
26L5.0-PHR-307T	Pharmaceutical Engineering (Theory)		3	3
26L5.0-PHR-308T	Pharmaceutical Microbiology (Theory)		3	3
26L5.0-PHR-309P	General Pharmacology (Practical)		4	2
26L5.0-PHR-310P	Heterocyclic Compounds and Stereochemistry (Practical)		4	2
26L5.0-PHR-311P	Pharmaceutical Dosage Forms I (Practical)		3	1
26L5.0-PHR-312P AEC*	26L5.0-PHR-312P AEC1	Nutraceuticals and Functional Foods	2	1
	26L5.0-PHR-312P AEC2	Food Analysis		
	26L5.0-PHR-312P AEC3	Yoga and Life Sciences		
Total			32	25

*Only one elective course shall be selected

Table-IV: Course of study for semester IV

Course Code	Nomenclature of course	No. of hours per week (L/P)	Credit Points
26L5.0-PHR-401T	Herbal Drug Technology (Theory)	3	3
26L5.0-PHR-402T	Medicinal Chemistry (Theory)	3	3
26L5.0-PHR-403T	Pharmaceutical Biotechnology (Theory)	3	3
26L5.0-PHR-404T	Social Pharmacy and Public Health (Theory)	2	2
26L5.0-PHR-405T	Systemic Pharmacology I (Theory)	3	3
26L5.0-PHR-406P	Herbal Drug Technology (Practical)	3	1
26L5.0-PHR-407P	Medicinal Chemistry (Practical)	3	1
26L5.0-PHR-408P	Pharmaceutical Biotechnology (Practical)	3	1
26L5.0-PHR-409P	Social Pharmacy and Public Health (Practical)	2	1
26L5.0-PHR-410P	Systemic Pharmacology I (Practical)	3	1
26L5.0-PHR-411I	Internship (Mandatory)	8	4
Total		28	23

Table-V: Course of study for semester V

Course Code	Nomenclature of course	No. of hours per week (L/P)	Credit Points
26L5.5-PHR-501T	Biomedical Chemistry (Theory)	3	3
26L5.5-PHR-502T	Industrial Pharmacognosy (Theory)	3	3
26L5.5-PHR-503T	Innovation and Startup Ecosystem (Theory)	2	2
26L5.5-PHR-504T	Pharmaceutical Dosage Form II (Theory)	2	2
26L5.5-PHR-505T	Pharmaceutical Quality Assurance (Theory)	3	3
26L5.5-PHR-506T	Systemic Pharmacology II (Theory)	3	3
26L5.5-PHR-507P	Biomedical Chemistry (Practical)	4	2
26L5.5-PHR-508P	Industrial Pharmacognosy (Practical)	3	1
26L5.5-PHR-509P	Pharmaceutical Dosage Form II (Practical)	3	1
26L5.5-PHR-510P	Systemic Pharmacology II (Practical)	4	2
Total		30	22

Table-VI: Course of study for semester VI

Course Code	Nomenclature of course		No. of hours per week (L/P)	Credit Points
26L5.5-PHR-601T	Advanced Pharmacognosy (Theory)		3	3
26L5.5-PHR-602T	Biopharmaceutics and Pharmacokinetics (Theory)		3	3
26L5.5-PHR-603T	Intellectual Property Rights (Theory)		2	2
26L5.5-PHR-604T	AI Applications in Pharmaceutical Sciences (Theory)		2	2
26L5.5-PHR-605T	Pharmaceutical Analysis (Theory)		3	3
26L5.5-PHR-606T	Pharmaceutical Jurisprudence (Theory)		3	3
26L5.5-PHR-607T AEC*	26L5.5-PHR-607T AEC1	Green Chemistry	1	1
	26L5.5-PHR-607T AEC2	Materiovigilance and Hemovigilance		
	26L5.5-PHR-607T AEC3	Scientific Writing		
	26L5.5-PHR-607T AEC4	Drug Store and Business Management		
	26L5.5-PHR-607T AEC5	Career Building in Cultivation of Medicinal Plants		
	26L5.5-PHR-607T AEC6	Active Pharmaceutical Ingredients and Excipient Sciences		
26L5.5-PHR-608P	Biopharmaceutics and Pharmacokinetics (Practical)		3	1
26L5.5-PHR-609P	Pharmaceutical Analysis (Practical)		4	2
26L5.5-PHR-610P SEC*	26L5.5-PHR-610P SEC1	Computer-Aided Drug Design	2	1
	26L5.5-PHR-610P SEC2	Analytical Method Development and Validation		
	26L5.5-PHR-610P SEC3	Principles of Preclinical Studies		
26L5.5-PHR-611P VAC*	26L5.5-PHR-611P VAC1	Professional Skills	2	1
	26L5.5-PHR-611P VAC2	Process Analytical Technology (PAT) and QbD in Formulation Science		
26L5.5-PHR-612I	Internship (Mandatory)		8	4
Total			28	26

* Only 1 course shall be selected from each elective

Table-VII: Course of study for semester VII

Course Code	Nomenclature of course		No. of hours per week (L/P)	Credit Points
26L6.0-PHR-701T	Biostatistics and Research Methodology (Theory)		3	3
26L6.0-PHR-702T	Cosmetics and Cosmeceuticals (Theory)		2	2
26L6.0-PHR-703T	AI in Clinical Applications (Theory)		2	2
26L6.0-PHR-704T	Modern Analytical Techniques (Theory)		3	3
26L6.0-PHR-705T	Pharmacovigilance (Theory)		3	3
26L6.0-PHR-706T	Pharmacy Practice (Theory)		3	3
26L6.0-PHR-707T	Regulatory Affairs (Theory)		2	2
26L6.0-PHR-708T AEC*	26L6.0-PHR-708T AEC1	Current Good Manufacturing Practices (cGMP)	1	1
	26L6.0-PHR-708T AEC2	Pharmaceutical Automation		
	26L6.0-PHR-708T AEC3	Modern Techniques in Cellular Biology		
	26L6.0-PHR-708T AEC4	Medical Devices		
	26L6.0-PHR-708T AEC5	Transformation of Food Waste into Medicinal Products		
	26L6.0-PHR-708T AEC6	Biosimilars, Vaccines & Macromolecules		
26L6.0-PHR-709P	Modern Analytical Techniques (Practical)		3	1
26L6.0-PHR-710RP	Research Project		-	6
Total			22	26

* One course shall be selected from the list

Table-VIII: Course of study for semester VIII

Course Code	Nomenclature of course		No. of hours per week (L/P)	Credit Points
26L6.0-PHR-801T	Ethical Considerations and Translational Applications of AI in Pharmacy (Theory)		2	2
26L6.0-PHR-802T	Clinical Pharmacotherapeutics (Theory)		2	2
26L6.0-PHR-803T	Industrial Pharmacy and Facility Design (Theory)		3	3
26L6.0-PHR-804T	Pharmaceutical Management (Theory)		2	2
26L6.0-PHR-805T	Sterile Dosage Forms and Novel Drug Delivery System (Theory)		3	3
26L6.0-PHR-806T AEC*	26L6.0-PHR-806T AEC1	Pharmaceutical Packaging	2	2
	26L6.0-PHR-806T AEC2	Supply Chain Management		
	26L6.0-PHR-806T AEC3	Industrial Safety and Waste Management		
	26L6.0-PHR-806T AEC4	Traditional Healing Practices of India		
	26L6.0-PHR-806T AEC5	Futuristic Pharma through AR/VR: Pharma 4.0		
	26L6.0-PHR-806T AEC6	Herbal Cosmetics for Industry Perspective		
26L6.0-PHR-807P	Pharmaceutical Marketing Skills (Practical)		2	1
26L6.0-PHR-808P	Sterile Dosage Forms and Novel Drug Delivery System (Practical)		4	2
26L6.0-PHR-809P VAC*	26L6.0-PHR-809P VAC1	Cleaning Validation	2	1
	26L6.0-PHR-809P VAC2	Basic Training in Aseptic Handling Techniques		
	26L6.0-PHR-809P VAC3	Impurity Profiling		
26L6.0-PHR-810RP	Research Project		-	6
Total			22	24

* One course shall be selected from the list

Table-IX: Total Credits per Semester

Semester	Total Credits
I	21
II	26
III	25
IV	23
V	22
VI	26
VII	26
VIII	24
Grand Total	193

Note: Earning total credits [193] as mentioned above are mandatory for award of the degree. However, Institute/University has the liberty to offer additional courses as per their mandates or may also offer additional credits through various MOOCs upon approval of their respective academic council.

10. Programme Committee and Internal Examination Committee

10.1 Programme Committee

1. The B. Pharm. Programme shall have a Programme Committee constituted by the Head of the Institution/Principal in consultation with all the Heads of the Departments and reconstituted annually.
2. The composition of the Programme Committee shall be as follows:
 - The Principal/HoI shall serve as the Chairperson
 - One senior teacher from any department shall act as the B. Pharm Coordinator
 - One teacher from each department offering B. Pharm courses and
 - Four student representatives of the programme (one from each academic year), nominated by the Head of the Institution.
3. The Programme Committee shall meet at least twice in every semester to perform the following duties.
4. Duties of the Programme Committee (not limited to):
 - i. Periodically reviewing the progress of classes and attendance.
 - ii. Discussing problems concerning the curriculum, syllabus, and conduct of classes.

- iii. Communicating its recommendations on academic matters to the Head of the Institution, with such communications being duly recorded.
- iv. Periodically reviewing and monitoring the attainment of Programme Outcomes and Course Outcomes along with Bloom's Taxonomy Levels and/or Miller's Pyramid.
- v. Encouraging the use of ICT tools and providing e-learning resources for higher- order learning.
- vi. Ensuring effective implementation of participative, problem-based, experiential learning, and innovative pedagogical approaches for effective outcomes.

10.2 Internal Examination Committee

1. The B. Pharm. Programme shall have an Internal Examination Committee constituted by the Principal / HoI in consultation with all the Heads of the Departments and may be reconstituted as and when necessary.
2. The composition of the Internal Examination Committee shall be as follows:
 - Principal / HoI- Chairperson
 - B. Pharm Programme Coordinator- Member Secretary
 - One senior faculty member from each department involved in B. Pharm teaching Members
 - Examination Cell In-charge- Member
3. The Committee shall meet periodically, before each Sessional Examination (Internal Assessment) and before the end-semester examination.
4. Duties of the Internal Examination Committee (not limited to):
 - i. Plan and approve the internal assessment calendar for all semesters.
 - ii. Ensure uniformity, transparency, and fairness in continuous assessment, sessional, and practical examinations.
 - iii. Moderation of sessional question papers and assessment tools in alignment with programme and course outcomes, incorporating Bloom's Taxonomy Levels and/or Miller's Pyramid.
 - iv. Monitor the conduct and evaluation of theory, practical, internship, and project assessments.
 - v. Ensure compliance with PCI regulations, university ordinances, and NEP-2020

assessment reforms.

- vi. Promote outcome-based, skill-oriented, and innovative assessment methods.
- vii. Review, moderate, and finalize internal assessment marks prior to submission to the university.
- viii. Address student grievances related to internal assessments in a timely and structured manner.
- ix. Maintain proper records, reports, and minutes related to internal examinations and assessments.
- x. Recommend remedial measures and academic support as and when required.

10.3 Scheme for credit-based marks distribution for assessment

The general scheme for credit wise marks distribution is as given below. The detailed scheme for internal assessment and end semester examinations is given in **Table-X (a-h)**.

Credits	Maximum Marks	Internal Assessment	External Assessment
4	100	40	60
3	75	30	45
2 or 1	50	20	30

11. End semester examinations

The End Semester Examinations for each theory and practical course through Semesters I to VIII shall be conducted by the university (Table-X).

Table-Xa: Semester I

Course Type	CourseCode	Nomenclature of the Course	No. of hours per week (L/P)	Credit Points	Continuous mode (Marks)	Sessional Exam (Marks)	Sessional Duration	Internal Total	End Sem Marks	End Sem Exam Duration	Total Marks
Core-1	26L4.5-PHR-101T	Basics of Python Programming for Pharmaceutical Sciences (Theory)	2	2	10	10	1 Hr	20	30	1.5 Hr	50
Core-2	26L4.5-PHR-102T	General Pharmacy (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-3	26L4.5-PHR-103T	Healthcare Psychology and Communication Skills (Theory)	1	1	10	10	1 Hr	20	30	1.5 Hr	50
Core-4	26L4.5-PHR-104T	Human Anatomy, Physiology and Pathophysiology I (Theory)	4	4	20	20	1 Hr	40	60	3 Hr	100
Core-5	26L4.5-PHR-105T	Introduction to Pharmacognosy (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-6	26L4.5-PHR-106T	Pharmaceutical Inorganic and Analytical Chemistry (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-7	26L4.5-PHR-107P	General Pharmacy (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
Core-8	26L4.5-PHR-108P	Healthcare Psychology and Communication Skills (Practical)	2	1	10	10	3 Hr	20	30	3 Hr	50
Core-9	26L4.5-PHR-109P	Human Anatomy, Physiology and Pathophysiology-I (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
Core-10	26L4.5-PHR-110P	Introduction to Pharmacognosy (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
Core-11	26L4.5-PHR-111P	Pharmaceutical Inorganic and Analytical Chemistry (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
	Total		30	21	-	-	-	-	-	-	-

Table-Xb: Semester II

Course Type	Course Code	Nomenclature of the Course	No. of hours per week (L/P)	Credit Points	Continuous mode (Marks)	Sessional Exam (Marks)	Sessional Duration	Internal Total	End Sem Marks	End Semester Exam Duration	Total Marks
Core-1	26L4.5-PHR-201T	Applied Biostatistics and Data Analytics for Pharmaceutical Sciences (Theory)	2	2	10	10	1 Hr	20	30	1.5 Hr	50
Core-2	26L4.5-PHR-202T	Biochemistry (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-3	26L4.5-PHR-203T	Human Anatomy, Physiology and Pathophysiology II (Theory)	4	4	20	20	1 Hr	40	60	3 Hr	100
Core-4	26L4.5-PHR-204T	Pharmaceutical Organic Chemistry (Theory)	4	4	20	20	1 Hr	40	60	3 Hr	100
Core-5	26L4.5-PHR-205T	Pharmacognosy and Phytochemistry (Theory)	4	4	20	20	1 Hr	40	60	3 Hr	100
Core-6	26L4.5-PHR-206T	Physical Pharmaceutics (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-7	26L4.5-PHR-207P	Biochemistry (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
Core-8	26L4.5-PHR-208P	Human Anatomy, Physiology and Pathophysiology-II (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
Core-9	26L4.5-PHR-209P	Pharmaceutical Organic Chemistry (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
Core-10	26L4.5-PHR-210P	Pharmacognosy and Phytochemistry (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
Core-11	26L4.5-PHR-211P	Physical Pharmaceutics (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
26L4.5-PHR-212P SEC*	26L4.5-PHR-212P SEC1	Communication Skills	2	1	10	10	3 Hr	20	30	3 Hr	50
	26L4.5-PHR-212P SEC2	Mental Well-Being, Stress & Conflict Management									
	26L4.5-PHR-212P SEC3	Fundamentals of Computer Operations									
	Total		37	26							

*One course shall be selected from the list

Table-Xc: Semester III

Course Type	CourseCode	Nomenclature of the Course	No. of hours per week (L/P)	Credit Points	Continuous mode (Marks)	Sessional Exam (Marks)	Sessional Duration	Internal Total	End Sem Marks	End Semester Exam Duration	Total Marks
Core-1	26L5.0-PHR-301T	Introduction to Machine Learning in Pharmaceutical Sciences (Theory)	2	2	10	10	1 Hr	20	30	1.5 Hr	50
Core-2	26L5.0-PHR-302T	Environmental Science (Theory)	1	1	10	10	1 Hr	20	30	1.5 Hr	50
Core-3	26L5.0-PHR-303T	Ethics and Universal Human Values (Theory)	1	1	10	10	1 Hr	20	30	1.5 Hr	50
Core-4	26L5.0-PHR-304T	General Pharmacology (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-5	26L5.0-PHR-305T	Heterocyclic Compounds and Stereochemistry (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-6	26L5.0-PHR-306T	Pharmaceutical Dosage Forms I (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-7	26L5.0-PHR-307T	Pharmaceutical Engineering (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-8	26L5.0-PHR-308T	Pharmaceutical Microbiology (Theory)	3	3	15	10	1 Hr	30	45	2 Hr	75
Core-9	26L5.0-PHR-309P	General Pharmacology (Practical)	4	2	10	10	4 Hr	20	30	4 Hr	50
Core-10	26L5.0-PHR-310P	Heterocyclic Compounds and Stereochemistry (Practical)	4	2	10	10	4 Hr	20	30	4 Hr	50
Core-11	26L5.0-PHR-311P	Pharmaceutical Dosage Forms-I (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
26L5.0-PHR-312P AEC*	26L5.0-PHR-312P AEC1	Nutraceuticals and Functional Foods	2	1	10	10	3 Hr	20	30	3 Hr	50
	26L5.0-PHR-312P AEC2	Food Analysis									
	26L5.0-PHR-312P AEC3	Yoga and Life Sciences									
Total			32	25							

*One course shall be selected from the list

Table-Xd: Semester IV

Course Type	Course Code	Nomenclature of Course	No. of hours per week (L/P)	Credit Points	Continuous mode (Marks)	Sessional Exam (Marks)	Sessional Duration	Internal Total	End Sem Marks	End Semester Exam Duration	Total Marks
Core-1	26L5.0-PHR-401T	Herbal Drug Technology (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-2	26L5.0-PHR-402T	Medicinal Chemistry (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-3	26L5.0-PHR-403T	Pharmaceutical Biotechnology (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-4	26L5.0-PHR-404T	Social Pharmacy and Public Health (Theory)	2	2	10	10	1 Hr	20	30	1.5 Hr	50
Core-5	26L5.0-PHR-405T	Systemic Pharmacology I (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-6	26L5.0-PHR-406P	Herbal Drug Technology (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
Core-7	26L5.0-PHR-407P	Medicinal Chemistry (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
Core-8	26L5.0-PHR-408P	Pharmaceutical Biotechnology (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
Core-9	26L5.0-PHR-409P	Social Pharmacy and Public Health (Practical)	2	1	10	10	3 Hr	20	30	3 Hr	50
Core-10	26L5.0-PHR-410P	Systemic Pharmacology I (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
	26L5.0-PHR-411I	Internship (Mandatory)	8	4	Refer Section 22	-	-	-	100	4 Hr	100
	Total		28	23							

Table-Xe: Semester V

Course Type	Course Code	Nomenclature of the Course	No. of hours per week (L/P)	Credit Points	Continuous mode (Marks)	Sessional Exam (Marks)	Sessional Duration	Internal Total	End Sem Marks	End Sem Exam Duration	Total Marks
Core-1	26L5.5-PHR-501T	Biomedical Chemistry (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-2	26L5.5-PHR-502T	Industrial Pharmacognosy (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-3	26L5.5-PHR-503T	Innovation and Startup Ecosystem (Theory)	2	2	10	10	1 Hr	20	30	1.5 Hr	50
Core-4	26L5.5-PHR-504T	Pharmaceutical Dosage Form II (Theory)	2	2	10	10	1 Hr	20	30	1.5 Hr	50
Core-5	26L5.5-PHR-505T	Pharmaceutical Quality Assurance (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-6	26L5.5-PHR-506P	Systemic Pharmacology II (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-7	26L5.5-PHR-507P	Biomedical Chemistry (Practical)	4	2	10	10	4 Hr	20	30	4 Hr	50
Core-8	26L5.5-PHR-508P	Industrial Pharmacognosy (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
Core-9	26L5.5-PHR-509P	Pharmaceutical Dosage Form II (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
Core-10	26L5.5-PHR-510P	Systemic Pharmacology II (Practical)	4	2	10	10	4 Hr	20	30	4 Hr	50
	Total		30	22							

Table-Xf: Semester VI

Course Type	Course Code	Nomenclature of the Course	No. of hours per week (L/P)	Credit Points	Continuous mode (Marks)	Sessional Exam (Marks)	Sessional Duration	Internal Total	End Sem Marks	End Sem Exam Duration	Total Marks
Core-1	26L5.5-PHR-601T	Advanced Pharmacognosy (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-2	26L5.5-PHR-602T	Biopharmaceutics and Pharmacokinetics (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-3	26L5.5-PHR-603T	Intellectual Property Rights (Theory)	2	2	10	10	1 Hr	20	30	1.5 Hr	50
Core-4	26L5.5-PHR-604T	AI Applications in Pharmaceutical Sciences (Theory)	2	2	10	10	1 Hr	20	30	1.5 Hr	50
Core-5	26L5.5-PHR-605T	Pharmaceutical Analysis (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-6	26L5.5-PHR-606T	Pharmaceutical Jurisprudence (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
26L5.5-PHR-607T AEC*	26L5.5-PHR-607T AEC1	Green Chemistry	1	1	10	10	1 Hr	20	30	1.5 Hr	50
	26L5.5-PHR-607T AEC2	Materiovigilance and Hemovigilance									
	26L5.5-PHR-607T AEC3	Scientific Writing									
	26L5.5-PHR-607T AEC4	Drug Store and Business Management									
	26L5.5-PHR-607T AEC5	Career Building in Cultivation of Medicinal Plants									
	26L5.5-PHR-607T AEC6	Active Pharmaceutical Ingredients and Excipient Sciences									
Core-8	26L5.5-PHR-608P	Biopharmaceutics and Pharmacokinetics (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
Core-9	26L5.5-PHR-609P	Pharmaceutical Analysis (Practical)	4	2	10	10	4 Hr	20	30	4 Hr	50
26L5.5-PHR-610P SEC*	26L5.5-PHR-610P SEC1	Computer-Aided Drug Design	2	1	10	10	3 Hr	20	30	3 Hr	50
	26L5.5-PHR-610P SEC2	Analytical Method Development and Validation									
	26L5.5-PHR-610P SEC3	Principles of Preclinical Studies									
26L5.5-PHR-611P VAC*	26L5.5-PHR-611P VAC1	Professional Skills	2	1	10	10	3 Hr	20	30	3 Hr	50
	26L5.5-PHR-611P VAC2	Process Analytical Technology (PAT) and QbD in Formulation Science									
	26L5.5-PHR-612I	Internship (Mandatory)	8	4	Refer Section 22	-	-	-	100	4 Hr	100
	Total		28	26							

*One course shall be selected from the list

Table-Xg: Semester VII

Course Type	Course Code	Nomenclature of the Course	No. of hours per week (L/P)	Credit Points	Continuous mode (Marks)	Sessional Exam (Marks)	Sessional Duration	Internal Total	End Sem Marks	End Sem Exam Duration	Total Marks
Core-1	26L6.0-PHR-701T	Biostatistics Research Methodology (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-2	26L6.0-PHR-702T	Cosmetics and Cosmeceuticals (Theory)	2	2	10	10	1 Hr	20	30	1.5 Hr	50
Core-3	26L6.0-PHR-703T	AI in Clinical Applications (Theory)	2	2	10	10	1 Hr	20	30	1.5 Hr	50
Core-4	26L6.0-PHR-704T	Modern Analytical Techniques (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-5	26L6.0-PHR-705T	Pharmacovigilance (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-6	26L6.0-PHR-706T	Pharmacy Practice (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-7	26L6.0-PHR-707T	Regulatory Affairs (Theory)	2	2	10	10	1 Hr	20	30	1.5 Hr	50
26L6.0-PHR-708T AEC*	26L6.0-PHR-708T AEC1	Current Good Manufacturing Practices (cGMP)	1	1	10	10	1 Hr	20	30	1.5 Hr	50
	26L6.0-PHR-708T AEC2	Pharmaceutical Automation									
	26L6.0-PHR-708T AEC3	Modern Techniques in Cellular Biology									
	26L6.0-PHR-708T AEC4	Medical Devices									
	26L6.0-PHR-708T AEC5	Transformation of Food Waste into Medicinal Products									
	26L6.0-PHR-708T AEC6	Biosimilars, Vaccines & Macromolecules									
Core-9	26L6.0-PHR-709P	Modern Analytical Techniques (Practical)	3	1	10	10	3 Hr	20	30	3 Hr	50
	26L6.0-PHR-710RP	Research Project	-	6	Refer Section 21	-	-	-	150	4 Hr	150
	Total		22	26							

*One course shall be selected from the list

Table-Xh: Semester VIII

Course Type	Course Code	Nomenclature of course	No. of hours per week (L/P)	Credit Points	Contious mode (Marks)	Sessional Exam (Marks)	Sessional Duration	Internal Total	End Sem Marks	End Sem Exam Duration	Total Marks
Core-1	26L6.0-PHR-801T	Ethical Considerations and Translational Applications of AI in Pharmacy (Theory)	2	2	10	10	1 Hr	20	30	1.5 Hr	50
Core-2	26L6.0-PHR-802T	Clinical Pharmacotherapeutics (Theory)	2	2	10	10	1 Hr	20	30	1.5 Hr	50
Core-3	26L6.0-PHR-803T	Industrial Pharmacy and Facility Design (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
Core-4	26L6.0-PHR-804T	Pharmaceutical Management (Theory)	2	2	10	10	1 Hr	20	30	1.5 Hr	50
Core-5	26L6.0-PHR-805T	Sterile Dosage Forms and Novel Drug Delivery System (Theory)	3	3	15	15	1 Hr	30	45	2 Hr	75
26L6.0-PHR-806T AEC*	26L6.0-PHR-806T AEC1	Pharmaceutical Packaging	2	2	10	10	1 Hr	20	30	1.5 Hr	50
	26L6.0-PHR-806T AEC2	Supply Chain Management									
	26L6.0-PHR-806T AEC3	Industrial Safety and Waste Management									
	26L6.0-PHR-806T AEC4	Traditional Healing Practices of India									
	26L6.0-PHR-806T AEC5	Futuristic Pharma through AR/VR: Pharma 4.0									
	26L6.0-PHR-806T AEC6	Herbal Cosmetics for Industry Perspective									
Core-7	26L6.0-PHR-807P	Pharmaceutical Marketing Skills (Practical)	2	1	10	10	3 Hr	20	30	3 Hr	50
Core-8	26L6.0-PHR-808P	Sterile Dosage Forms and Novel Drug Delivery System (Practical)	4	2	10	10	4 Hr	20	30	4 Hr	50
26L6.0-PHR-809P VAC*	26L6.0-PHR-809P VAC1	Cleaning Validation	2	1	10	10	3 Hr	20	30	3 Hr	50
	26L6.0-PHR-809P VAC2	Basic Training in Aseptic Handling Techniques									
	26L6.0-PHR-809P VAC3	Impurity Profiling									
	26L6.0-PHR-810RP	Research Project		6	Refer Section 21	-	-	-	150	4 Hr	150
	Total		22	24							

*One course shall be selected from the list

11.2. Internal assessment: Continuous internal assessment and sessional Examination

The marks allocated for Continuous mode of Internal assessment and Sessional examination shall be awarded as per the scheme given below.

Table-XI: Scheme for awarding internal assessment: Continuous mode and Sessional**a. Theory****Theory- Internal assessment pattern of marks distribution**

Theory		Internal assessment pattern of marks Distribution			
Credit Type	Max. Marks	Total	Attendance (Refer Table XII) and Student-Teacher Interaction	Academic Activities (Average of any three: quiz, assignment, open book test, field work, group discussion, seminar, etc.)	Sessional (Average of two tests) Duration 1 Hour
4	100	40	10	10	20
3	75	30	7.5	7.5	15
2 or 1	50	20	05	05	10

b. Practical**Practical- Internal assessment pattern of marks distribution**

Practical		Internal assessment pattern of marks distribution			
Credit Type	Max. Marks	Total	Attendance (Refer Table XII) and Student-Teacher Interaction	Based on Practical Records, Regular viva voce, etc.	Sessional (Average of two tests) Duration- As per allotted hours#)
2 or 1	50	20	05	05	10

For practical courses (core as well as elective), those having four hours per week shall have a four-hour duration for the sessional and end-semester examinations. Practical courses with less than four hours per week shall have a three-hour duration for the sessional and end-semester examinations.

Table- XII: Guidelines for the allotment of marks for attendance

Percentage of Attendance	Theory			Practical
	4 Credit	3 Credit	2 or 1 Credit	
90-100	4	3.5	2	2
85-89	3	2.5	1.5	1.5
75-84	2	1.5	1	1
Less than 75	0	0	0	0

11.2.1. Sessional Exams

Two Sessional exams shall be conducted for each theory / practical course as per the schedule fixed by the college(s)/University. The scheme of question paper for theory and practical Sessional examinations is given in Table XIII-XIV below.

Table-XIII: Internal Assessment Question Paper Pattern (Theory)

Type of Questions	4 Credit Course	3 Credit Course	2 or 1 Credit Course
I. Multiple Choice Questions (MCQs) OR Objective Type Questions	4×1 Mark each OR 2×2 Marks each (Compulsory)	2×1 Mark each (Compulsory)	2×1 Mark each (Compulsory)
II. Short Answers	2×3 Marks each (2 out of 3)	2×3 Marks each (2 out of 3)	1×3 Marks each (1 out of 2)
III. Long Answers	1×10 Marks each (1 out of 2)	1×7 Marks each (1 out of 2)	1×5 Marks each (1 out of 2)
Max. Marks	20	15	10
Duration	1 Hour	1 Hour	1 Hour

Table-XIV: Internal Assessment Question Paper Pattern (Practical)

Type of questions	2 or 1 Credit Course
Synopsis	2
Major Experiment	4
Minor Experiment	2
Viva voce	2
Max. Marks	10
Duration	As per the allotted hours in scheme

The average marks of two Sessional exams shall be computed for internal assessment as per the requirements given in Table-XI.

11.3. End semester Examination

The End semester Theory and practical examination shall be conducted as per the scheme given in Table XV-XVI as per the credits allotted.

Table-XV: End Semester Question Paper Pattern (Theory)

Type of Questions	4 Credit Course	3 Credit Course	2 or 1 Credit Course
I. Multiple Choice Questions (MCQs) Or Objective Type Questions	20×1 Mark each or 10×2 Marks each (Compulsory)	10×1 Mark each (Compulsory)	10×1 Mark each (Compulsory)
II. Short Answers	5×4 Marks each (5 out of 7)	5×4 Marks each (5 out of 7)	5×2 Marks each (5 out of 7)
III. Long Answers	2×10 Marks each (2 out of 3)	2×7.5 Marks each (2 out of 3)	2×5 Marks each (2 out of 3)
Max. Marks	60	45	30
Duration	3 Hours	2 Hours	1.5 Hour

Table-XVI: End Semester Question Paper Pattern (Practical)

Type of questions	2 or 1 Credit Course
Synopsis	7.5
Major Experiment	10
Minor Experiment	5
Viva voce	7.5
Max. Marks	30
Duration	As per the allotted hours in scheme #

For practical courses (core as well as elective), those having four hours per week shall have a four- hour duration for the sessional and end-semester examinations. Practical courses with less than four hours per week shall have a three-hour duration for the sessional and end-semester examinations.

12. Promotion and award of grades

12.1. Promotion: A student shall be declared PASS and eligible to receive a grade in a course of the B.Pharm. programme if he/she secures at least 50% marks in that particular course, including internal assessment. For example, to be declared PASS and to receive a grade, the student must secure a minimum of 50 marks out of a total of 100, inclusive of internal assessment marks (continuous internal assessment and sessional examination marks) and the end-semester theory examination marks as applicable.

12.2. Grace Marks and Moderation: Grace marks shall be awarded to the students as per the norms of the University, with due emphasis on promoting learner progression.

13. Carry forward of internal assessment marks

In case a student fails to secure the minimum 50% in any Theory or Practical course as specified in 12, then he/she shall reappear for the end semester examination of that course. However, his/her marks of the Internal Assessment shall be carried over and he/she shall be entitled for grade obtained by him/her on passing.

14. Improvement of internal assessment

A student shall have the opportunity to improve his/her performance only once in the Sessional exam component of the internal assessment. The re-conduct of the Sessional exam shall be completed within that particular semester only. The re-conduct of sessional examinations for failed candidates shall be conducted only once for the purpose of improving their sessional marks, without changing their continuous internal assessment.

15. End semester supplementary examinations

Supplementary examination will be held with main end-semester examination i.e., odd semester supplementary examination with odd semester main end-semester examination and even semester supplementary examination with even semester main end-semester examination. The proposed end semester examinations to be conducted as per the schedule below

Table-XVI: Tentative schedule of end semester examinations

Regular Semester	For Regular Examination
I, III, V and VII	November / December
II, IV, VI and VIII	May / June

16. Academic progression

Students are permitted to progress to the next semester even if they fail a course. However, to appear for the Semester VIII end semester examination, a student must have successfully completed all courses up to Semester VII. The final CGPA shall be awarded only after successful completion of all courses from Semester I to Semester VIII within the maximum duration prescribed by PCI. Lateral entry students shall successfully complete all courses from Semester III to Semester VII before appearing for the Semester VIII end semester examination.

17. Grading of performance

17.1. Letter grades and grade points allocations: Based on the performances, each student shall be awarded a final letter grade at the end of the semester for each course. The letter grades and their corresponding grade points are given in Table-XVII.

Table-XVII: Letter grades and grade points equivalent to percentage of marks and performance

Percentage of Marks Obtained	Letter Grade	Grade Point	Performance
90.00 -100	O	10	Outstanding
80.00 - 89.99	A	9	Excellent
70.00 - 79.99	B	8	Good
60.00 - 69.99	C	7	Fair
50.00 - 59.99	D	6	Average
Less than 50	F	0	Fail
Absent	AB	0	Fail

A student who remains absent for any end semester examination shall be assigned a letter grade of AB and a corresponding grade point of zero. He/she should reappear for the said evaluation/examination in due course. Such rules are also applicable for those students who fail to register for examination(s) of any course in any semester.

18. The Semester Grade Point Average (SGPA)

The performance of a student in a semester is indicated by a number called ‘Semester Grade Point Average’ (SGPA). The SGPA is the weighted average of the grade points obtained in all the courses by the student during the semester.

$$SGPA = \frac{C1G1 + C2G2 + C3G3 + C4G4 + C5G5}{C1 + C2 + C3 + C4 + C5}$$

The SGPA is calculated to two decimal points. It should be noted that, the SGPA for any semester shall take into consideration the F and ABS grade awarded in that semester.

19. Cumulative Grade Point Average (CGPA)

The CGPA is calculated with the SGPA of all the VIII semesters to two decimal points and is indicated in final grade report card/final transcript showing the grades of all VIII semesters and

their courses.

$$\text{SGPA} = \frac{C1S1 + C2S2 + C3S3 + C4S4 + C5S5 + C6S6 + C7S7 + C8S8}{C1 + C2 + C3 + C4 + C5 + C6 + C7 + C8}$$

CGPA To Percentage Conversion

It is mandatory for Examining Authority to mention both, marks and SGPA and/or CGPA scores, in the marksheets. The conversion factor for calculation of CGPA into percentage should be 10.0 uniformly.

Credit Record and Transfer Mechanism

The Examining Authority shall be responsible for creation and verification of Academic Bank of Credits ID, uploading and maintenance of semester wise credits/grades and award in the ABC and National Academic Depository (NAD) to facilitate the credit transfer and redemption as per guidelines of statutory bodies.

20. Declaration of class

The classification of the degree shall be determined based on the Cumulative Grade Point Average (CGPA) obtained by the candidate, as indicated below:

- First Class with Distinction: **CGPA of 7.50 and above**
- First Class: **CGPA of 6.00 to 7.49**
- Second Class: **CGPA of 5.00 to 5.99**

21. Project work

All students shall undertake a project under the supervision of a teacher and submit a report, preferably with the involvement of an external mentor from Industry, Hospital, NABL or CDSCO-approved labs, or an Allied/Interdisciplinary field. The project shall be carried out in groups not exceeding three members. The project report must be submitted in triplicate as a typed and bound copy of no less than 25 pages. Internal and external examiners appointed by the University shall evaluate the project during the practical examinations of the respective semester(s), and students shall be evaluated in groups. Additionally, students are permitted the option to pursue a continuous research theme initiated in the seventh semester and extending through the eighth semester. Under this provision, the specific project milestones achieved by the conclusion of the seventh semester shall undergo formal evaluation by the appointed examiners during that semester's final

examination. The projects shall be evaluated as per the criteria given in **Table XVIII** and **Table XIX** below.

Table - XVIII: Evaluation of Dissertation Book

Sl. No.	Evaluation Criteria	Maximum Marks
1.	Objectives of the work undertaken	10
2.	Methodology adopted	20
3.	Results and discussion	20
4.	Conclusion and outcome	10
	Total	60

Table XIX. Evaluation of Dissertation Presentation

Sl. No.	Evaluation Criteria	Maximum Marks
1.	Presentation of work	40
2.	Communication skills	20
3.	Question and answer skills	30
	Total	90

Explanation: The 60 marks assigned to the dissertation book shall be same for all the students in a group. However, the 90 marks assigned for presentation shall be awarded based on the performance of individual students in the given criteria.

22. Internship

Every candidate shall be required to complete a minimum of 240 hours of practical training, spread over a period of two semesters, in a Pharmaceutical/ Cosmetics/ Medical Devices/ Food Industry, or in a Hospital/Community Pharmacy, or any other relevant field as per the prescribed course content. He/she has to submit two internship reports which will be evaluated separately.

Certificate and Report submission : 75 Marks
Presentation and Discussion: : 25 Marks
Total: : 100 Marks

23. Industry/Field Visits and other Co-curricular Activities

It shall be compulsory for pharmacy Institutions to organize industrial/field visit and other co-curricular activities to promote holistic learning through participative, problem-based, experiential

and innovative pedagogical methods. Students shall submit individual reports, which shall be assessed in continuous evaluation mode as part of any core course each year, as decided by the Programme Committee.

23.1 Industry/Field Visits

It shall be compulsory for students to undertake at least one industrial/field visit during each year to facilities involved in the manufacturing of active pharmaceutical ingredients, excipients, pharmaceutical formulations, medical devices, food, cosmetics, government/ NABL approved drug and medical device testing laboratories or NABH accredited hospital. It shall be assured by the institutions that the facilities chosen for a particular year shall not be repeated.

23.2 Memorandum of Understanding (MoU)

A formal and legally valid Memorandum of Understanding (MoU) must be executed (minimum 10) between the pharmacy Institution and pharmaceutical Industry/ government/NABL approved drug and medical device testing laboratories/ NABH accredited hospital. Out of those MoUs, 5 must be with the pharmaceutical industries.

23.3 Co-curricular Activities

It shall be compulsory for the pharmacy institution to adopt a village or a ward in the panchayath/municipal corporation and engage in community service activities. The community services shall include (but not limited to) prescription survey, awareness of rational drug use, patient counselling services or activities as per the prescribed course content.

24. Award of Ranks

Ranks and Medals shall be awarded on the basis of final CGPA. However, candidates who fail in one or more courses during the B. Pharm Programme shall not be eligible for award of ranks. Moreover, the candidates should have completed the B. Pharm Programme in minimum prescribed number of years (i.e. four years) for the award of Ranks.

25. Award of Degree

Candidates who fulfil the requirements mentioned above shall be eligible for award of degree during the ensuing convocation.

26. Duration for Completion of the Programme

The maximum period permitted for completion of the Programme shall be twice the prescribed duration of the Programme. Any student who fails to complete the Programme within this stipulated period shall be required to discontinue the course.

27. Re-admission after Break of Study

A candidate seeking re-admission to the programme after a break in studies must obtain approval from the university by paying the prescribed condonation fee. Condonation will not be granted if the break in study exceeds two years or if the student fails to complete the programme within the maximum permitted duration ($N \times 2$).

CURRICULAR STRUCTURE

T: Theory	P: Practical	AEC: Ability Enhancement Course	SEC: Skill Enhancement Course	VAC: Value Added Course		
The numeral against the T/P cell indicates the credit assigned for the course e.g. <table><tr><td>T</td><td>3</td></tr></table> indicates Theory course with 3 credits					T	3
T	3					

Note:- Refer the detailed syllabus for exact course codes

Semester																
Course Type	I		II		III		IV		V		VI		VII		VIII	
Core-1	T	3	T	3	T	3	T	3	T	3	T	3	T	3	T	3
	General Pharmacy		Biochemistry		General Pharmacology		Herbal Drug Technology		Biomedical Chemistry		Biopharmaceutics and Pharmacokinetics		Modern Analytical Techniques		Sterile Dosage Form and Novel Drug Delivery Systems	
Core-2	P	1	P	1	P	1	P	1	P	1	P	1	P	1	P	2
	General Pharmacy		Biochemistry		General Pharmacology		Herbal Drug Technology		Biomedical Chemistry		Biopharmaceutics and Pharmacokinetics		Modern Analytical Techniques		Sterile Dosage Form and Novel Drug Delivery Systems	
	T	1	T	4	T	3	T	3	T	3	T	3	T	3	T	3

Core-3	Healthcare Psychology and Communication Skills		Human Anatomy, Physiology and Pathophysiology II		Heterocyclic Compounds and Stereochemistry		Medicinal Chemistry		Industrial Pharmacognosy		Pharmaceutical Analysis		Biostatistics Research methodology		Industrial Pharmacy and Facility Design	
Course Type	I		II		III		IV		V		VI		VII		VIII	
Core-4	P	1	P	1	P	1	P	1	P	1	P	2	T	3	T	2
	Healthcare Psychology and Communication Skills		Human Anatomy, Physiology and Pathophysiology II		Heterocyclic Compounds and Stereochemistry		Medicinal Chemistry		Industrial Pharmacognosy		Pharmaceutical Analysis		Pharmacovigilance		Clinical Pharmacotherapeutics	
Core-5	T	4	T	4	T	3	T	3	T	2	T	3	T	3	T	2
	Human Anatomy, Physiology and Pathophysiology I		Pharmaceutical Organic Chemistry		Pharmaceutical Dosage Forms I		Pharmaceutical Biotechnology		Pharmaceutical Dosage Forms II		Advanced Pharmacognosy		Pharmacy Practice		Pharmaceutical Management	
Core-6	P	1	P	1	P	1	P	1	P	1	T	3	T	2	T	2
	Human Anatomy, Physiology and Pathophysiology I		Pharmaceutical Organic Chemistry		Pharmaceutical Dosage Forms I		Pharmaceutical Biotechnology		Pharmaceutical Dosage Forms II		Pharmaceutical Jurisprudence		Cosmetics and Cosmeceuticals		Ethical Considerations and Translational Applications of AI in Pharmacy	
Core-7	T	3	T	4	T	3	T	2	T	3	T	2	T	2	P	1
	Introduction To Pharmacognosy		Pharmacognosy and Phytochemistry		Pharmaceutical Engineering		Social Pharmacy and Public Health		Systemic Pharmacology and Chemotherapy		Intellectual Property Rights		AI in Clinical applications		Pharmaceutical Marketing Skills	

ANNEXURE A

B. Pharm. Regulation & Scheme 2026

Core-8	P	1	P	1	T	3	P	1	P	1	P	2	T	2	—
	Introduction To Pharmacognosy		Pharmacognosy and Phytochemistry		Pharmaceutical Microbiology		Social Pharmacy and Public Health		Systemic Pharmacology and Chemotherapy		AI applications in Pharmaceutical Sciences		Regulatory Affairs		—
Course Code	I		II		III		IV		V		VI		VII		VIII
Core-9	T	3	T	3	T	2	T	2	T	3	—	—	—	—	—
	Pharmaceutical Inorganic and Analytical Chemistry		Physical Pharmaceutics		Introduction to Machine Learning in Pharmaceutical Sciences		Systemic Pharmacology I		Pharmaceutical Quality Assurance		—	—	—	—	—
Core-10	P	1	P	1	T	1	P	1	T	2	—	—	—	—	—
	Pharmaceutical Inorganic and Analytical Chemistry		Physical Pharmaceutics		Environmental Science		Systemic Pharmacology I		Innovation and Startup Ecosystem		—	—	—	—	—
Core-11	T	2	T	3	T	1	—	—	—	—	—	—	—	—	—
	Basics of Python Programming for Pharmaceutical Sciences (Theory)		Applied Biostatistics and Data Analytics for Pharmaceutical Sciences		Ethics and Universal Human Values		—	—	—	—	—	—	—	—	—
Internship	—	—	—	—	—	—	—	4	—	—	—	4	—	—	—
	—	—	—	—	—	—	Internship (Mandatory)		—	—	Internship (Mandatory)		—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	6	6

Research	—	—	—	—	—	—	Research Project	Research Project
AEC	—	—	P 1	—	—	T 1	T 1	T 2
	—	—	Elective 2	—	—	Elective 3	Elective 6	Elective 7
Course Code	I	II	III	IV	V	VI	VII	VIII
SEC	—	P 1	—	—	—	P 1	—	—
	—	Elective 1	—	—	—	Elective 4	—	—
VAC	—	—	—	—	—	P 1	—	P 1
		—	—	—	—	Elective 5	—	Elective 8
Credits per semester	21	23	23	25	25	26	26	24
Total Credits	193							