Curevita Research
https://Curevita.org

Contents lists available at Curevita Journals
Frontiers of Health Innovation and Medical Advances
A Peer-Reviewed International Journal
journal homepage: www.curevitajournals.com

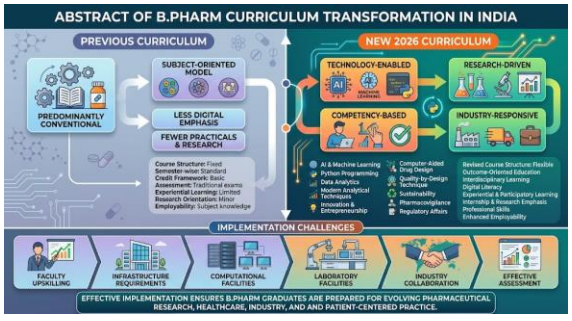
Transforming Pharmacy Education in India: A Comprehensive Review of the Revised B.Pharm Curriculum 2026 under NEP 2020

Tanay Upadhyay, Harit Rawal, Ayushi Goswami and Surendra Pardhi

Abstract

Pharmacy education in India is undergoing a major shift with the Pharmacy Council of India (PCI) introducing a revised Bachelor of Pharmacy (B.Pharm) curriculum for the 2026–27 academic session, aligning with the National Education Policy (NEP) 2020. This review critically compares the previous B.Pharm framework with the revised 2026 curriculum across course structures, credit systems, assessment methodologies, and experiential learning. Key additions include advanced digital and technological competencies such as artificial intelligence, machine learning, Python programming, computer-aided drug design, data analytics, and sustainability alongside core pharmaceutical sciences. Transitioning from a traditional subject-oriented model to an interdisciplinary, competency-based framework, the new curriculum enhances research capabilities, digital literacy, and employability. However, successful implementation hinges on overcoming challenges such as faculty upskilling, infrastructure upgrades, and strong industry collaboration. Overall, the revised curriculum establishes a modern, technology-enabled foundation to prepare graduates for evolving roles in healthcare and the global pharmaceutical industry.

Infographic abstract



Keywords: B.Pharm curriculum, Pharmacy education, Pharmacy Council of India, NEP 2020, revised syllabus 2026, competency-based education, artificial intelligence, pharmaceutical education, experiential learning, curriculum reform.

Article info

Article history: Received 26 Aug 2026, Revised 29 Aug 2026, Accepted 30 Aug 2026, Published: Sept 2026.

Author: 1Mr.Tanay Upadhyay, Assistant Professor, Sardar Patel University, Balaghat
2Dr. Harit Rawal, Professor & Principal of LNCT School of Pharmacy, LNCT Vidhyapeeth University, Indore
3Ms. Ayushi Goswami, Assisstant Professor of Devi Ahilya Collage of Pharmacy, Indore
4Dr.Surendra Pardhi, Professor & Principal of Oriental Institute of Pharmacy, Lalbarra - Balaghat India. **Corresponding Author:**
Email surendrapharma.pardhi64@gmail.com

Citation: Tanay Upadhyay, Harit Rawal, Ayushi Goswami and Surendra Pardhi. 2026. Transforming Pharmacy Education in India: A Comprehensive Review of the Revised B.Pharm Curriculum 2026 under NEP 2020.Frontiers of Health Innovation and Medical Advances. 2, 3.130-146.

Publisher: Curevita Research Pvt Ltd

©All rights reserved with Curevita Research.

Introduction

Pharmacy education plays a pivotal role in preparing competent professionals for the development, manufacture, quality assurance, regulation, distribution, and rational use of medicines. The rapid evolution of pharmaceutical sciences, advances in biotechnology and digital technologies, increasing emphasis on patient-centered healthcare, and changing requirements of the pharmaceutical industry have created a need to continuously update pharmacy education. In India, the Bachelor of Pharmacy (B.Pharm) programme has traditionally provided students with a strong foundation in pharmaceutical chemistry, pharmaceutics, pharmacology, pharmacognosy, pharmaceutical analysis, pharmacy practice, and related disciplines. However, the changing landscape of healthcare and the pharmaceutical sector necessitates a curriculum that extends beyond conventional subject-based knowledge and develops practical, technological, research, entrepreneurial, and professional competencies.

The National Education Policy (NEP) 2020 has emphasized multidisciplinary education, competency development, experiential learning, critical thinking, research, innovation, technology integration, employability, and lifelong learning. In alignment with these objectives, the Pharmacy Council of India (PCI) has introduced a revised B.Pharm curriculum for implementation from the academic session 2026–27. The revised curriculum represents an important transition towards a more outcome-oriented, technology-enabled, research-focused, and industry-responsive model of pharmacy education. One of the notable features of the revised curriculum is the introduction and strengthening of emerging technological areas, including artificial intelligence (AI), machine learning, Python programming, data analytics, and digital applications in pharmaceutical sciences. These developments are particularly relevant because modern pharmaceutical research increasingly relies on computational approaches for drug discovery, formulation development, pharmacokinetic modelling, data interpretation, clinical decision support, and pharmaceutical manufacturing. Incorporating these

areas at the undergraduate level can help students acquire the digital competencies required for the evolving concept of Pharma 4.0.

The revised curriculum also provides greater emphasis on research methodology, modern analytical techniques, innovation, entrepreneurship, regulatory affairs, pharmacovigilance, quality-by-design (QbD), process analytical technology (PAT), computer-aided drug design (CADD), sustainability, and industry-oriented learning. In addition, the curriculum strengthens experiential learning through practical training, internships, research projects, professional skills, and participatory learning approaches. Such modifications are intended to bridge the gap between theoretical knowledge and its application in pharmaceutical research, healthcare, manufacturing, regulatory and professional environments.

Rationale for the Revised B.Pharm Curriculum:

The rationale for revising the B.Pharm curriculum can be understood from several important perspectives:

1. Alignment with NEP 2020:The revised curriculum aims to translate the principles of NEP 2020 into pharmacy education by promoting multidisciplinary learning, critical thinking, experiential education, innovation, research, professional development, and lifelong learning.

2. Rapid technological advancement: The pharmaceutical sector is increasingly adopting AI, machine learning, automation, data science, computational drug discovery, digital health, and advanced analytical technologies. Therefore, undergraduate pharmacy education needs to provide students with appropriate exposure to these technologies.

3. Changing pharmaceutical industry requirements: The modern pharmaceutical industry requires graduates who possess not only pharmaceutical knowledge but also competencies in quality systems, regulatory affairs, data interpretation, research, automation, entrepreneurship, documentation, and interdisciplinary collaboration.

4. Strengthening research capabilities: The inclusion and strengthening of research methodology, data analytics, modern analytical techniques, scientific writing, CADD, preclinical studies, and research projects can

encourage undergraduate students to develop scientific reasoning and research skills.

5. Enhancing employability: The revised curriculum provides greater exposure to professional skills, internships, entrepreneurship, regulatory affairs, pharmacovigilance, industrial pharmacy, and emerging technologies. These components can improve graduate preparedness for diverse career opportunities.

6. Promoting competency-based education: The revised framework places greater emphasis on learning outcomes, graduate attributes, programme outcomes, course outcomes, competency development, and outcome attainment rather than relying exclusively on conventional subject completion.

7. Strengthening experiential learning: Pharmacy is an application-oriented discipline. Practical training, internships, research projects, field-based learning, seminars, assignments, problem-solving activities, and industry exposure are therefore important for translating classroom knowledge into professional competence.

8. Responding to patient-centered healthcare: Contemporary pharmacists increasingly participate in medication management, pharmacovigilance, public health, clinical services, patient counselling, and rational use of medicines. Curriculum development therefore needs to address both pharmaceutical science and healthcare responsibilities.

9. Integration of sustainability and ethics: The inclusion of environmental sustainability, green chemistry, waste management, professional ethics, and human values reflects the growing importance of socially responsible and environmentally sustainable pharmaceutical practices. 10. Preparing graduates for the future: The pharmaceutical profession is continuously evolving. The revised curriculum seeks to develop graduates who can adapt to technological changes, pursue research and innovation, work across multidisciplinary environments, and engage in lifelong professional learning.

Significance of the Curriculum Revision

The transition from the earlier B.Pharm curriculum to the revised 2026 curriculum is therefore more than a simple modification of subjects

or credit distribution. It represents a paradigm shift from predominantly conventional, subject-oriented education towards competency-based, outcome-oriented, technology-enabled, experiential, research-driven, and industry-responsive pharmacy education. The integration of AI and digital technologies with established pharmaceutical disciplines provides an opportunity to prepare graduates for emerging roles in pharmaceutical research, manufacturing, clinical practice, regulatory affairs, data-driven drug development, pharmacovigilance, entrepreneurship, and healthcare. However, successful implementation will depend on appropriate faculty development, infrastructure, laboratory modernization, computational facilities, industry collaboration, internship opportunities, teaching-learning methodologies, and robust assessment systems. Consequently, systematic evaluation of the revised curriculum is essential to determine whether its intended educational outcomes are being achieved.

Rationale for the Present Review

In view of these developments, a systematic comparative review of the earlier and revised B.Pharm curricula is warranted. Such a comparison can identify major changes in subject structure, credits, practical components, emerging disciplines, assessment strategies, experiential learning, research orientation, industry readiness, and professional competencies. The present review therefore aims to critically examine the transition from the old B.Pharm curriculum to the revised PCI B.Pharm curriculum 2026 under NEP 2020, identify its strengths and potential implementation challenges, and discuss its likely implications for the future of pharmacy education and professional practice in India.

Table-1: Comparison table showing the major differences.

S. No.	Parameter	Old PCI B.Pharm Syllabus	New PCI B.Pharm 2026 – NEP 2020	Major Change
1	Regulatory framework	Earlier PCI B.Pharm regulations/syllabus	New B.Pharm Degree Programme under **NEP 2020**	**Major revision**

S. No.	Parameter	Old PCI B.Pharm Syllabus	New PCI B.Pharm 2026 – NEP 2020	Major Change
		implemented from 2016–17		
2	Implementation	Implemented from academic session 2016–17	Proposed/implemented from **2026–27**	**New curriculum applicable to new batch**
3	Programme duration	4 years / 8 semesters	4 years / 8 semesters	No major change
4	Lateral entry	D.Pharm → 3rd semester	D.Pharm → 3rd semester continues, with additional courses/credit treatment	Modified
5	Minimum attendance	Earlier regulation required **80% attendance**	**75% attendance** in each individual course; theory and practical considered separately	**Reduced to 75%**
6	Total credits	Earlier CBCS structure had approximately **208 credits**	**193 credits** required for B.Pharm degree	**Credit structure rationalized**
7	Educational philosophy	Conventional CBCS / subject-oriented	**CBCS + NEP 2020 + Outcome Based Education + experiential learning**	Major change
8	Graduate attributes	Less explicitly integrated	**10 Graduate Attributes** covering pharmaceutical knowledge, critical thinking, ethics, patient orientation, digital competence, leadership, innovation and lifelong learning	**New**
9	Programme Educational Objectives (PEOs)	Not presented in the same integrated format	**5 PEOs**	**New/strengthened**
10	Programme Outcomes (POs)	Conventional pharmacy POs	**11 POs**, including AI/digital competence, research, entrepreneurship, sustainability and lifelong learning	**Expanded**
11	Artificial Intelligence	Not a dedicated curriculum component	**AI, Machine Learning and digital technologies** introduced	**Major new area**
12	Programming	No dedicated Python programming course in the old first semester	**Basics of Python Programming for Pharmaceutical Sciences**	**New**
13	Data analytics	Limited/embedded exposure	**Applied Biostatistics and Data Analytics for Pharmaceutical Sciences**	**New/expanded**
14	Machine Learning	Not a dedicated subject	**Introduction to Machine Learning in Pharmaceutical Sciences**	**New**
15	AI in pharmacy	Not a dedicated subject	**AI Applications in Pharmaceutical Sciences**	**New**

S. No.	Parameter	Old PCI B.Pharm Syllabus	New PCI B.Pharm 2026 – NEP 2020	Major Change
16	AI in clinical practice	Not present as an independent course	**AI in Clinical Applications**	**New**
17	AI ethics	Not separately emphasized	**Ethical Considerations and Translational Applications of AI in Pharmacy**	**New**
18	General Pharmacy	Traditional subjects were distributed among Pharmaceutics and other courses	**General Pharmacy** introduced as a first-semester subject	**New restructuring**
19	Anatomy	Human Anatomy & Physiology I and II	**Human Anatomy, Physiology & Pathophysiology I and II**	**Pathophysiology added/strengthened**
20	Pharmacognosy	Pharmacognosy & Phytochemistry	**Introduction to Pharmacognosy**, followed by **Pharmacognosy & Phytochemistry**, Industrial Pharmacognosy and Advanced Pharmacognosy	**More progressive structure**
21	Pharmaceutical Chemistry	Separate Pharmaceutical Inorganic Chemistry, Organic Chemistry, Physical Chemistry etc.	Chemistry reorganized into integrated and advanced courses	**Restructured**
22	Pharmaceutical Analysis	Pharmaceutical Analysis I & II	Pharmaceutical Inorganic & Analytical Chemistry initially, followed by **Pharmaceutical Analysis** and **Modern Analytical Techniques**	**Reorganized/expanded**
23	Pharmaceutics	Pharmaceutics I, II, Physical Pharmaceutics, Industrial Pharmacy etc.	Physical Pharmaceutics, Pharmaceutical Dosage Forms I & II, Sterile Dosage Forms & NDDS, Industrial Pharmacy & Facility Design	**Modernized**
24	Pharmacology	Pharmacology I, II, III	General Pharmacology + Systemic Pharmacology I & II	**Reorganized**
25	Herbal Drug Technology	Existing subject	Continues as **Herbal Drug Technology**	Retained
26	Biotechnology	Pharmaceutical Biotechnology	Continues with practical component	Retained
27	Social Pharmacy	Social & Preventive Pharmacy	**Social Pharmacy and Public Health**	**Public-health emphasis increased**
28	Biomedicinal Chemistry	Not a major independent subject in the old scheme	**Biomedicinal Chemistry**	**New/strengthened**

S. No.	Parameter	Old PCI B.Pharm Syllabus	New PCI B.Pharm 2026 – NEP 2020	Major Change
29	Industrial Pharmacognosy	Not separately structured as in new curriculum	**Industrial Pharmacognosy**	**New dedicated subject**
30	Advanced Pharmacognosy	Not separately structured	**Advanced Pharmacognosy**	**New dedicated subject**
31	Innovation & entrepreneurship	Limited coverage	**Innovation and Startup Ecosystem**	**New**
32	Intellectual Property Rights	Present as a topic/course component	**IPR** explicitly included	Strengthened
33	Pharmaceutical Quality Assurance	Existing	Continues	Modernized content
34	Pharmaceutical Jurisprudence	Existing	Continues	Retained
35	Regulatory Affairs	Limited/embedded in earlier curriculum	**Regulatory Affairs** as dedicated course	**Strengthened**
36	Pharmacovigilance	Covered within pharmacy-related areas	**Dedicated Pharmacovigilance**	**Strengthened**
37	Cosmetics	Cosmetic science/cosmetology content	**Cosmetics and Cosmeceuticals**	Modernized
38	Biostatistics & research	Biostatistics and research methodology existed	**Biostatistics & Research Methodology** with greater data/research orientation	Expanded
39	Modern analytical techniques	Conventional analytical techniques	**Modern Analytical Techniques**	**New/expanded**
40	CADD	Not a major dedicated component	**Computer-Aided Drug Design** elective	**New**
41	Analytical method validation	Conventional analysis content	**Analytical Method Development and Validation** elective	**Strengthened**
42	Preclinical studies	Limited integration	**Principles of Preclinical Studies** elective	**New**
43	Green Chemistry	Not a major standalone elective	**Green Chemistry** elective	**New**
44	Materiovigilance	Not present as dedicated elective	**Materiovigilance and Hemovigilance**	**New**
45	Scientific writing	Limited/embedded	**Scientific Writing** elective	**New**
46	PAT & QbD	Limited coverage	**Process Analytical Technology (PAT) and QbD in Formulation Science**	**Major new area**
47	Professional skills	Communication skills existed	**Professional Skills** as value-added/skill-oriented course	Expanded
48	Internship	Industry/hospital exposure existed	**Mandatory internships** explicitly integrated into curriculum	**Strengthened**

S. No.	Parameter	Old PCI B.Pharm Syllabus	New PCI B.Pharm 2026 – NEP 2020	Major Change
49	Research project	Final-year project	Research project continues with stronger research orientation	Strengthened
50	Industry exposure	Present but comparatively less integrated	Internship + industry-oriented courses + facility design + entrepreneurship	**Increased**
51	Sustainability	Limited	**Environment & Sustainability / Green Pharmacy / SDGs**	**New emphasis**
52	Universal Human Values	Limited	**Ethics and Universal Human Values**	**New/strengthened**
53	Mental well-being	Not a major dedicated component	**Mental Well-Being, Stress & Conflict Management** elective	**New**
54	Nutraceuticals	Limited	**Nutraceuticals and Functional Foods** elective	Expanded
55	Food analysis	Limited	**Food Analysis** elective	New/expanded
56	Yoga	Not a major B.Pharm core subject	**Yoga and Life Sciences** elective	New
57	Computer operations	General computer exposure	**Fundamentals of Computer Operations** elective	Modernized
58	Green pharmacy	Limited	Explicitly linked to sustainability and green chemistry	**New emphasis**
59	Pharmaceutical automation	Limited	**Pharmaceutical Automation** elective	**New**
60	Medical devices	Limited	**Medical Devices** elective	**New**
61	Biosimilars/vaccines	Covered in various subjects	**Biosimilars, Vaccines & Macromolecules** elective	**Strengthened**
62	AR/VR	Not included	**Futuristic Pharma through AR/VR: Pharma 4.0** elective	**New**
63	Supply chain	Limited	**Supply Chain Management** elective	**New**
64	Industrial safety	Present in parts of industrial subjects	**Industrial Safety and Waste Management** elective	Strengthened
65	Traditional Indian knowledge	Limited	**Traditional Healing Practices of India**	**New/NEP-oriented**
66	Herbal cosmetics	Conventional cosmetics/herbal content	**Herbal Cosmetics for Industry Perspective** elective	Expanded
67	Packaging	Conventional pharmaceutical packaging	**Pharmaceutical Packaging** elective	Expanded
68	Cleaning validation	Quality assurance topic	**Cleaning Validation** elective	Strengthened
69	Aseptic handling	Covered under sterile products	**Basic Training in Aseptic Handling Techniques** elective	Practical emphasis
70	Impurity profiling	Analytical/QA topic	**Impurity Profiling** elective	Strengthened

Major Semester-wise Change

Semester	Old PCI Syllabus – Major Subjects	New PCI 2026 – Major Subjects	Major Difference
I	HAP-I, Pharmaceutical Analysis-I, Pharmaceutics-I, Inorganic Chemistry, Communication Skills, Remedial Biology/Maths	Python Programming, General Pharmacy, Healthcare Psychology & Communication, HAP & Pathophysiology-I, Pharmacognosy, Inorganic & Analytical Chemistry	**Very major restructuring**
II	HAP-II, Pharmaceutical Organic Chemistry-I, Physical Pharmaceutics-I, Biochemistry, Pathophysiology, Computer Applications	Biostatistics & Data Analytics, Biochemistry, HAP & Pathophysiology-II, Organic Chemistry, Pharmacognosy & Phytochemistry, Physical Pharmaceutics + SEC	**Data analytics and electives added**
III	Pharmaceutical Organic Chemistry-II, Physical Pharmaceutics-II, Pharmaceutical Microbiology, Pharmaceutical Engineering, Pharmaceutical Biotechnology/Pharmacology-related courses	Machine Learning, Environmental Science, Ethics & Human Values, General Pharmacology, Heterocyclic Chemistry & Stereochemistry, Dosage Forms-I, Engineering, Microbiology	**AI/ML and ethics introduced**
IV	Pharmacology-II, Medicinal Chemistry, Pharmacognosy & Phytochemistry, Pharmaceutical Jurisprudence, Herbal Drug Technology etc.	Herbal Drug Technology, Medicinal Chemistry, Biotechnology, Social Pharmacy & Public Health, Systemic Pharmacology-I + **Mandatory Internship**	**Internship integrated**
V	Industrial Pharmacy-I, Medicinal Chemistry-II, Pharmacology-III, Pharmacognosy etc.	Biomedicinal Chemistry, Industrial Pharmacognosy, Innovation & Startup, Dosage Forms-II, QA, Systemic Pharmacology-II	**Innovation + industrial orientation**
VI	Biopharmaceutics & Pharmacokinetics, Pharmaceutical Biotechnology, Quality Assurance, Biostatistics etc.	Advanced Pharmacognosy, BPK, IPR, **AI Applications**, Pharmaceutical Analysis, Jurisprudence + electives + internship	**AI, IPR, electives, internship**
VII	Instrumental methods, Industrial Pharmacy, Pharmacy Practice, Novel Drug Delivery etc.	Biostatistics & Research Methodology, Cosmetics & Cosmeceuticals, **AI in Clinical Applications**, Modern Analytical Techniques, Pharmacovigilance, Pharmacy Practice, Regulatory Affairs + Research Project	**Research/AI/regulatory focus**
VIII	Biostatistics/Research Project, Industrial Pharmacy, Pharmacy Practice/Novel Drug Delivery etc.	AI Ethics, Clinical Pharmacotherapeutics, Industrial Pharmacy & Facility Design, Pharmaceutical Management, Sterile Dosage Forms & NDDS + electives + Research Project	**AI + clinical + industry + research**

Note: The official 2026 curriculum confirms that Semester I now has 21 credits, Semester II 26, Semester III 25, Semester IV 23, Semester V 22, Semester VI 26, Semester VII 26 and Semester VIII 24, totaling 193 credits.

Important New Subjects Incorporated in 2026: The 2026 syllabus specifically states that it emphasizes scientific fundamentals, practical/experiential learning, research orientation, professional competencies, AI and latest digital technologies, including applications in drug discovery, manufacturing, pharmacokinetics and pharmacy practice.

The new PCI document explicitly requires monitoring of PO/CO attainment, Bloom's Taxonomy and/or Miller's Pyramid**,** and promotes participative, problem-based, experiential, and innovative learning.

For implementation from 2026–27, the college should particularly prepare for:

1. New 193-credit curriculum
2. New subject-wise timetable
3. New faculty workload distribution
4. AI/Python/ML teaching capability
5. New electives/SEC/AEC/VAC
6. Mandatory internship planning
7. Research-project framework
8. Modern analytical and computational facilities
9. Continuous internal assessment system
10. CO-PO mapping and attainment
11. Bloom's Taxonomy-based question papers
12. Experiential/problem-based learning
13. Entrepreneurship and startup activities
14. Industry collaboration
15. Updated laboratory requirements

PCI has officially published the **2026 B.Pharm syllabus as per NEP 2020** and separately issued an implementation notice for approved institutions for the **2026–27 academic session**. The syllabus was also gazetted in June 2026

Category	New/Strengthened Subject
AI & Digital	Basics of Python Programming
	Machine Learning in Pharmaceutical Sciences
	AI Applications in Pharmaceutical Sciences

Category	New/Strengthened Subject
	AI in Clinical Applications
	Ethical & Translational Applications of AI
Data/Research	Applied Biostatistics & Data Analytics
	Biostatistics & Research Methodology
	Modern Analytical Techniques
Industry	Innovation & Startup Ecosystem
Biomedical	Industrial Pharmacognosy
	Industrial Pharmacy & Facility Design
	Pharmaceutical Automation
	Supply Chain Management
Advanced Pharmacy	Biomedicinal Chemistry
	Advanced Pharmacognosy
	Sterile Dosage Forms & NDDS
	PAT & QbD
	Computer-Aided Drug Design
Clinical/Regulatory	Pharmacovigilance
	Regulatory Affairs
	Clinical Pharmacotherapeutics
	Material Vigilance& Hemovigilance
Sustainability	Green Chemistry
	Environment & Sustainability
	Industrial Safety & Waste Management
Professional Development	Professional Skills
	Scientific Writing
	Entrepreneurship
	Mental Well-being

Important Change in Examination Pattern:-

Parameter	Old Syllabus	New 2026 Syllabus
Assessment philosophy	Internal + University examination	**Continuous assessment + Sessional + End-semester**
4-credit course	100 marks	40 internal + 60 external
3-credit course	100 marks commonly used for many theory subjects	30 internal + 45 external = 75

Parameter	Old Syllabus	New 2026 Syllabus
2/1-credit course	50 marks commonly used	20 internal + 30 external = 50
Internal assessment	Mainly sessional/internal marks	**Attendance + student-teacher interaction + academic activities + sessional exams**
Academic activities	Less formally integrated	Quiz, assignment, open-book test, field work, group discussion, seminar etc.
Question design	Conventional university pattern	**MCQ/objective + short answer + long answer**, linked with course/learning outcomes
Bloom's Taxonomy	Used in OBE practices by institutions	Explicitly incorporated into curriculum/assessment framework
Practical assessment	Conventional practical examination	Practical records, viva, synopsis, major/minor experiments and continuous assessment

S.No.	Document / Record	Status	Purpose
1	New B.Pharm 2026 Curriculum File	Essential	Master copy of PCI 2026 syllabus
2	Old vs New Syllabus Comparison Statement	Recommended	Demonstrates curriculum transition
3	Semester-wise Course Structure	Essential	Subjects, credits, theory/practical hours
4	Academic Calendar 2026–27	Essential	Semester, examination, internship and academic activities
5	Scheme of Teaching & Examination	Essential	Teaching hours, credits and assessment
6	Faculty Workload Statement – 2026 Curriculum	Essential	Maps faculty to new courses
7	Faculty–Subject Mapping	Essential	Shows faculty responsible for each subject
8	Course File for Every Subject	Essential	Documentation of course delivery
9	Course Outcome (CO) Statements	Essential	Learning outcomes for each course
10	CO–PO Mapping Matrix	Essential	Outcome-based education documentation

S.No.	Document / Record	Status	Purpose
11	PO/PSO Attainment Plan	Recommended	Assessment and attainment of programme outcomes
12	Bloom's Taxonomy Question Paper Blueprint	Essential	New assessment/question-paper framework
13	Internal Assessment Policy	Essential	Tests, assignments, seminars, quizzes etc.
14	Continuous Assessment Record	Essential	Evidence of student assessment throughout semester
15	Practical Assessment Scheme	Essential	Practical evaluation and rubrics
16	Student Academic Performance Register	Essential	Continuous academic record
17	Internship Policy/Guidelines	Essential	New internship implementation
18	Internship MoUs with Industry/Hospitals	Strongly recommended	Evidence of internship opportunities
19	Internship Logbook	Essential	Student internship documentation
20	Internship Evaluation Form	Essential	Industry/preceptor evaluation
21	Research Project Guidelines	Essential	Final-year research/project management
22	Project Allocation Register	Essential	Student–supervisor allocation
23	Project Evaluation Rubric	Recommended	Standardized project assessment
24	Research Ethics/Plagiarism Declaration	Recommended	Research integrity
25	Scientific Writing/Research Training Record	Recommended	Supports research-oriented curriculum
26	AI & Digital Pharmacy Training Plan	New/Recommended	AI, ML, Python and digital competencies
27	Python/Programming Laboratory Plan	New/Recommended	Implementation of Python component
28	Data Analytics Laboratory/Training Record	New/Recommended	Data analytics competency
29	AI/ML Software & Resource Inventory	Recommended	Demonstrates computational resources
30	Computer Laboratory Utilization Register	Recommended	Evidence of digital practical work
31	Modern Analytical Instrument Training Record	Recommended	Analytical techniques
32	CADD/Computational Drug Design Resource File	Recommended	If offered as elective/training
33	QbD/PAT Training File	Recommended	Advanced formulation/industrial education
34	Innovation & Entrepreneurship Cell File	Recommended	Startup/innovation activities
35	Industry Interaction File	Recommended	Industry lectures, visits, MoUs

S.No.	Document / Record	Status	Purpose
36	Professional Skills Training File	Recommended	Communication, leadership and professional development
37	Value Added Course (VAC) File	Recommended	VAC implementation
38	Skill Enhancement Course (SEC) File	Recommended	SEC implementation
39	Ability Enhancement Course (AEC) File	Recommended	AEC implementation
40	Elective Course Register	Essential	Student choice and elective allocation
41	Student Feedback on New Curriculum	Recommended	Curriculum review
42	Faculty Feedback on New Curriculum	Recommended	Implementation evaluation
43	Stakeholder Feedback Record	Recommended	Industry/alumni/student feedback
44	Academic Audit Report	Recommended	Internal monitoring
45	Curriculum Implementation Committee Minutes	Recommended	Evidence of institutional implementation
46	Board of Studies/Academic Council Approval Record	Important	University-level adoption, where applicable
47	Department Meeting Minutes	Essential	Evidence of departmental planning
48	Faculty Development Programme (FDP) Records	Strongly recommended	Faculty preparation for new subjects
49	New Laboratory Requirement Assessment	Important	Identifies additional equipment/resources
50	Library Resource Gap Analysis	Recommended	New books, e-resources and databases
51	E-Learning/Digital Resource Register	Recommended	Digital teaching resources
52	Student Mentoring Record	Recommended	Academic/professional mentoring
53	CO–PO Attainment Report	Essential after semester	Outcome assessment
54	Curriculum Review & Corrective Action Report	Recommended	Continuous improvement
55	Annual Curriculum Implementation Report	Recommended	Consolidated evidence for inspection/audit

Important New Files for 2026

The following deserve **special attention**, because the revised curriculum introduces/strengthens areas that were not prominent in the previous curriculum:

1. AI & Digital Pharmacy File

Prepare a separate file containing:

- AI in Pharmaceutical Sciences

- Machine Learning
- Python Programming
- Data Analytics
- AI in Clinical Applications
- Ethical considerations of AI
- Digital pharmaceutical technologies
- Software/resources available
- Faculty competency/training
- Student practical activities

The 2026 curriculum specifically incorporates emerging digital and AI-oriented learning, so this should be documented rather than simply listed in the timetable.

2. Internship File

- Internship policy
- List of eligible organizations
- MoUs
- Student allotment
- Attendance
- Internship logbook
- Daily/weekly activity record
- Industry supervisor evaluation
- Faculty evaluation
- Student report
- Certificate
- Final assessment

3. Research Project File

- Project guidelines
- Project titles
- Supervisor allocation
- Synopsis
- Ethical approval, where applicable
- Research methodology
- Progress reports
- Plagiarism report
- Dissertation/project report
- Presentation
- Evaluation sheet

4. CO–PO–PSO File

I strongly recommend maintaining one consolidated **OBE file** containing:

Course → CO → Bloom's Level → Assessment Method → PO/PSO Mapping → CO Attainment → PO Attainment → Corrective Action

This will be particularly useful for academic audits and inspections.

5. Faculty Development File

Because the new syllabus introduces areas such as AI, machine learning, Python, data analytics, modern analytical techniques, innovation, entrepreneurship and advanced pharmaceutical technologies, maintain evidence that faculty are being prepared to teach these areas.

Include:

- FDP certificates
- Workshops, Webinars
- Training programmes
- Expert lectures
- Faculty competency matrix
- Department-wise training plan

PCI has also established a faculty dashboard and continues to issue institutional/faculty-related notices,

so keeping faculty documentation systematically is advisable.

R References

- Pharmacy Council of India. (2026). Syllabus Bachelor of Pharmacy (B.Pharm) (2026): As per NEP 2020. New Delhi: Pharmacy Council of India, Ministry of Health & Family Welfare, Government of India.