# SECTION – C FACULTY OF PHARMACY

#### 165.0 REGULATIONS FOR B.PHARM AND D.PHARM PROGRAMMES

These regulations shall be called as "Regulations for the B.Pharm and D.Pharm programme" of the Dr.M.G.R.Educational and Research Institute, Deemed University.

165.1 As per the decision of the Academic council of this Deemed University, these regulations have been prepared by adopting the regulations of Pharmacy Council of India.

#### 166.0 Regulations for B.Pharm Programme

166.1 Eligibility for Admission

He/She shall complete the age of 17 years on or before 31<sup>st</sup> December of the year of Admission in B.Pharm Programme.

#### **167.0** Minimum qualification for admission

#### **167.1 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.

# **167.2B.** 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.

#### 168.0 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 prescribed from time to time by Pharmacy Council of India, New Delhi.

#### **169.0** Medium of instruction and examinations

Medium of instruction and examination shall be in English.

#### **170.0** Working days in each semester

Each semester shall consist of not less than 100 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.

#### **171.0** 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.

#### **172.0 Program/Course credit structure**

As per the philosophy of Credit Based Semester System, certain quantum of academic work viz. theory classes, tutorial hours, 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.

# 172.1. Credit assignment

#### **172.1.1.** Theory and Laboratory courses

Courses are broadly classified as Theory and Practical. Theory courses consist of lecture (L) and /or tutorial (T) hours, 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 and tutorial hours, and a multiplier of half (1/2) for practical (laboratory) hours. Thus, for example, a theory course having three lectures and one tutorial 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.

#### **172.2.** Minimum credit requirements

The minimum credit points required for award of a B. Pharm. degree is 208. These credits are divided into Theory courses, Tutorials, Practical, Practice School and Projectover 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.

# **173.0** Academic Work

A regular record of attendance both in Theory and Practical shall be maintained by the teaching staff.

# **174.0.** 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, tutorial and practical course in any semester shall not be less than that shown in Table – I to VIII.

Course code	Name of the course	No. of hours	Tuto rial	Credit points
BP101T	Human Anatomy and Physiology I- Theory	3	1	4
BP102T	Pharmaceutical Analysis I – Theory	3	1	4
BP103T	Pharmaceutics I – Theory	3	1	4
BP104T	Pharmaceutical Inorganic Chemistry – Theory	3	1	4
BP105T	Communication skills – Theory *	2	-	2
BP106RBT	Remedial Biology/	2		2
BP106RMT	Remedial Mathematics – Theory*	Z	-	Z
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	32/34 <sup>\$</sup> /36 <sup>#</sup>	4	27/29 <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.
- \* Non University Examination (NUE)

Course Code	Name of the course	No. of hours	Tutorial	Credit points
BP201T	Human Anatomy and Physiology II – Theory	3	1	4
BP202T	Pharmaceutical Organic Chemistry I – Theory	3	1	4
BP203T	Biochemistry – Theory	3	1	4
BP204T	Pathophysiology – Theory	3	1	4
BP205T	Computer Applications in Pharmacy – Theory	3	-	3
BP206T	Environmental sciences – Theory *	3	-	3
BP207P	Human Anatomy and Physiology II –Practical	4	-	2
BP208P	Pharmaceutical Organic Chemistry I–	4	-	2
BP209P	Biochemistry – Practical	4	-	2
BP210P	Computer Applications in Pharmacy –	2	-	1
	Total	32	4	29

# Table-II: Course of study for semester II

\*Non University Examination (NUE)

# Table-III: Course of study for semester III

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP301T	Pharmaceutical Organic Chemistry II –	3	1	4
BP302T	Physical Pharmaceutics I – Theory	3	1	4
BP303T	Pharmaceutical Microbiology – Theory	3	1	4
BP304T	Pharmaceutical Engineering – Theory	3	1	4
BP305P	Pharmaceutical Organic Chemistry II –	4	-	2
BP306P	Physical Pharmaceutics I – Practical	4	-	2
BP307P	Pharmaceutical Microbiology – Practical 4 -			2
BP 308P	Pharmaceutical Engineering –Practical	4	-	2

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP401T	Pharmaceutical Organic Chemistry III-	3	1	4
BP402T	Medicinal Chemistry I – Theory	3	1	4
BP403T	Physical Pharmaceutics II – Theory	3	1	4
BP404T	Pharmacology I – Theory	3	1	4
BP405T	Pharmacognosy and Phytochemistry I–	3	1	4
BP406P	Medicinal Chemistry I – Practical	4	-	2
BP407P	Physical Pharmaceutics II – Practical	4		2
BP408P	Pharmacology I – Practical	4	-	2
BP409P	Pharmacognosy and Phytochemistry I –	4	-	2
	Total	31	5	28

# Table-IV: Course of study for semester IV

# Table-V: Course of study for semester V

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP501T	Medicinal Chemistry II – Theory	3	1	4
BP502T	Industrial PharmacyI- Theory	3	1	4
BP503T	Pharmacology II – Theory	3	1	4
BP504T	Pharmacognosy and Phytochemistry II-	3	1	4
BP505T	Pharmaceutical Jurisprudence – Theory	3	1	4
BP506P	Industrial PharmacyI – Practical	4	-	2
BP507P	Pharmacology II – Practical	4	-	2
BP508P	Pharmacognosy and Phytochemistry II –	4	-	2
	Practical			
	Total	27	5	26

# Table-VI: Course of study for semester VI

Cours	Name of the course	No. of	Tutorial	Credit
е	Name of the course	hours	Tutorial	points
BP601T	Medicinal Chemistry III – Theory	3	1	4
BP602T	Pharmacology III – Theory	3	1	4
BP603T	Herbal Drug Technology – Theory	3	1	4
BP604T	Biopharmaceutics and Pharmacokinetics – Theory	3	1	4

BP605T	Pharmaceutical Biotechnology – Theory	3	1	4
BP606T	Quality Assurance – Theory	3	1	4
BP607P	Medicinal chemistry III – Practical	4	-	2
BP608P	Pharmacology III – Practical	4	-	2
BP609P	Herbal Drug Technology – Practical	4	2	
	Total	30	6	30

# Table-VII: Course of study for semester VII

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP701T	Instrumental Methods of Analysis – Theory	3	1	4
BP702T	Industrial PharmacyII – Theory	3	1	4
BP703T	Pharmacy Practice – Theory	3	1	4
BP704T	Novel Drug Delivery System – Theory	3	1	4
BP705P	Instrumental Methods of Analysis –	4	-	2
BP706PS	Practice School*	12	-	6
	Total	28	5	24

\* Non University Examination (NUE)

# Table-VIII: Course of study for semester VIII

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP801T	Biostatistics and Research Methodology	3	1	4
BP802T	Social and Preventive Pharmacy	3	1	4
BP803ET	Pharma Marketing Management			
BP804ET	Pharmaceutical Regulatory Science			
BP805ET	Pharmacovigilance			
DDOOCET	Quality Control and Standardization of			
BP806ET	Herbals	3 + 3	1 + 1 =	4 + 4
BP807ET	Computer Aided Drug Design	=	2	=
BP808ET	Cell and Molecular Biology	6		8
BP809ET	Cosmetic Science			
BP810ET	Experimental Pharmacology			
BP811ET	Advanced Instrumentation Techniques			
BP812ET	Dietary Supplements and Nutraceuticals			
BP813PW	Project Work	12	-	6
	Total	24	4	22

Semester	Credit
I	27/29 <sup>\$</sup> /30 <sup>#</sup>
II	29
III	26
IV	28
V	26
VI	26
VII	24
VIII	22
Extracurricular/ Co curricular activities	01*
Total credit points for the program	209/211 <sup>\$</sup> /212 <sup>#</sup>

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

- \* The credit points assigned for extracurricular and or co-curricular activities shall be given by the Head of the Faculty and the same shall be submitted to the University. The criteria to acquire this credit point shall be defined from time to time.
- \* Applicable ONLY for the students studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics course.
- # Applicable ONLY for the students studied Mathematics / Physics / Chemistry at HSC and appearing for Remedial Biology course.

# **175.0 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 Sessionalexam (Internal Assessment) and before the end semester exam.

# **176.0.** Examinations/Assessments

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

#### **176.1.** End semester examinations

The End Semester Examinations for each theory and practical course through semesters I to VIII shall be conducted by the university except for the subjects with asterix symbol (\*) in table I and II for which examinations shall be conducted by the subject experts at college level and the marks/grades shall be submitted to the university.

#### TABLE – X : Schemes for Internal assessments and end semester examinations semester wise

Semester - I

Cours		Internal Assessment			End Sem	Tot		
e	Name of the course	Continuou s	Sessiona Marks	l Exams Duration	Total	Marks	Duration	al
BP101T	Human Anatomy and Physiology I– Theory	10	15	1 Hr	25	75	3 Hrs	10
BP102T	Pharmaceutical Analysis I –	10	15	1 Hr	25	75	3 Hrs	10
BP103T	Pharmaceutics I – Theory	10	15	1 Hr	25	75	3 Hrs	10
BP104T	Pharmaceutical Inorganic Chemistry – Theory	10	15	1 Hr	25	75	3 Hrs	10
BP105T	Communication skills – Theory *	5	10	1 Hr	15	35	1.5 Hrs	5
BP106RB T	Remedial Biology/ Mathematics –	5	10	1 Hr	15	35	1.5 Hrs	5
BP107P	Human Anatomy and Physiology – Practical	5	10	4 Hrs	15	35	4 Hrs	5
BP108P	Pharmaceutical Analysis I –	5	10	4 Hrs	15	35	4 Hrs	5
BP109P	Pharmaceutics I –	5	10	4 Hrs	15	35	4 Hrs	5
BP110P	Pharmaceutical Inorganic Chemistry – Practical	5	10	4 Hrs	15	35	4 Hrs	5
BP111P	Communication skills – Practical*	5	5	2 Hrs	10	15	2 Hrs	2
BP112RB	Remedial Biology – Practical*	5	5	2 Hrs	10	15	2 Hrs	2
	Total	70/75 <sup>\$</sup> /80 <sup>#</sup>	115/125 <sup>\$</sup> /130	23/24 <sup>\$</sup> /26 <sup>#</sup> Hrs	185/200 <sup>\$</sup> /210 #	490/525 <sup>\$</sup> 540 <sup>#</sup>	31.5/33 <sup>\$</sup> /35 <sup>#</sup> Hrs	675/725 <sup>\$</sup> /750 <sup>#</sup>

- # Applicable ONLY for the students studies Mathematics /Physics/Chemistry at HSC and appearing for Remedial Biology (RB) course.
- \$ Applicable ONLY for the students studies Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics (RM) Course.
- \* Non University Examination (NUE)

# Semester II

Course		Internal Assessment				End Sem	Total	
Course code	Name of the course	Continuous			Total	Marks	Duration	Marks
coue		Mode	Marks	Duration	Total	Fial K5	Duration	riai k5
BP201T	Human Anatomy and Physiology II – Theory	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*	10	15	1 Hr	25	50	2 Hrs	75
BP206T	Environmental sciences –	10	15	1 Hr	25	50	2 Hrs	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*	5	5	2 Hrs	10	15	2 Hrs	25
	Total	80	125	20 Hrs	205	520	30 Hrs	725

\* The subject experts shall conduct examinations

# Semester III

Course	ourco			ssessment		End Sem	Total	
code	Name of the course	Continuous	Session	al Exams	Total	Marks	Duration	Marks
coue		Mode	Marks	Duration	TULAI	Pial K5	Duration	riai ks
BP301T	Pharmaceutical Organic	10	15	1 Hr	25	75	3 Hrs	100
	Chemistry II – Theory							
BP302T	PhysicalPharmaceuticsI – 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
BP308P	Pharmaceutical Engineering – Practical	5	10	4 Hr	15	35	4 Hrs	50
	Total	60	100	20	160	440	28Hrs	600

# Semester IV

Course		Internal Assessment				End Seme	Total	
code	Name of the course	Continuous	Session	al Exams	Total	Marks	Duration	Marks
coue		Mode	Marks	Duration	IUtai	Marks	Duration	
BP401T	Pharmaceutical Organic	10	15	1 Ци	25	75	2 Цио	100
DP4011	Chemistry III– Theory	10	15	1 Hr	25	/5	3 Hrs	
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 Hr	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	Pharmacognosy I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
	Total	70	115	21 Hrs	185	515	31 Hrs	700

# Semester V

Course			Internal A	End Sem	Total			
Course code	Name of the course	Continuous Mode	Sessio Marks	nal Exams Duration	Total	Marks	Duration	Marks
BP501T	Medicinal Chemistry II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP502T	Industrial PharmacyI- 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 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 PharmacyI- Practical	5	10	4 Hr	15	35	4 Hrs	50
BP507P	Pharmacology II – Practical	5	10	4 Hr	15	35	4 Hrs	50
BP508P	Pharmacognosy II – Practical	5	10	4 Hr	15	35	4 Hrs	50
	Total	65	105	17 Hr	170	480	27 Hrs	650

# Semester VI

Courses		Internal Assessment				End Seme	Tatal	
Course code	Name of the course	Continuous Mode	Sessio Marks	nal Exams Duration	Total	Marks	Duration	Total Marks
BP601T	Medicinal Chemistry III –	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
	Total	75	120	18 Hrs	195	555	30 Hrs	750

# Semester VII

Course		]	Internal <i>I</i>	End So Ex	Total Marks			
code	Name of the course	Continuous	Session	al Exams	Total	Marks	Duration	
		Mode	Marks	Duration	iotai	Marks	Duration	
BP701T	Instrumental Methods of Analysis	10	15	1 Hr	25	75	3 Hrs	100
BP702T	Industrial Pharmacy – 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
BP705 P	Instrumental Methods of Analysis	5	10	4 Hrs	15	35	4 Hrs	50
BP706 PS	Practice School*	25	-	-	25	12	5 Hrs	150
	Total	70	70	8Hrs	140	460	21 Hrs	600

\* The subject experts shall conduct examinations

# Semester VIII

Course			Internal As	sessmen	t	End Semester		
code	Name of the course	Continuous Mode	Sessiona Marks	l Exams Duratio	Total	Marks	Duration	Marks
BP801T	Biostatistics and Research Methodology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP802T	Social and Preventive Pharmacy	10	15	1 Hr	25	75	3 Hrs	100
BP803ET	Pharmaceutical Marketing – Theory							
BP804ET	Pharmaceutical Regulatory Science – Theory							
BP805ET	Pharmacovigilance – Theory							
	Quality Control and							
BP806ET	Standardization of Herbals – Theory	10 + 10	15 + 15 =		25 + 25 =	75 + 75	3+3 = 6	100 +
BP807ET	Computer Aided Drug Design	= 20	30	2 Hrs	50	= 150	Hrs	100 = 200
BP808ET	Cell and Molecular Biology – Theory							
BP809ET	Cosmetic Science – Theory							
BP810ET	Experimental Pharmacology – Theory							
BP811ET	Advanced Instrumentation Techniques – Theory							
BP812PW	Project Work	-	-	-	-	150	4 Hrs	150

Total 40 60 4 Hrs 100 45 16 Hrs 550
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# **176.2.** 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	Maxin Ma	num Irks			
Attendance (Refer Table – XII)	4	2			
Academic activities (Average of any 3 activities e.g. quiz, assignment,	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 forattendance

Percentage of	Theor	Practical
95 –	4	2
90 –	3	1.5
85 –	2	1
80 -	1	0.5
Less than 80	0	0

# 177.0.Sessional Exams

Two Sessional exams shall be conducted for each theory / practical course as per the schedule. 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.

# 178.0 Question paper pattern for theory Sessional examinations

#### **178.1** For subjects having University examination

(Answer I. Long A	e Choice Questions (MCQs) all the questions) nswers (Answer 1 out of 2) Answers (Answer 2 out of 3)		= = =	10 / 1 10
		Total	=	30 marks
178.2 For subjects	s having Non University Ex	amination		
I. Long A	nswers (Answer 1 out of 2)		=	$1 \times 10 = 10$
II. Short	Answers (Answer 4 out of 6)		=	$4 \times 5 = 20$
		Total	=	30 marks
178.3 Question	paper pattern for practical	sessional		
examinatio	ons		=	10
II. Experime	ents		=	25
III. Viva voo	e		=	05
		Total	=	40 marks

#### 179.0 Promotion and award of grades

A student shall be declared PASSand eligible for getting gradein 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.

#### 180.0 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.

# 181.0 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.

# **182.0** Re-examination of end semester examinations

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

# **183.0** 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

#### 184.0 Question paper pattern for end semester theory examinations

#### 184.1 For 75 marks paper

I. Multiple Choice Questions(MCQs)		
(Answer all the questions)	=	$20 \times 1 = 20$
I. Long Answers (Answer 2 out of 3)	=	$2 \times 10 = 20$
II. Short Answers (Answer 7 out of 9)	=	7 x 5 = 35
Total	=	75 marks
184.2 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 x 5 = 30
Total	=	50 marks

#### 184.3 For 35 marks paper

I. Long Answers (Answer 1 out of 2)	=	1 x 10 =10
II. Short Answers (Answer 5 out of 7)	=	5 x 5 = 25
Total	=	35 marks

#### 185.0 Question paper pattern for end semester practical examinations

Total	=	35 marks
TOLAI	-	

#### **186.0.** Academic Progression:

No student shall be admitted to any examination unless he/she fulfills the norms given in clause 7.0 Academic progression rules are applicable as follows:

- 186.1 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.
- 186.2 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.
- 186.3 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 I, II, III, IV, V and VI semesters are successfully completed.
- 186.4 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.

- 186.5 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.
- 186.6 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 and VI semesters are successfully completed.
- 186.7 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.
- 186.8 Any student who hasgiven 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.
- 186.9 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.

# **187.0** Grading of performances

#### **187.1.** 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.

Percentage of Marks Obtained	Letter Grade	Grade Point	Performance
90.00 - 100	0	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

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

187.2 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.

#### 188.0. 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 = C1G1 + C2G2 + C3G3 + C4G4 + C5G5C1 + 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. For example if a learner has a F or ABS grade in course 4, the SGPA shall then be computed as:

# **189.0.** 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:

	C1S1 + C2S2 + C3S3 + C4S4+ C5S5+ C6S6+ C7S7+ C8S8
CGPA =	

# C1 + C2 + C3 + C4+ C5+ C6+ C7+ C8

where C1, C2, C3,.... is the total number of credits for semester I,II,III,.... and S1,S2, S3,....is the SGPA of semester I,II,III,.... .

# **190.0.** 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

# **191.0. Project work**

- 191.1 All the students shall undertake a projectunder the supervision of a teacher and submit a report. The area of the project shall directly relate any one of the elective subject 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).
- 191.2 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.

Total	75 Marks
Conclusions and Outcomes	20 Marks
Results and Discussions	20 Marks
Methodology adopted	20 Marks
Objective(s) of the work done	15 Marks
Evaluation of Dissertation Book:	
Evolution of Discretation Book	

# Evaluation of Presentation:

Presentation of work	25 Marks
Communication skills	20 Marks
Question and answer skills	30 Marks

191.3 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.

# **192.0 Industrial training (Desirable)**

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 and before the commencement of Semester – VII, and shall submit satisfactory report of such work and certificate duly signed by the authority of training organization to the head of the Faculty of Pharmacy.

# **193.0. Practice School**

- 193.1 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.
- 193.2 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 University level and grade point shall be awarded.

# **194.0 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.

#### 195.0 Award of degree

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

# 196.0 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.

# 197.0 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.

# **198.0 REGULATIONS FOR D.PHARM PROGRAMMES**

# **199.0 ELIGIBILITY FOR ADMISSION :**

199.1 He / She shall complete the age of 17 years on or before 31<sup>st</sup> December of the year of Admission in D.Pharm Programme.

#### **199.2 MINIMUM QUALIFICATION FOR ADMISSION** :

No. Candidate shall be admitted to Diploma in Pharmacy unless he/she had passed any of the following examinations in all the optional subjects and compulsory subjects (Physics, Chemistry, Biology and /or Mathematics including English as one of the Compulsory subjects):

- a) Intermediate examination in Science; The First Year of the three year degree course in Science; 10+2 Examination(Academic stream) in Science;
- b) Pre-degree examination; any other qualification approved by the Pharmacy Council of India as equivalent to any of the above exam. Admission of candidates to the Diploma in Pharmacy Part - I shall be made in order of merit on the basis of 'Pre-Pharmacy Test' conducted in accordance with the scheme of Examinations and syllabus laid-down by the University.

# 200.0 DURARION OF THE COURSE :

The duration of the course shall be for two academic years, with each academic year spread over a period of not less than one hundred and eighty working days in addition to 500 hours practical training spread over a period of not less than 3 months.

- 201.0 Medium of Instruction and examination shall be in English.
- 202.0 Attendance and Eligibility for appearing in Examination.
- 202.1 A candidate is required to put in atleast 75% attendance in theory and practical separately in each, shall be eligible for appearing the part I of Examination of Diploma in Pharmacy.
- 202.2 A candidate is required to put in atleast 75% of attendance in theory and practical separately in early shall be eligible for appearing the part II Examination of Diploma in Pharmacy.
- 202.3 A candidate can have a relaxation of 10% attendance on medical ground by producing a certificate from medical officer of government hospital and a

5% relaxation by the vicechancellor on the recommendation of Dean, faculty.

- 203.0 Working days in each semester.
- 203.1 Each semester shall consist of not less than 100 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.
- 204.0 **Course of Study**: The course of study for Diploma in Pharmacy part-I and Diploma in pharmacy part-II shall include the subjects as given in the Tables I & II below. The number of hours devoted to each subject for its teaching is given against columns 2 and 3 of the Tables below.

Theory			Practic	al
Subject	hours /year	Hrs./week	hours /year	Hrs./ week
Pharmaceutics-I	75	3	100	4
Pharmaceutical Chemistry-I	75	3	75	3
Pharmacognosy	75	3	75	3
Biochemistry & Clinical Pathology	50	2	75	3
Human Anatomy & Physiology	75	3	50	2
Health Education & community pharmacy	50	2		
	400	16	375	15

#### TABLE-I Diploma in Pharmacy (Part-I)

	Theory		Practical		
Subject	hours /year	Hrs. / week	hours /year	Hrs.	
Pharmaceutics-II	75	3	100	4	
Pharmaceutical Chemistry-II	100	4	75	3	
Pharmacology & Toxicology	75	3	50	2	
Pharmaceutical Jurisprudence	50	2	-		
Drug store and Business Management	75	3	-		
Hospital & Clinical Pharmacy	75	3	50	2	

#### **TABLE-II Diploma in Pharmacy (Part-II)**

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205.0 Examinations: There shall be an examination for Diploma in Pharmacy (part-I) to examine students of the first year course and an examination for Diploma in Pharmacy (part-II) to examine students of the second year course. Each examination may be held twice every year. The first examination in every year shall be the annual examination and the second examination shall be supplementary examination of the Diploma in Pharmacy (part-I) or Diploma in pharmacy (Part-II)as the case may be. The examinations shall be of written and practical (including oral) nature. Carrying maximum marks for each part of subject, as indicated in

Table III and IV:R-29(A) (Plan and scheme of examination for Diploma in Pharmacy).

# 206.0 PRACTICAL TRAINING Diploma in pharmacy (Part – III)

Period and other conditions of practical training:

After having appeared in Part-II examination of Diploma in Pharmacv conducted by Board/University or other approved examination Body or any other course accepted as beina equivalent by the Pharmacy Council of India, a candidate shall be eligible to undergo practical training in one or more of the following institutions namely:

Hospitals/Dispensaries run by Central/State Government/Municipal corporations/ central Government Health scheme and Employees state Insurance scheme. A pharmacy, chemist and Druggist licensed under the Drugs and cosmetics Rules, 1945 made under the Drugs and Cosmetics Act, 1940(23 of 1940). The institutions referred in subregulation(1)shall be eligible to impart training subject to the condition that the number of student pharmacists that may be taken in any Hospital, pharmacy, Chemist and Druggist licensed under the Drugs and cosmetics Rules, 1945 made under the Drugs and cosmetics Act, 1940 shall not exceed two where there is one registered pharmacist engaged in the work in which the student pharmacist is under going practical training, where there is more than one registered pharmacist similarly engaged, the number shall not exceed one for each additional such registered pharmacist. Hospital and Dispensary other than those specified in subregulation(1) for the purpose of giving practical training shall have to be recognized by pharmacy council of India on fulfilling the conditions specified in Appendix-D to these regulations.

In the course of practical training, the trainees shall have exposure to: Working knowledge of keeping of records required by various acts concerning the profession of pharmacy and Practical experience in the manipulation of pharmaceutical apparatus in common use, the reading, translation and copying of prescription including checking of dose, the dispensing of prescriptions illustrating the commoner methods of administering medicaments; the storage of drugs and medical preparations. The practical training shall be not less than five hundred hours spread over a period of not less than three months provided that not less than two hundred and fifty hours and devoted to actual dispensing of prescriptions.

#### 206.1 Procedure to be followed prior to commencing of the training:

The head of the academic training institution, shall supply application in triplicate in' Practical Training Contract Form for Qualification as pharmacist' to candidate eligible to under-take the said practical training, the contract form shall be as specified in Appendix-E to these regulations.

The head of an academic training institution shall fill section I of the contract Form. The trainee shall fill section II of the said contract Form and the Head of the institution agreeing to impart the training (hereinafter referred to as the Apprentice Master) shall fill section III of the said contract Form.

It shall be the responsibility of the trainee to ensure that one copy (hereinafter referred to as the first copy of the contract Form)so filled is submitted to Head of the academic training institution and the other two copies(hereinafter referred to as the second copy and the third copy)shall be filled with Apprentice Master(if he so desires)or with the trainee pending completion of the training.

206.2 Certificate of Passing Diploma in Pharmacy(part-III) on satisfactory completion of the apprentice period, the Apprentice Master shall fill Section IV of the second copy and third copy of contract form and cause it to be sent to the head to the academic training institution who shall suitably enter in the first copy of the entries from the second copy and third copy and shall fill section V of the three copies of contract form and thereafter handover both the second copy and the third copy to the trainee. Thus, if completed in all respect, shall be regarded as a certificate of having successfully completed the course of Diploma in Pharmacy (part-III).

#### 207.0 Working out of Result

207.1 Mode of examinations:

Each theory and practical examination in the subject mentioned in Table-III and IV shall be of three hours duration. A candidate who fails in theory or practical examination shall reappear in such theory or practical paper(s) as the case may be. Practical examination shall also consist of viva voce (oral) examination.

207.2 Award of sessional marks and maintenance of records:

A regular record of both theory and practical class work and examinations conducted in an institution imparting training for Diploma in Pharmacy Part-I and Diploma in pharmacy Part-II courses, shall be maintained for each student in the institution and 20 marks for each theory and 20 marks for each practical subject shall be allotted as sessional.

There shall be at least three periodic sessional examinations during each academic year. The highest aggregate of any two performances shall form the basis of calculating sessional marks.

The sessional marks in practicals shall be allotted on the following basis:

Actual performance in the sessional examination.10Day to day assessment in the practical class work.10

- 207.3 Minimum marks for passing the examination: A student shall not be declared to have passed Diploma in Pharmacy examination unless he/she secures atleast 40% marks in each of the subject separately in theory examination, including sessional marks and atleast 40% marks in each of the practical examination including sessional marks. The candidates securing 60% marks or above in aggregate in all subjects in a single attempt at the Diploma in Pharmacy (part-I)or Diploma in Pharmacy(part-II) examinations shall be declared to have passed in first class the Pharmacy(part-I)of Diploma Diploma in in Pharmacv (part-II) examinations, as the case may be. Candidates securing 75% marks or above in any subject or subjects provided he/she passes in all the subjects in single attempt, will be given distinction in that subjects(s).
- 207.4 Eligibility for Promotion to Diploma in Pharmacy (Pt. II): All candidates who have appeared for all the subjects and passed the Diploma in pharmacy part-I class. However failure in more than two subjects (each Theory paper or practical examination shall be considered as a subject) shall debar him/her from promotion to the Diploma in Pharmacy Part-II class. Such candidates shall be examined in the failing subjects only at subsequent. A candidate who fails to pass D Pharm Part I exam. in four attempts shall not allowed to continue the course.
- 207.5 Improvement of sessional marks: Candidates who wish to improve sessional marks can do so by appearing in two additional sessional examinations during the next academic year. The average score of the two examinations shall be the basis for improved sessional marks in theory. The sessional of practicals shall be improved by appearing in additional practical examinations. Marks awarded to a candidate for day to day assessment in the practical class, can not be improved unless he/she attends regular course of study again.
- 207.6 Certificate of passing examination for Diploma in Pharmacy (part-II): Certificate of having passes the examination for the Diploma in pharmacy Part-II shall be granted by the Examining Authority to a successful student.
- 207.7 Certificate of Diploma in Pharmacy: A certificate of Diploma in pharmacy shall be granted by the Examining Authority to successful candidate on producing certificate of having passed the Diploma in Pharmacy part-I and Part-II and satisfactory completion of practical training for Diploma in pharmacy (part-III).
- 207.8 The chairman and at least one expert member of examining committee of the Examining Authority Concerned with appointment of examiners and

conduct of pharmacy examination should be persons possessing pharmacy Qualifications.

208.0 PLAN AND SCHEME OF EXAMINATION FOR THE DIPLOMA IN PHARMACY (Based on effective teaching for 180 working days in one academic session)

208.1	Table-III	Diploma in pharmacy	y (part-I) Examination
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Subject		Max. Marks in Theory			Max. Marks in Practical		
	Examinati	Session	Total	Examinati	Session	Total	
Pharmaceutics-I	80	20	100	80	20	100	
Pharmaceutical	80	20	100	80	20	100	
Pharmacognosy	80	20	100	80	20	100	
Biochem. & Clinical	80	20	100	80	20	100	
Human Anatomy &	80	20	100	80	20	100	
Health Education & community	80	20	100				
			600			500	

208.2 TABLE-IV Diploma in Pharmacy (Part-II)						
Subject	Max. Marks in Theory			Max. Marks in Practical		
	Examination	Sessional	Total	Examination	Sessional	Total
Pharmaceutics-II	80	20	100	80	20	100
Pharmaceutical	80	20	100	80	20	100
Pharmacology &	80	20	100	80	20	100
Pharmaceutical	80	20	100			
Drug store and Business	80	20	100			
Hospital & Clinical	80	20	100	80	20	100
			600			400

208.3 Each paper shall consist of six questions out of which five shall be attempted. Half of the total number of papers in each year will be set and assessed by external examiners and the remaining half will be set and assessed by the internal examiners. There shall be one external and one internal examiner for each practical Examination.