

DIPLOMA IN PHARMACY FIRST YEAR

Academic Year: 2025–2026

Academic Period: 03 November 2025 – 20 May 2026

Prepared as per: PCI Education Regulations–2020 & HSBTE Academic Calendar

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INSTITUTIONAL & ACADEMIC DETAILS

- **Program:** Diploma in Pharmacy
- **Regulations:** ER-2020
- **Affiliating Authority:** Haryana State Board of Technical Education
- **Semester Covered:** First Year
- **Teaching Scheme:** 3 Hours Theory + 3 Hours Tutorial + 3 Hours Practical per subject per week

ACADEMIC CALENDAR SUMMARY

Phase	Period	Academic Activity
Phase I	03 Nov – 10 Jan 2026	Core teaching (all subjects)
Phase II	11 Jan – 16 Mar 2026	Revision & Sessional Test–I
Phase III	18 Jan – 15 Mar 2026	Continued syllabus coverage
Phase IV	16 Mar – 22 Mar 2026	Sessional Test–II
Phase V	23 Mar – 25 Apr 2026	Remaining syllabus & practical completion
Phase VI	26 Apr – 10 May 2026	Final revision
Phase VII	11 May – 17 May 2026	Sessional Test–III
Phase VIII	18 May – 20 May 2026	Academic closure & record submission

COMPLIANCE STATEMENT

The lesson plan document has been prepared and implemented in accordance with:

- Pharmacy Council of India – Education Regulations 2020 (ER-2020)
- Approved Institutional Academic Calendar

Instructional hours affected due to gazetted holidays were compensated through tutorial adjustments and extended or clubbed practical sessions, ensuring completion of the prescribed syllabus.

PHARMACEUTICS LESSON PLAN

Subject Code: ER20-11T

Lesson Plan Duration: 03 November 2025 – 20 May 2026

Weekly Load: Theory – 3 hrs | Tutorial – 3 hrs | Practical – 3 hrs

THEORY & TUTORIAL LESSON PLAN

Week	Date Range	Theory Topics	Tutorial / Activity
1	03–08 Nov 2025	Introduction to Pharmaceutics, scope, sources of drugs, dosage forms & routes	Discussion on dosage forms
2	10–15 Nov 2025	Classification of dosage forms, advantages & disadvantages	MCQs / short notes
3	17–22 Nov 2025	Prescription: definition, parts, handling	Prescription interpretation
4	24–29 Nov 2025	Posology: factors affecting dose	Numerical problems
5	01–06 Dec 2025	Posology: paediatric & geriatric dose calculation	Practice exercises
6	08–13 Dec 2025	Weights & Measures: imperial, metric, apothecary	Conversion problems
7	15–20 Dec 2025	Pharmaceutical calculations: percentage, dilution, alligation	Problem solving
8	22–27 Dec 2025	Isotonic solutions, displacement value	Worked examples
9	05–10 Jan 2026	Introduction to powders, classification & advantages	Case discussion
10	12–17 Jan 2026	SESSIONAL TEST – I	Test discussion
11	19–24 Jan 2026	Divided & bulk powders, dusting powders	Labeling practice
12	26–31 Jan 2026	Granules: methods of preparation & advantages	Flow property numericals
13	02–07 Feb 2026	Solutions: definition, classification, vehicles & additives	Formulation discussion
14	09–14 Feb 2026	Syrups: preparation, types	Comparison tables
15	16–21 Feb 2026	Elixirs & linctuses	Viva-style Q&A
16	23–28 Feb 2026	Suspensions: formulation & stability	Numerical problems
17	02–07 Mar 2026	Emulsions: types & emulsifying agents	Case studies
18	09–14 Mar 2026	Suppositories: bases & methods	Calculations
19	16–21 Mar 2026	SESSIONAL TEST – II	Test review
20	23–28 Mar 2026	Ointments: bases & preparation	Base selection
21	30 Mar–04 Apr 2026	Creams, gels & pastes	Comparative study
22	06–11 Apr 2026	Capsules & tablets – introduction	Viva questions
23	13–18 Apr 2026	Packaging of pharmaceuticals	Label exercises
24	20–25 Apr 2026	Storage of dosage forms	Stability discussion

Week	Date Range	Theory Topics	Tutorial / Activity
25	27 Apr–02 May 2026	Incompatibilities	Prescription-based cases
26	04–09 May 2026	Final revision	Doubt clearing
27	11–16 May 2026	SESSIONAL TEST – III	Evaluation
28	18–20 May 2026	Final revision & exam orientation	Model paper discussion

PRACTICAL LESSON PLAN

Week	Date Range	Practical Exercise
1	03–08 Nov 2025	Lab introduction, apparatus & safety
2	10–15 Nov 2025	Weighing & measuring techniques
3	17–22 Nov 2025	Preparation of simple solutions
4	24–29 Nov 2025	Preparation of syrups
5	01–06 Dec 2025	Preparation of elixirs
6	08–13 Dec 2025	Preparation of suspensions
7	15–20 Dec 2025	Preparation of emulsions
8	22–27 Dec 2025	Preparation of divided powders
9	05–10 Jan 2026	Preparation of ointments
10	12–17 Jan 2026	Practical Sessional – I
11	19–24 Jan 2026	Preparation of creams
12	26–31 Jan 2026	Preparation of gels
13	02–07 Feb 2026	Preparation of suppositories
14	09–14 Feb 2026	Prescription handling & dispensing
15	16–21 Feb 2026	Record completion
16	23–28 Feb 2026	Advanced dispensing: powder & liquid dosage forms
17	02–07 Mar 2026	Advanced dispensing: suspensions & emulsions
18	09–14 Mar 2026	Dispensing practice based on prescriptions
19	16–21 Mar 2026	Practical Sessional – II
20	23–28 Mar 2026	Record writing & correction
21	30 Mar–04 Apr 2026	Revision of solutions, syrups & elixirs
22	06–11 Apr 2026	Revision of ointments, creams & gels
23	13–18 Apr 2026	Revision of suspensions & emulsions
24	20–25 Apr 2026	Mock practical & viva practice
25	27 Apr–02 May 2026	Final record submission & internal assessment
26	04–09 May 2026	Practical revision
27	11–16 May 2026	Practical Sessional – III

PHARMACEUTICAL CHEMISTRY LESSON PLAN

Subject Code: ER20-12T

Lesson Plan Duration: 03 November 2025 – 20 May 2026

Weekly Load: Theory – 3 hrs | Tutorial – 3 hrs | Practical – 3 hrs

THEORY & TUTORIAL LESSON PLAN

Week	Date Range	Theory Topics	Tutorial / Activity
1	03–08 Nov 2025	Introduction to Pharmaceutical Chemistry, role of chemist, sources of drugs	Orientation & syllabus discussion
2	10–15 Nov 2025	Atomic structure, electronic configuration	Numericals
3	17–22 Nov 2025	Chemical bonding, hybridization	Problem solving
4	24–29 Nov 2025	Acids, bases & buffers	Buffer calculations
5	01–06 Dec 2025	pH, pKa & Henderson equation	Numerical exercises
6	08–13 Dec 2025	Isomerism: structural & stereoisomerism	Models & examples
7	15–20 Dec 2025	Organic reaction mechanisms	Reaction mapping
8	22–27 Dec 2025	Functional groups & nomenclature	Practice problems
9	05–10 Jan 2026	Hydrocarbons: alkanes & alkenes	Reaction exercises
10	12–17 Jan 2026	SESSIONAL TEST – I	Paper discussion
11	19–24 Jan 2026	Aromatic hydrocarbons	MCQs
12	26–31 Jan 2026	Alcohols & phenols	Comparative charts
13	02–07 Feb 2026	Aldehydes & ketones	Reaction mechanisms
14	09–14 Feb 2026	Carboxylic acids & derivatives	Numerical & theory
15	16–21 Feb 2026	Amines	Structure–activity discussion
16	23–28 Feb 2026	Alkyl halides	Mechanism-based problems
17	02–07 Mar 2026	Introduction to inorganic pharmaceuticals	Classification
18	09–14 Mar 2026	Antacids & gastrointestinal agents	Case-based learning
19	16–21 Mar 2026	SESSIONAL TEST – II	Evaluation
20	23–28 Mar 2026	Electrolytes & replacement therapy	Problem solving
21	30 Mar–04 Apr 2026	Topical agents	Formulation linkage
22	06–11 Apr 2026	Expectorants & emetics	Clinical relevance
23	13–18 Apr 2026	Pharmaceutical aids	Viva preparation
24	20–25 Apr 2026	Revision (organic + inorganic)	Model questions
25	27 Apr–02 May 2026	Complete syllabus revision	Doubt clearing
26	04–09 May 2026	Final revision	Mock test
27	11–16 May 2026	SESSIONAL TEST – III	Answer review
28	18–20 May 2026	Academic wrap-up	Exam orientation

PRACTICAL LESSON PLAN

Week	Date Range	Practical Exercise
1	03–08 Nov 2025	Introduction to lab, safety & glassware
2	10–15 Nov 2025	Preparation of standard solutions
3	17–22 Nov 2025	Acid–base titrations
4	24–29 Nov 2025	Redox titrations
5	01–06 Dec 2025	Limit tests – chloride
6	08–13 Dec 2025	Limit tests – sulphate
7	15–20 Dec 2025	Assay of antacids
8	22–27 Dec 2025	Assay of inorganic compounds
9	05–10 Jan 2026	Identification tests – acids
10	12–17 Jan 2026	Practical Sessional – I
11	19–24 Jan 2026	Identification tests – bases
12	26–31 Jan 2026	Identification tests – salts
13	02–07 Feb 2026	Buffer preparation & pH measurement
14	09–14 Feb 2026	Assay of pharmaceutical aids
15	16–21 Feb 2026	Record completion
16	23–28 Feb 2026	Advanced titration practice
17	02–07 Mar 2026	Assay calculations & error analysis
18	09–14 Mar 2026	Record writing & corrections
19	16–21 Mar 2026	Practical Sessional – II
20	23–28 Mar 2026	Revision of titrations
21	30 Mar–04 Apr 2026	Revision of assays
22	06–11 Apr 2026	Mock practical
23	13–18 Apr 2026	Viva practice
24	20–25 Apr 2026	Final record submission
25	27 Apr–02 May 2026	Internal practical assessment
26	04–09 May 2026	Practical revision
27	11–16 May 2026	Practical Sessional – III

PHARMACOGNOSY LESSON PLAN

Subject Code: ER20-13T

Lesson Plan Duration: 03 November 2025 – 20 May 2026

Weekly Load: Theory – 3 hrs | Tutorial – 3 hrs | Practical – 3 hrs

THEORY & TUTORIAL LESSON PLAN

Week	Date Range	Theory Topics	Tutorial / Activity
1	03–08 Nov 2025	Introduction to Pharmacognosy, history & scope	Orientation, syllabus discussion
2	10–15 Nov 2025	Classification of crude drugs	Charts & examples
3	17–22 Nov 2025	Cultivation of medicinal plants	Case discussion
4	24–29 Nov 2025	Collection, drying & storage of crude drugs	Flow diagrams
5	01–06 Dec 2025	Quality control of crude drugs	Adulteration examples
6	08–13 Dec 2025	Plant tissue culture & biotechnological aspects	Short notes
7	15–20 Dec 2025	Carbohydrates: classification & sources	Source identification
8	22–27 Dec 2025	Glycosides: introduction & classification	Structure discussion
9	05–10 Jan 2026	Glycosides: cardiac & anthraquinone	Comparative tables
10	12–17 Jan 2026	SESSIONAL TEST – I	Paper discussion
11	19–24 Jan 2026	Tannins	MCQs & examples
12	26–31 Jan 2026	Volatile oils	Identification tests
13	02–07 Feb 2026	Resins & resin combinations	Viva preparation
14	09–14 Feb 2026	Alkaloids: introduction & classification	Source-based Q&A
15	16–21 Feb 2026	Alkaloids: therapeutic uses	Case linkage
16	23–28 Feb 2026	Lipids & fixed oils	Comparison charts
17	02–07 Mar 2026	Proteins & enzymes	Short answers
18	09–14 Mar 2026	Vitamins & hormones (natural sources)	Tables & uses
19	16–21 Mar 2026	SESSIONAL TEST – II	Evaluation
20	23–28 Mar 2026	Natural allergens & toxic plants	Safety discussion
21	30 Mar–04 Apr 2026	Herbal cosmetics	Market samples
22	06–11 Apr 2026	Herbal drugs used in GIT disorders	Therapeutic mapping
23	13–18 Apr 2026	Herbal drugs used in respiratory disorders	Case studies
24	20–25 Apr 2026	Adulteration & evaluation techniques	Problem solving
25	27 Apr–02 May 2026	Complete syllabus revision	Doubt clearing
26	04–09 May 2026	Final revision	Mock test
27	11–16 May 2026	SESSIONAL TEST – III	Review
28	18–20 May 2026	Academic wrap-up	Exam orientation

PRACTICAL LESSON PLAN

Week	Date Range	Practical Exercise
1	03–08 Nov 2025	Introduction to Pharmacognosy lab, microscopy
2	10–15 Nov 2025	Morphological study of leaves
3	17–22 Nov 2025	Morphological study of roots & rhizomes
4	24–29 Nov 2025	Morphological study of barks & woods
5	01–06 Dec 2025	Morphological study of flowers & fruits
6	08–13 Dec 2025	Microscopy of starch & fibres
7	15–20 Dec 2025	Microscopy of calcium oxalate crystals
8	22–27 Dec 2025	Chemical tests for carbohydrates
9	05–10 Jan 2026	Chemical tests for glycosides
10	12–17 Jan 2026	Practical Sessional – I
11	19–24 Jan 2026	Chemical tests for tannins
12	26–31 Jan 2026	Chemical tests for alkaloids
13	02–07 Feb 2026	Chemical tests for volatile oils
14	09–14 Feb 2026	Chemical tests for fixed oils
15	16–21 Feb 2026	Record Completion
16	23–28 Feb 2026	Microscopy of leaf constants
17	02–07 Mar 2026	Quantitative microscopy
18	09–14 Mar 2026	Record writing & corrections
19	16–21 Mar 2026	Practical Sessional – II
20	23–28 Mar 2026	Revision of morphology
21	30 Mar–04 Apr 2026	Revision of microscopy
22	06–11 Apr 2026	Mock practical
23	13–18 Apr 2026	Viva practice
24	20–25 Apr 2026	Final record submission
25	27 Apr–02 May 2026	Internal assessment
26	04–09 May 2026	Practical revision
27	11–16 May 2026	Practical Sessional – III

HUMAN ANATOMY & PHYSIOLOGY LESSON PLAN

Subject Code: ER20-14T

Lesson Plan Duration: 03 November 2025 – 20 May 2026

Weekly Load: Theory – 3 hrs | Tutorial – 3 hrs | Practical – 3 hrs

THEORY & TUTORIAL LESSON PLAN

Week	Date Range	Theory Topics	Tutorial / Activity
1	03–08 Nov 2025	Introduction to human body, levels of organization, homeostasis	Orientation & syllabus briefing
2	10–15 Nov 2025	Cell structure & functions	Diagrams & labeling
3	17–22 Nov 2025	Tissues: epithelial & connective	Identification exercises
4	24–29 Nov 2025	Tissues: muscular & nervous	Comparative tables
5	01–06 Dec 2025	Skeletal system: bones & joints	Charts & models
6	08–13 Dec 2025	Muscular system	Movement analysis
7	15–20 Dec 2025	Blood: composition & functions	Numerical problems
8	22–27 Dec 2025	Cardiovascular system: heart & circulation	Case discussion
9	05–10 Jan 2026	Lymphatic system	Flow diagrams
10	12–17 Jan 2026	SESSIONAL TEST – I	Answer discussion
11	19–24 Jan 2026	Respiratory system	Breathing mechanics
12	26–31 Jan 2026	Digestive system	Enzyme mapping
13	02–07 Feb 2026	Nervous system	Reflex arc analysis
14	09–14 Feb 2026	Endocrine system	Hormone tables
15	16–21 Feb 2026	Urinary system	Clinical correlations
16	23–28 Feb 2026	Reproductive system	Health education
17	02–07 Mar 2026	Special senses	Diagram practice
18	09–14 Mar 2026	Skin & body temperature regulation	Short answers
19	16–21 Mar 2026	SESSIONAL TEST – II	Evaluation
20	23–28 Mar 2026	Immune system	Case studies
21	30 Mar–04 Apr 2026	Metabolism & nutrition	BMI calculations
22	06–11 Apr 2026	Body fluids & electrolytes	Numerical problems
23	13–18 Apr 2026	Pathophysiology: basic concepts	Case linkage
24	20–25 Apr 2026	Revision of systems	Doubt clearing
25	27 Apr–02 May 2026	Complete syllabus revision	Model questions
26	04–09 May 2026	Final revision	Mock test
27	11–16 May 2026	SESSIONAL TEST – III	Review
28	18–20 May 2026	Academic wrap-up	Exam orientation

PRACTICAL LESSON PLAN

Week	Date Range	Practical Exercise
1	03–08 Nov 2025	Introduction to lab, instruments & safety
2	10–15 Nov 2025	Study of microscope
3	17–22 Nov 2025	Identification of tissues (slides)
4	24–29 Nov 2025	Study of bones
5	01–06 Dec 2025	Study of joints
6	08–13 Dec 2025	Study of skeletal muscles
7	15–20 Dec 2025	Hemoglobin estimation
8	22–27 Dec 2025	Blood grouping
9	05–10 Jan 2026	Practical Sessional – I
10	12–17 Jan 2026	Measurement of blood pressure
11	19–24 Jan 2026	Study of heart sounds
12	26–31 Jan 2026	Spirometry & lung volumes
13	02–07 Feb 2026	Study of digestive enzymes
14	09–14 Feb 2026	Reflexes & nervous system tests
15	16–21 Feb 2026	Record Completion
16	23–28 Feb 2026	Urine analysis
17	02–07 Mar 2026	BMI & anthropometric measurements
18	09–14 Mar 2026	Record writing & corrections
19	16–21 Mar 2026	Practical Sessional – II
20	23–28 Mar 2026	Revision of hematology experiments
21	30 Mar–04 Apr 2026	Revision of physiology experiments
22	06–11 Apr 2026	Mock practical
23	13–18 Apr 2026	Viva practice
24	20–25 Apr 2026	Final record submission
25	27 Apr–02 May 2026	Internal assessment
26	04–09 May 2026	Practical revision
27	11–16 May 2026	Practical Sessional – III

SOCIAL PHARMACY LESSON PLAN

Subject Code: ER20-15T

Lesson Plan Duration: 03 November 2025 – 20 May 2026

Weekly Load: Theory – 3 hrs | Tutorial – 3 hrs | Practical – 3 hrs

THEORY & TUTORIAL LESSON PLAN

Week	Date Range	Theory Topics	Tutorial / Activity
1	03–08 Nov 2025	Introduction to Social Pharmacy: concept, scope & objectives	Orientation, role of pharmacist
2	10–15 Nov 2025	Health & disease: concepts, indicators	Case discussion
3	17–22 Nov 2025	Determinants of health	Community examples
4	24–29 Nov 2025	Levels of healthcare: primary, secondary, tertiary	Flow charts
5	01–06 Dec 2025	National health policy – overview	Policy discussion
6	08–13 Dec 2025	National Health Mission	Program mapping
7	15–20 Dec 2025	Reproductive & Child Health (RCH) Programme	Case-based learning
8	22–27 Dec 2025	National programmes for communicable diseases	Charts & MCQs
9	05–10 Jan 2026	National programmes for non-communicable diseases	Group discussion
10	12–17 Jan 2026	SESSIONAL TEST – I	Test discussion
11	19–24 Jan 2026	Immunization programmes	Schedule practice
12	26–31 Jan 2026	Family welfare programmes	Problem solving
13	02–07 Feb 2026	Nutrition & balanced diet	Menu planning
14	09–14 Feb 2026	Demography & vital statistics	Numerical exercises
15	16–21 Feb 2026	Health education: principles & methods	Role play
16	23–28 Feb 2026	Primary healthcare & community pharmacy	Field linkage
17	02–07 Mar 2026	Pharmacist in public health	Case studies
18	09–14 Mar 2026	Drug abuse & social problems	Awareness activities
19	16–21 Mar 2026	SESSIONAL TEST – II	Evaluation
20	23–28 Mar 2026	Health legislation – overview	Discussion
21	30 Mar–04 Apr 2026	Drug pricing & DPCO	Case problems
22	06–11 Apr 2026	Consumer protection & patient rights	Mock complaint drafting
23	13–18 Apr 2026	Pharmacovigilance	ADR reporting
24	20–25 Apr 2026	Ethics in pharmacy practice	Case scenarios
25	27 Apr–02 May 2026	Complete syllabus revision	Doubt clearing

Week	Date Range	Theory Topics	Tutorial / Activity
26	04–09 May 2026	Final revision	Mock test
27	11–16 May 2026	SESSIONAL TEST – III	Review
28	18–20 May 2026	Academic wrap-up	Exam orientation

PRACTICAL / ACTIVITY LESSON PLAN

Week	Date Range	Practical / Activity
1	03–08 Nov 2025	Introduction to Social Pharmacy practicals
2	10–15 Nov 2025	Health survey questionnaire design
3	17–22 Nov 2025	Community health survey (planning)
4	24–29 Nov 2025	Health survey data collection
5	01–06 Dec 2025	Health survey data analysis
6	08–13 Dec 2025	Nutrition assessment
7	15–20 Dec 2025	Health education material preparation
8	22–27 Dec 2025	Immunization schedule study
9	05–10 Jan 2026	Practical Sessional – I
10	12–17 Jan 2026	Awareness programme planning
11	19–24 Jan 2026	Awareness programme execution
12	26–31 Jan 2026	Report writing
13	02–07 Feb 2026	Demographic data analysis
14	09–14 Feb 2026	Drug abuse awareness activity
15	16–21 Feb 2026	Record completion
16	23–28 Feb 2026	Case studies on health legislation
17	02–07 Mar 2026	Pharmacovigilance reporting exercise
18	09–14 Mar 2026	Record writing & corrections
19	16–21 Mar 2026	Practical Sessional – II
20	23–28 Mar 2026	Revision of community activities
21	30 Mar–04 Apr 2026	Mock practical
22	06–11 Apr 2026	Viva practice
23	13–18 Apr 2026	Final record submission
24	20–25 Apr 2026	Internal assessment
25	27 Apr–02 May 2026	Field visit / extension activity
26	04–09 May 2026	Practical revision
27	11–16 May 2026	Practical Sessional – III