# DR. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY, UTTAR PRADESH, LUCKNOW



# UPDATED ORDINANCE RULES AND REGULATIONS

FOR of Pharm

Bachelor of Pharmacy B. PHARM.

(Effective from the Session: 2019-20)

## **REGULATIONS & ORDINANCE**

#### 1. Short Title and Commencement

These regulations shall be called as "The Revised Regulations for the B. Pharm. Degree Program (CBSS) of the Pharmacy Council of India, New Delhi". They shall come into effect from the Academic Year 2019-20. The regulations framed are subject to modifications from time to time by Pharmacy Council of India.

## 2. Minimum qualification for admission

#### 2.1 First year B. Pharm:

Candidate shall have passed 10+2 examination conducted by the respective state/central government authorities recognized as equivalent to 10+2 examination by the Association of Indian Universities (AIU) with English as one of the subjects and Physics, Chemistry, Mathematics (P.C.M.) and or Biology (P.C.B. / P.C.M.B.) as optional subjects individually. 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):

A pass 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 program

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 program shall be modified as prescribed from time to time by Pharmacy Council of India, New Delhi.

#### 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 working days as per AKTU norms. 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.

#### 6. Attendance and progress

A candidate is required to put in at least 80% attendance in individual courses considering theory and practical separately. The candidate shall complete the prescribed course satisfactorily to be eligible to appear for the respective examinations.

#### 7. Program/Course credit structure

As per the philosophy of Credit Based Semester System, 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 Laboratory courses

Courses are broadly classified as Theory and Practical. Theory courses consist of lecture (L) and Practical (P) courses consist of hours spent in the laboratory. Credits (C) for a course is dependent on the number of hours of instruction per week in that course, and is obtained by using a multiplier of one (1) for lecture hours, and a multiplier of half (1/2) for practical (laboratory) hours. Thus, for example, a theory course having three lectures per week throughout the semester carries a credit of 4. Similarly, a practical having four laboratory hours per week throughout semester carries a credit of 2.

#### 7.2. Minimum credit requirements

The minimum credit points required for award of a B. Pharm. degree is 224/225. These credits are divided into Theory courses, Practical, Practice School and Project over the duration of eight semesters. The credits are distributed semester-wise as shown in Table IX. Courses generally progress in sequences, building competencies and their positioning indicates certain 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 get 52 credit points transferred from their D. Pharm. program. Such students shall take up additional remedial courses of 'Communication Skills' (Theory and Practical) and 'Computer Applications in Pharmacy' (Theory and Practical) equivalent to 3 and 4 credit points respectively, a total of 7 credit points to attain 59 credit points, the maximum of I and II semesters.

## 8. Academic work

A regular record of attendance both in Theory and Practical 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 Table – I to VIII. The number of hours to be devoted to each theory and practical course in any semester shall not be less than that shown in Table – I to VIII.

Table-I: Course of study for Semester I

Course code	Name of the course	No. of hours	Credit points
BP101T	Human Anatomy and Physiology I- Theory	4	4
BP102T	Pharmaceutical Analysis I – Theory	4	4
BP103T	Pharmaceutics I – Theory	4	4
BP104T	Pharmaceutical Inorganic Chemistry- Theory	4	4
BP105T	Communication skills – Theory	2	2
BP106RBT BP106RMT	Remedial Biology/ Remedial Mathematics – Theory	2	2
BP107P	Human Anatomy and Physiology- Practical	4	2
BP108P	Pharmaceutical Analysis I – Practical	4	2
BP109P	Pharmaceutics I – Practical	4	2
BP110P	Pharmaceutical Inorganic Chemistry— Practical	4	2
BP111P	Communication skills – Practical	2	1
BP112RBP	Remedial Biology – Practical	2	1
	Total	38 <sup>\$</sup> /40 <sup>#</sup>	29 <sup>\$</sup> /30 <sup>#</sup>

<sup>\*</sup>Applicable ONLY for the students who have studied Mathematics/ Physics/ Chemistry at HSC and appearing for Remedial Biology (RB) course.

<sup>\$</sup>Applicable ONLY for the students who have studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics (RM) course.

Table-II: Course of study for Semester II

Course Code	Name of the course	No. of hours	Credit points
BP201T	Human Anatomy and Physiology II - Theory	4	4
BP202T	Pharmaceutical Organic Chemistry I – Theory	4	4
BP203T	Biochemistry – Theory	4	4
BP204T	04T Pathophysiology- Theory		4
BP205T	Computer Applications in Pharmacy – Theory		3
BP206T	Environmental sciences – Theory	3	3
BP207P	Human Anatomy and Physiology II – Practical	4	2
BP208P	Pharmaceutical Organic Chemistry I– Practical	4	2
BP209P	P209P Biochemistry – Practical		2
BP210P	BP210P Computer Applications in Pharmacy – Practical		1
	Tota	36	29

Table-III: Course of study for Semester III\*

Course code	Name of the course	No. of hours	Credit points
BP301T	Pharmaceutical Organic Chemistry II – Theory	4	4
BP302T	Physical Pharmaceutics I – Theory	4	4
BP303T	Pharmaceutical Microbiology – Theory	4	4
BP304T	Pharmaceutical Engineering – Theory	4	4
BP305P	Pharmaceutical Organic Chemistry II – Practical	4	2
BP306P	Physical Pharmaceutics I – Practical	4	2
BP307P	Pharmaceutical Microbiology- Practical	4	2
BP308P	Pharmaceutical Engineering – Practical	4	2
KVE301	CVE301 Universal Human Values and Professional Ethics**		3
	Total	35	27

<sup>\*</sup>The lateral entry students taking admission directly to second year shall compulsorily appear for and pass the Communications Skill Subject Examination in the Third Semester.

<sup>\*\*</sup>Human values & Professional Ethics will be offered as a **compulsory course** for which passing marks shall be 30% in End Semester Examination and 40% in aggregate.

Table-IV: Course of study for Semester IV\*

Course code	Name of the course	No. of hours	Credit points
BP401T	Pharmaceutical Organic Chemistry III- Theory	4	4
BP402T	Medicinal Chemistry I – Theory	4	4
BP403T	P403T Physical Pharmaceutics II – Theory		4
BP404T	Pharmacology I – Theory	4	4
BP405T	Pharmacognosy and Phytochemistry I– Theory	4	4
BP406P	Medicinal Chemistry I – Practical	4	2
BP407P	Physical Pharmaceutics II – Practical	4	2
BP408P	BP408P Pharmacology I – Practical		2
BP409P	Pharmacognosy and Phytochemistry I – Practical		2
	Total	36	28

<sup>\*</sup>The lateral entry students taking admission directly to second year shall compulsorily appear for and pass the Computer Applications in Pharmacy Subject Examination in the Fourth Semester.

Table-V: Course of study for Semester V

Course code	Name of the course		No. of hours	Credit points
BP501T	Medicinal Chemistry II – Theory		4	4
BP502T	Industrial Pharmacy I – Theory		4	4
BP503T	Pharmacology II – Theory	4	4	
BP504T	Pharmacognosy and Phytochemistry II- Theory			4
BP505T	Pharmaceutical Jurisprudence – Theory		4	4
BP506P	Industrial Pharmacy I – Practical		4	2
BP507P	Pharmacology II – Practical		4	2
BP508P	Pharmacognosy and Phytochemistry II – Practical		4	2
BP509P	BP509P Report on Hospital Training-I		-	2
		Total	32	28

Table-VI: Course of study for Semester VI

Course code	Name of the course	No. of hours	Credit points
BP601T	Medicinal Chemistry III – Theory	4	4
BP602T	Pharmacology III - Theory	4	4
BP603T	Herbal Drug Technology – Theory	4	4
BP604T	Biopharmaceutics and Pharmacokinetics – Theory	4	4
BP605T	Pharmaceutical Biotechnology- Theory	4	4
BP606T	Quality Assurance – Theory	4	4
BP607P	Medicinal chemistry III – Practical	4	2
BP608P	Pharmacology III – Practical	4	2
BP609P	Herbal Drug Technology – Practical	4	2
BP610P	Report on Industrial Training		2
	Total	36	32

Table-VII: Course of study for Semester VII

Course code	Name of the course		Credit points
BP701T	Instrumental Methods of Analysis – Theory	4	4
BP702T	Industrial Pharmac y II – Theory	4	4
BP703T	PharmacyPractice – Theory	4	4
BP704T	Novel Drug Delivery System (NDDS) – Theory	4	4
BP705P	Instrumental Methods of Analysis/NDDS - Practical	4	2
BP706PS	Practice School	12	6
BP710P	BP710P Report on Hospital Training-II		2
	Total	32	26

Table-VIII: Course of study for Semester VIII

Course code	Name of the course	No. of hours	Credit points	
BP801T	Biostatistics and Research Methodology	4	4	
BP802T	Social and Preventive Pharmacy	4	4	
BP803ET	Pharma Marketing Management			
BP804ET	Pharmaceutical Regulatory Science			
BP805ET	Pharmacovigilance			
BP806ET	Quality Control and Standardization of Herbals			
BP807ET	Computer Aided Drug Design	4 + 4 = 8	4 + 4 = 8	
BP808ET	Cell and Molecular Biology			
BP809ET	Cosmetic Science			
BP810ET	Experimental Pharmacology			
BP811ET	Advanced Instrumentation Techniques			
BP812ET	Dietary Supplements and Nutraceuticals			
BP813ET	Pharmaceutical Product Development			
BP814ET	LSSSDC Elective			
BP815PW	Project Work	12	6	
BP816P	Report on Industrial Tour	-	2	
	Total	28	24	

**Table-IX: Semester wise credits distribution** 

Semester	Credit Points
I	29 <sup>3</sup> /30 <sup>#</sup>
II	29
III	27
IV	28
V	28
VI	32
VII	26
VIII	24
Extracurricular/ Co curricular activities	01*
Total credit points for the program	224 <sup>\$</sup> /225 <sup>#</sup>

<sup>\*</sup>The credit points assigned for extracurricular and/or co-curricular activities shall be given by the Principals of the colleges and the same shall be submitted to the University. The criteria to acquire this credit point shall be defined by the colleges from time to time.

<sup>\$</sup>Applicable ONLY for the students studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics course.

<sup>&</sup>lt;sup>#</sup>Applicable ONLY for the students studied Mathematics / Physics / Chemistry at HSC and appearing for Remedial Biology course.

## 10. Program Committee

- 1. The B. Pharm. program shall have a Program Committee constituted by the Head of the institution in consultation with all the Heads of the departments.
- 2. The composition of the Program Committee shall be as follows:

A senior teacher shall be the Chairperson; One Teacher from each department handling B. Pharm. courses; and four student representatives of the program (one from each academic year), nominated by the Head of the institution.

- 3. Duties of the Program Committee:
  - i. Periodically reviewing the progress of the classes.
  - ii. Discussing the problems concerning curriculum, syllabus and the conduct of classes.
  - iii. Discussing with the course teachers on the nature and scope of assessment for the course and the same shall be announced to the students at the beginning of respective semesters.
  - iv. Communicating its recommendation to the Head of the institution on academic matters
  - v. The Program Committee shall meet at least thrice in a semester preferably at the end of each Sessional exam (Internal Assessment) and before the end semester exam.

#### 11. Examinations/Assessments

The scheme for internal assessment and end semester examinations is given in Table -X.

#### 11.1. 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: Schemes For Internal Assessments And End Semester Examinations Semester Wise Semester I

Course		Continuous	Int	ernal Assessm	nent	End Se	emester	Total	
Code	Name of the Course	Mode	Session	al Exams	Total	Mar	Duration	Marks	
			Marks	Duration	10001	ks	2 41441011		
BP101T	Human Anatomy and Physiology– Theory	10	15	1 Hr	25	75	3 Hrs	100	
BP102T	Pharmaceutical Analysis I  - Theory	10	15	1 Hr	25	75	3 Hrs	100	
BP103T	Pharmaceutics I – Theory	10	15	1 Hr	25	75	3 Hrs	100	
BP104T	Pharmaceutical Inorganic Chemistry– Theory	10	15	1 Hr	25	75	3 Hrs	100	
BP105T	Communication Skills – Theory	20	30	2 Hr	50			50	
BP106RBT BP106RMT	Remedial Biology/ Mathematics – Theory	20	30	2 Hr	50			50	
BP107P	Human Anatomy and Physiology  – Practical	5	10	4 Hrs	15	35	4 Hrs	50	
BP108P	Pharmaceutical Analysis I  — Practical	5	10	4 Hrs	15	35	4 Hrs	50	
BP109P	Pharmaceutics I – Practical	5	10	4 Hrs	15	35	4 Hrs	50	
BP110P	Pharmaceutical Inorganic Chemistry– Practical	5	10	4 Hrs	15	35	4 Hrs	50	
BP111P	Communication Skills – Practical	10	15	2 Hrs	25			25	
BP112RBP	Remedial Biology– Practical	10	15	2 Hrs	25			25	
	Total	110 <sup>3</sup> /120 <sup>#</sup>	175 <sup>5</sup> / 190 <sup>#</sup>	26 <sup>3</sup> /28 <sup>#</sup> Hrs	285 <sup>3</sup> /310 <sup>#</sup>	440#	28 <sup>#</sup> Hrs	$725^{3}/750^{\#}$	

<sup>\*</sup>Applicable ONLY for the students who have studied Mathematics/ Physics/ Chemistry at HSC and appearing for Remedial Biology (RB) course. 
SApplicable ONLY for the students who have studied Physics/ Chemistry/ Botany/ Zoology at HSC and appearing for Remedial Mathematics (RM) course.

# Semester II

Course		Internal Assessment				End Semester Exams		Total
Code	Name of the Course	Continuous	Sessiona	al Exams	Total	Marks	Duration	Marks
		Mode	Marks	Duration	10141	IVIUI KS	Duration	
BP201T	Human Anatom y and Physiology II  - Theor y	10	15	1 Hr	25	75	3 Hrs	100
BP202T	Pharmaceutical Organic Chemistry I  - Theory	10	15	1 Hr	25	75	3 Hrs	100
BP203T	Biochemistry- Theory	10	15	1 Hr	25	75	3 Hrs	100
BP204T	Pathophysiology-Theory	10	15	1 Hr	25	75	3 Hrs	100
BP205T	Computer Applications in Pharmacy— Theory	25	50	2 Hr	75			75
BP206T	Environmental Sciences – Theory	25	50	2 Hr	75			75
BP207P	Human Anatomy and Physiology II  – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP208P	Pharmaceutical Organic Chemistry I  — Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP209P	Biochemistry-Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP210P	Computer Applications in Pharmacy  — Practical	10	15	2 Hrs	25			25
	Total	115	205	22Hrs	320	405	24 Hrs	725

# **Semester III\***

Course			Internal Ass	essment		End Semes	Total	
Code	Name of the Course	Continuous	Sessiona	ıl Exams	Total	Marks	Duration	Marks
		Mode	Marks	Duration	10	1,141145	Duration	
BP301T	Pharmaceutical Organic Chemistry II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP302T	Physical Pharmaceutics I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP303T	Pharmaceutical Microbiology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP304T	Pharmaceutical Engineering – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP305P	Pharmaceutical Organic Chemistry II – Practical	5	10	4 Hr	15	35	4 Hrs	50
BP306P	Physical Pharmaceutics I – Practical	5	10	4 Hr	15	35	4 Hrs	50
BP307P	Pharmaceutical Microbiology- Practical	5	10	4 Hr	15	35	4 Hrs	50
BP 308P	Pharmaceutical Engineering – Practical	5	10	4 Hr	15	35	4 Hrs	50
KVE 401	Universal Human Values and Professional Ethics**	20	30	1 Hr	50	100	3 Hrs	150
	Total	80	130	21 Hrs	210	540	31 Hrs	750

<sup>\*</sup>The lateral entry students taking admission directly to second year shall compulsorily appear for and pass the Communications Skill Subject Examination in the Third Semester.

<sup>\*\*</sup>Human values & Professional Ethics will be offered as a **compulsory course** for which passing marks shall be 30% in End Semester Examination and 40% in aggregate.

# Semester IV\*

Course			End Semes	Total				
Code	Name of the Course	Continuous	Sessiona	l Exams	Total	Marks	Duration	Marks
		Mode	Marks	Duration	10411	TVIIII ILG	Duration	
BP401T	Pharmaceutical Organic Chemistry III  - Theory	10	15	1 Hr	25	75	3 Hrs	100
BP402T	Medicinal Chemistry I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP403T	Physical Pharmaceutics II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP404T	Pharmacology I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP405T	Pharmacognosy I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP406P	Medicinal Chemistry I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP407P	Physical Pharmaceutics II – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP408P	Pharmacology I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP409P	Pharmacognos y I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
	Total	70	115	21 Hrs	185	515	31 Hrs	700

<sup>\*</sup>The lateral entry students taking admission directly to second year shall compulsorily appear for and pass the Computer Applications in Pharmacy Subject Examination in the Fourth Semester.

# Semester V

Course		Internal Assessment				End Semes	Total	
Code	Name of the Course	Continuous	Sessiona	ıl Exams	Total	Marks	Duration	Marks
		Mode	Marks	Duration	Total	Marks	Duration	
BP501T	Medicinal Chemistry II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP502T	Industrial Pharmacy I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP503T	Pharmacology II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP504T	Pharmacognosy and Phytochemistry II– Theory	10	15	1 Hr	25	75	3 Hrs	100
BP505T	Pharmaceutical Jurisprudence – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP506P	Industrial Pharmacy I– Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP507P	Pharmacology II – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP508P	Pharmacognosy and Phytochemistry II  - Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP509P	Report on Hospital Training-I	-	-	-	-	100	-	100
	Total	65	105	17 Hrs	170	580	27 Hrs	750

# Semester VI

Course		Internal Assessment					End Semester Exams		
Code	Name of the Course	Continuous	ous Sessional Exams		Total	Marks	Duration	Total Marks	
		Mode	Marks	Duration	Total	Marks	Duration		
BP601T	Medicinal Chemistry III – Theory	10	15	1 Hr	25	75	3 Hrs	100	
BP602T	Pharmacology III – Theory	10	15	1 Hr	25	75	3 Hrs	100	
BP603T	Herbal Drug Technology – Theory	10	15	1 Hr	25	75	3 Hrs	100	
BP604T	Biopharmaceutics and Pharmacokinetics – Theory	10	15	1 Hr	25	75	3 Hrs	100	
BP605T	Pharmaceutical Biotechnology— Theory	10	15	1 Hr	25	75	3 Hrs	100	
BP606T	Quality Assurance – Theory	10	15	1 Hr	25	75	3 Hrs	100	
BP607P	Medicinal Chemistry III – Practical	5	10	4 Hrs	15	35	4 Hrs	50	
BP608P	Pharmacology III – Practical	5	10	4 Hrs	15	35	4 Hrs	50	
BP609P	Herbal Drug Technology – Practical	5	10	4 Hrs	15	35	4 Hrs	50	
BP610P	Report on Industrial Training	-	-	-	-	100	-	100	
	Total	75	120	18 Hrs	195	655	30 Hrs	850	

# Semester VII

Course		Internal Assessment				Total		
Code	Name of the Course Continuous Sessional Exams		Total	Marks	Duration	Marks		
		Mode	Marks	Duration	Total	Wiaiks	Duration	
BP701T	Instrumental Methods of Analysis – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP702T	Industrial Pharmac y II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP703T	Pharmacy Practice – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP704T	Novel Drug Delivery System – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP705P	Instrumental Methods of Analysis – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP706PS	Practice School	50	100	5 Hrs	150			150
BP707P	Report on Hospital Training-II	-	-	-	-	100	-	100
	Total	95	170	13 Hrs	265	435	16 Hrs	700

# **Semester VIII**

Course			Internal Assessment		End Semes	Total		
Code	Name of the Course	Continu-	Session	al Exams	Total	Marks	Duration	Marks
2040		ous	Marks	Duration	Totai	Marks	Duration	1,1411115
BP801T	Biostatistics and Research Methodology	10	15	1 Hr	25	75	3 Hrs	100
BP802T	Social and Preventive Pharmacy	10	15	1 Hr	25	75	3 Hrs	100
BP803ET	Pharma Marketing Management*							
BP804ET	Pharmaceutical Regulatory Science*							
BP805ET	Pharmacovigilance*							
BP806ET	Quality Control and	10 + 10	15 + 15	1 + 1	25 + 25	75 + 75	3 + 3	100 +100
BP807ET	Standardization of Herbal* Computer Aided Drug Design*	= 20	= 30	= 2 Hrs	= 50	= 150	= 6 Hrs	= 200
BP808ET	Cell and Molecular Biology*							
BP809ET	Cosmetic Science*							
BP810ET	Experimental Pharmacology*							
BP811ET	Advanced Instrumentation Techniques*							
BP812ET	Dietary Supplements and Nutraceuticals*							
BP813ET	Pharmaceutical Product Development*							
BP814ET	LSSSDC Elective*							
BP815PW	Project Work (On Elective)	-	-	-	-	150	4 Hrs	150
BP816P	Report on Industrial Tour	-	-	-	-	100	-	100
	Total	40	6	4 Hrs	100	550	16 Hrs	650

<sup>\*(</sup>ET: Elective subject) Every candidate has to **opt for two** of the elective subjects, and has to carry out **project on any one** of them. The student has the choice to choose both the elective subjects from the already prescribed list of elective subjects by the PCI or choose one elective subject from the existing prescribed list of elective subjects of B. Pharm. programme by the PCI and the other (second subject) elective from list of skill pack/modules available with the LSSSDC from time to time.

#### 11.2. Internal assessment: Continuous mode

The marks allocated for Continuous mode of Internal Assessment shall be awarded as per the scheme given below.

Table-XI: Scheme for awarding internal assessment: Continuous mode

Theory				
Criteria	Max	Maximum		
		M	arks	
Attendance (Refer Table – XII)		4	2	
Academic activities (Average of any 3 activities e.g. quiz, assignment, open book test, field work, group discussion and seminar)		3	1.5	
Student – Teacher interaction		3	1.5	
	Total	10	5	
Practical				
Attendance (Refer Table – XII)			2	
Based on Practical Records, Regular viva voce, etc.			3	
	Total		5	

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

Percentage of Attendance	Theory	Practical
95 – 100	4	2
90 – 94	3	1.5
85 – 89	2	1
80 – 84	1	0.5
Less than 80	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). The scheme of question paper for theory and practical Sessional examinations is given below. The average marks of two Sessional exams shall be computed for internal assessment as per the requirements given in tables -X.

Sessional exam shall be conducted for 30 marks for theory and shall be computed for 15 marks. Similarly, Sessional exam for practical shall be conducted for 40 marks and shall be computed for 10 marks.

# Question paper pattern for theory Sessional examinations

## For subjects having University examination

	Total =	30 marks
II. Short Answers (Answer 2 out of 3)	=	$2 \times 5 = 10$
I. Long Answers (Answer 1 out of 2)	=	$1 \times 10 = 10$
(Answer all the questions)		
Objective Type Questions (5 x 2)	=	$05 \times 2 = 10$
OR		OR
I. Multiple Choice Questions (MCQs)	=	$10 \times 1 = 10$

## For subjects having only Sessional Examination

I. Long Answers (Answer 1 out of 2) = 
$$1 \times 10 = 10$$
  
II. Short Answers (Answer 4 out of 6) =  $4 \times 5 = 20$ 

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Total = 30 marks

## Question paper pattern for practical sessional examinations

I. Synopsis	=	10
II. Experiments	=	25
III. Viva voce	=	05

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Total = 40 marks

## 12. Promotion and award of grades

A student shall be declared PASS and eligible for getting grade in a course of B. Pharm. program if he/she secures at least 50% marks in that particular course including internal assessment. For example, to be declared as PASS and to get grade, the student has to secure a minimum of 50 marks for the total of 100 including continuous mode of assessment and end semester theory examination and has to secure a minimum of 25 marks for the total 50 including internal assessment and end semester practical examination

#### 13. Carry forward of 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 before the commencement of next end semester theory examinations

#### 15. Re-examination of end semester examinations

Re-examination of end semester examination shall be conducted as per the schedule given in table XIII. The exact dates of examinations shall be notified from time to time.

**Table-XIII: Tentative schedule of end semester examinations** 

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

## Question paper pattern for end semester theory examinations

# For 75 marks paper

I. Multiple Choice Questions (MCQs) =  $20 \times 1 = 20$ OR OR OR OR =  $10 \times 2 = 20$ 

(Answer all the questions)

II. Long Answers (Answer 2 out of 3) =  $2 \times 10 = 20$ III. Short Answers (Answer 7 out of 9) =  $7 \times 5 = 35$ 

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Total = 75 marks

# For 50 marks paper

I. Long Answers (Answer 2 out of 3) =  $2 \times 10 = 20$ II. Short Answers (Answer 6 out of 8) =  $6 \times 5 = 30$ 

6 X 3 - 30

Total = 50 marks

## For 35 marks paper

I. Long Answers (Answer 1 out of 2) =  $1 \times 10 = 10$ II. Short Answers (Answer 5 out of 7) =  $5 \times 5 = 25$ 

Total = 35 marks

## Question paper pattern for end semester practical examinations

I. Synopsis = 5 II. Experiments = 25 III. Viva voce = 5

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Total = 35 marks

#### 16. Academic Progression:

No student shall be admitted to any examination unless he/she fulfils the norms given in 6. Academic progression rules are applicable as follows:

A student shall be eligible to carry forward all the courses of I, II and III semesters till the IV semester examinations. However, he/she shall not be eligible to attend the courses of V semester until all the courses of I and II semesters are successfully completed.

A student shall be eligible to carry forward all the courses of III, IV and V semesters till the VI semester examinations. However, he/she shall not be eligible to attend the courses of VII semester until all the courses of I, II, III and IV semesters are successfully completed.

A student shall be eligible to carry forward all the courses of V, VI and VII semesters till the VIII semester examinations. However, he/she shall not be eligible to get the course completion certificate until all the courses of all the semesters are successfully completed.

A student shall be eligible to get his/her CGPA upon successful completion of the courses of I to VIII semesters within the stipulated time period as per the norms specified in 26.

A lateral entry student shall be eligible to carry forward all the courses of III, IV and V semesters till the VI semester examinations. However, he/she shall not be eligible to attend the courses of VII semester until all the courses of III and IV semesters are successfully completed.

A lateral entry student shall be eligible to carry forward all the courses of V, VI and VII semesters till the VIII semester examinations. However, he/she shall not be eligible to get the course completion certificate until all the courses of III, IV, V, VI, VII and VIII semesters are successfully completed.

A lateral entry student shall be eligible to get his/her CGPA upon successful completion of the courses of III to VIII semesters within the stipulated time period as per the norms specified in 26.

Any student who has given more than 4 chances for successful completion of I / III semester courses and more than 3 chances for successful completion of II / IV semester courses shall be permitted to attend V / VII semester classes ONLY during the subsequent academic year as the case may be. In simpler terms there shall NOT be any ODD BATCH for any semester.

The provision of grace marks shall be as per the AKTU guidelines.

Note: Grade AB should be considered as failed and treated as one head for deciding academic progression. Such rules are also applicable for those students who fail to register for examination(s) of any course in any semester.

## 17. Grading of performances

## 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 – XII.

Table – XII: Letter grades and grade points equivalent to Percentage of marks and performances

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

A learner 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.

# 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. For example, if a student takes five courses (Theory/Practical) in a semester with credits C1, C2, C3, C4 and C5 and the student's grade points in these courses are G1, G2, G3, G4 and G5, respectively, and then students' SGPA is equal to:

$$SGPA = C_1G_1 + C_2G_2 + C_3G_3 + C_4G_4 + C_5G_5$$

$$C_1 + C_2 + C_3 + C_4 + C_5$$

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. For example, if a learner has a F or ABS grade in course 4, the SGPA shall then be computed

as:

$$SGPA = C_{1}G_{1} + C_{2}G_{2} + C_{3}G_{3} + C_{4}* ZERO + C_{5}G_{5}$$

$$C_{1} + C_{2} + C_{3} + C_{4} + C_{5}$$

#### 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. The CGPA shall reflect the failed status in case of F grade(s), till the course(s) is/are passed. When the course(s)is/are passed by obtaining a pass grade on subsequent examination(s) the CGPA shall only reflect the new grade and not the fail grades earned earlier. The CGPA is calculated as:

$$C_{1}S_{1} + C_{2}S_{2} + C_{3}S_{3} + C_{4}S_{4} + C_{5}S_{5} + C_{6}S_{6} + C_{7}S_{7} + C_{8}S_{8}$$

$$C_{1} + C_{2} + C_{3} + C_{4} + C_{5} + C_{6} + C_{7} + C_{8}$$

where  $C_1, C_2, C_3,...$  is the total number of credits for semester I,II,III,... and  $S_1,S_2, S_3,...$  is the SGPA of semester I,II,III,....

#### 20. Declaration of class

The class shall be awarded on the basis of CGPA as follows:

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 the students shall undertake a project under the supervision of a teacher and submit a report. The area of the project shall directly relate any one of the elective subjects opted by the student in semester VIII. The project shall be carried out in group not exceeding 5 in number. The project report shall be submitted in triplicate (typed & bound copy not less than 25 pages).

The internal and external examiner appointed by the University shall evaluate the project at the time of the Practical examinations of other semester(s). Students shall be evaluated in groups for four hours (i.e., about half an hour for a group of five students). The projects shall be evaluated as per the criteria given below.

# Evaluation of Dissertation Book:

Total	75 Marks
nd answer skills	30 Marks
eation skills	20 Marks
on of work	25 Marks
sentation:	
Total	75 Marks
ns and Outcomes	20 Marks
d Discussions	20 Marks
gy adopted	20 Marks
s) of the work done	15 Marks
	esentation: on of work cation skills nd answer skills

*Explanation*: The 75 marks assigned to the dissertation book shall be same for all the students in a group. However, the 75 marks assigned for presentation shall be awarded based on the performance of individual students in the given criteria.

# 22. Industrial training

Every candidate shall be required to work for at least 150 hours spread over four weeks in a Pharmaceutical Industry/Hospital. It includes Production unit, Quality Control department, Quality Assurance department, Analytical laboratory, Chemical manufacturing unit, Pharmaceutical R&D, Hospital (Clinical Pharmacy), Clinical Research Organization, Community Pharmacy, etc. After the Semester – VI shall submit satisfactory report of such work and certificate duly signed by the authority of training organization to the head of the institute.

#### 23. Practice School

In the VII semester, every candidate shall undergo practice school for a period of 150 hours evenly distributed throughout the semester. The student shall opt any one of the domains for practice school declared by the program committee from time to time.

At the end of the practice school, every student shall submit a printed report (in triplicate) on the practice school he/she attended (not more than 25 pages). Along with the exams of semester VII, the report submitted by the student, knowledge and skills acquired by the student through practice school shall be evaluated by the subject experts at college level and grade point shall be awarded.

#### 24. Elective subjects

In the VIII semester, every candidate has to opt for two of the elective subjects, and has to carry out project on any one of them. The student has the choice to choose both the elective subjects from the already prescribed list of elective subjects by the PCI or choose one elective subject from the existing prescribed list of elective subjects of B. Pharm. programme by the PCI and the other (second subject) elective from list of skill pack/modules available with the LSSSDC from time to time.

#### 25. 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. program shall not be eligible for award of ranks. Moreover, the candidates should have completed the B. Pharm. program in minimum prescribed number of years, (four years) for the award of Ranks.

#### 26. Award of degree

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

## 27. Duration for completion of the program of study

The duration for the completion of the program shall be fixed as double the actual duration of the program and the students have to pass within the said period, otherwise they have to get fresh Registration.

## 28. Re-admission after break of study

Candidate who seeks re-admission to the program after break of study has to get the approval from the University by paying a condonation fee.

No condonation is allowed for the candidate who has more than 2 years of break up period and he/she has to rejoin the program by paying the required fees.