

Annexure I

Table I: Semester wise credits distribution

SEMESTER	CREDIT POINTS
I	27/29\$/30#
II	25
III	28
IV	28
V	26
VI	26
VII	28
VIII	22
Extracurricular/ Co-curricular activities	01*
Total credit points for the program	211/213^{\$}/214[#]

Note:

* 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.

\$ 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.

Annexure-II

The course of study for B. Pharm shall include Semester Wise Theory, Tutorial & Practical. The number of hours devoted to each theory, tutorial and practical course in any semester shall not be less than that shown in Table – I to VIII.

Table I: Course of Study for B. Pharm Semester I

Course Code	Name of the Course	No. of hours		Credit Points
		Theory/ Practical	Tutorial	
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 (Theory)**	2	-	2
BP106RMT	Remedial Mathematics (Theory)\$**	2	-	2
BP101P	Human Anatomy and Physiology-I (Practical)	4	-	2
BP102P	Pharmaceutical Analysis I (Practical)	4	-	2
BP103P	Pharmaceutics-I (Practical)	4	-	2
BP104P	Pharmaceutical Inorganic Chemistry (Practical)	4	-	2
BP105P	Communication Skills (Practical)*	2	-	1
BP106RBP	Remedial Biology (Practical)**	2	-	1
Total		32/34^{\$}/36[#]	4	27/29^{\$}/30[#]

Note:

* **Non-University Examination (NUE)**

#Applicable ONLY for the students who have studied Physics / Chemistry/ Mathematics at HSC and appearing for Remedial Biology (RB)course.

\$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 B. Pharm Semester II

Course Code	Name of the Course	No. of hours		Credit Points
		Theory/ Practical	Tutorial	
BP201T	Human Anatomy and physiology-II (Theory)	3	1	4
BP202T	Pharmaceutical Organic Chemistry-I (Theory)	3	1	4
BP203T	Pharmaceutical Engineering (Theory)	3	1	4
BP204T	Computer Applications in Pharmacy Theory)*	3	-	3
BP205T	Environmental Sciences (Theory)*	3	-	3
BP201P	Human Anatomy and Physiology-II (Practical)	4	-	2
BP202P	Pharmaceutical Organic Chemistry-I (Practical)	4	-	2
BP203P	Pharmaceutical Engineering (Practical)	4	-	2
BP204P	Computer Applications in Pharmacy (Practical)*	2	-	1
Total		29	3	25

*Non-University Examination (NUE)

Table III: Course of Study for B. Pharm Semester III

Course Code	Name of the Course	No. of hours		Credit Points
		Theory/ Practical	Tutorial	
BP301T	Pharmaceutical Organic Chemistry-II (Theory)	3	1	4
BP302T	Biochemistry (Theory)	3	1	4
BP303T	Physical Pharmaceutics-I (Theory)	3	1	4
BP304T	Pharmaceutical Microbiology (Theory)	3	1	4
BP305T	Pathophysiology (Theory)	3	1	4
BP301P	Pharmaceutical Organic Chemistry-II (Practical)	4	-	2
BP302P	Biochemistry (Practical)	4	-	2
BP303P	Physical Pharmaceutics-I (Practical)	4	-	2
BP304P	Pharmaceutical Microbiology (Practical)	4	-	2
Total		31	5	28

Table IV: Course of Study for B. Pharm Semester IV

Course Code	Name of the Course	No. of hours		Credit Points
		Theory/ Practical	Tutorial	
BP401T	Pharmaceutical Organic Chemistry-III (Theory)	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 & Phytochemistry-I (Theory)	3	1	4
BP402P	Medicinal Chemistry-I (Practical)	4	-	2
BP403P	Physical Pharmaceutics-II (Practical)	4	-	2
BP404P	Pharmacology-I (Practical)	4	-	2
BP405P	Pharmacognosy & Phytochemistry-I (Practical)	4	-	2
Total		31	5	28

Table V: Course of Study for B. Pharm Semester V

Course Code	Name of the Course	No. of hours		Credit Points
		Theory/ Practical	Tutorial	
BP501T	Medicinal Chemistry-II (Theory)	3	1	4
BP502T	Industrial Pharmacy-I (Theory)	3	1	4
BP503T	Pharmacology-II (Theory)	3	1	4
BP504T	Pharmacognosy and Phytochemistry-II (Theory)	3	1	4
BP505T	Pharmaceutical Jurisprudence (Theory)	3	1	4
BP502P	Industrial Pharmacy-I (Practical)	4	-	2
BP503P	Pharmacology-II (Practical)	4	-	2
BP504P	Pharmacognosy and Phytochemistry-II (Practical)	4	-	2
Total		27	5	26

Table VI: Course of Study for B. Pharm Semester VI

Course Code	Name of the Course	No. of hours		Credit Points
		Theory/ Practical	Tutorial	
BP601T	Medicinal Chemistry-III (Theory)	3	1	4
BP602T	Pharmacology-III (Theory)	3	1	4
BP603T	Herbal Drug Technology (Theory)	3	1	4
BP604T	Industrial Pharmacy-II (Theory)	3	1	4
BP605T	Pharmaceutical Biotechnology (Theory)	3	1	4
BP601P	Medicinal Chemistry-III (Practical)	4	-	2
BP602P	Pharmacology-III (Practical)	4	-	2
BP603P	Herbal Drug Technology (Practical)	4	-	2
Total		27	5	26

Table VII: Course of Study for B. Pharm Semester VII

Course Code	Name of the Course	No. of hours		Credit Points
		Theory/ Practical	Tutorial	
BP701T	Instrumental Method of Analysis (Theory)	3	1	4
BP702T	Biopharmaceutics and Pharmacokinetics(Theory)	3	1	4
BP703T	Novel Drug Delivery System (Theory)	3	1	4
BP704T	Pharmacy Practice (Theory)	3	1	4
BP705P	Practice School*	12	-	6
BP706T	Quality Assurance (Theory)	3	1	4
BP701P	Instrumental Method of Analysis (Practical)	4	-	2
Total		28	4	24

* Non-University Examination (NUE)

Table VIII: Course of Study for B. Pharm Semester VIII

Course Code	Name of the course	No. of hours		Credit Points
		Theory/ Practical	Tutorial	
BP801T	Biostatistics and Research Methodology (Theory)	3	1	4
BP802T	Social and Preventive Pharmacy (Theory)	3	1	4
BP803T	Pharma Marketing Management (Theory)	(Any two courses) 3+3=6	1+1=2	4+4=8
BP804T	Pharmaceutical Regulatory Science (Theory)			
BP805T	Pharmacovigilance (Theory)			
BP806T	Quality Control and Standardization of Herbals (Theory)			
BP807T	Computer Aided Drug Design (Theory)			
BP808T	Cell and Molecular Biology (Theory)			
BP809T	Cosmetic Science (Theory)			
BP810T	Experimental Pharmacology (Theory)			
BP811T	Advanced Instrumentation Techniques (Theory)			
BP812T	Dietary Supplements and Nutraceuticals (Theory)			
BP813T	Pharmaceutical Product Development (Theory)			
BP814P	Project Work (Practical)	12	--	6
	Total	24	4	22

Annexure-III

The assessment and evaluation of student's performance for B. Pharm shall include Semester Wise Internal assessment as well as End semester examination for both theory and practical (If applicable). The Internal assessment will be through Sessional exams and Continuous Mode of evaluation.

The scheme for internal assessment and end semester examinations for B. Pharm program is given in Table I to VIII.

Table I: Assessment scheme for B. Pharm semester I

Course Code	Name of the Course	Marks Distribution			Total
		University (End Semester Exam)	Institute		
			Sessional Exams	Continuous Mode	
BP101T	Human Anatomy and Physiology-I (Theory)	75	15	10	100
BP102T	Pharmaceutical Analysis I (Theory)	75	15	10	100
BP103T	Pharmaceutics-I (Theory)	75	15	10	100
BP104T	Pharmaceutical Inorganic Chemistry (Theory)	75	15	10	100
BP105T	Communication Skills (Theory)*	35	10	5	50
BP106RBT BP106RMT	Remedial Biology (Theory)/ Remedial Mathematics (Theory)*	35	10	5	50
BP101P	Human Anatomy and Physiology-I (Practical)	35	10	5	50
BP102P	Pharmaceutical Analysis I (Practical)	35	10	5	50
BP103P	Pharmaceutics-I (Practical)	35	10	5	50
BP104P	Pharmaceutical Inorganic Chemistry (Practical)	35	10	5	50
BP105P	Communication Skills (Practical)*	15	5	5	25
BP106RBP	Remedial Biology (Practical)*	15	5	5	25
Total		490/525^{\$/5} 40[#]	115/125^{\$/1} 30[#]	70/75^{\$/80}[#]	675/725^{\$/750}[#]

Note:

***Non-University Examination (NUE)**

#Applicable ONLY for the students who have studied Physics / Chemistry/ Mathematics at HSC and appearing for Remedial Biology (RB)course.

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

Table II: Assessment scheme for B. Pharm semester II

Course Code	Name of the Course	Marks Distribution			
		University (End Semester Exam)	Institute		Total
			Sessional Exams	Continuous Mode	
BP201T	Human Anatomy and physiology-II (Theory)	75	15	10	100
BP202T	Pharmaceutical Organic Chemistry-I (Theory)	75	15	10	100
BP203T	Pharmaceutical Engineering (Theory)	75	15	10	100
BP204T	Computer Applications in Pharmacy (Theory)*	50	15	10	75
BP205T	Environmental Sciences (Theory)*	50	15	10	75
BP201P	Human Anatomy and Physiology-II (Practical)	35	10	5	50
BP202P	Pharmaceutical Organic Chemistry-I (Practical)	35	10	5	50
BP203P	Pharmaceutical Engineering (Practical)	35	10	5	50
BP204P	Computer Applications in Pharmacy (Practical)*	15	5	5	25
Total		445	110	70	625

Note: *Non-University Examination (NUE)

Table III: Assessment scheme for B. Pharm semester III

Course Code	Name of the Course	Marks Distribution			
		University (End Semester Exam)	Institute		Total
			Sessional Exams	Continuous Mode	
BP301T	Pharmaceutical Organic Chemistry-II (Theory)	75	15	10	100
BP302T	Biochemistry (Theory)	75	15	10	100
BP303T	Physical Pharmaceutics-I (Theory)	75	15	10	100
BP304T	Pharmaceutical Microbiology (Theory)	75	15	10	100
BP305T	Pathophysiology (Theory)	75	15	10	100
BP301P	Pharmaceutical Organic Chemistry-II (Practical)	35	10	5	50
BP302P	Biochemistry (Practical)	35	10	5	50
BP303P	Physical Pharmaceutics-I (Practical)	35	10	5	50
BP304P	Pharmaceutical Microbiology (Practical)	35	10	5	50
Total		515	115	70	700

Table IV: Assessment scheme for B. Pharm semester IV

Course Code	Name of the Course	Marks Distribution			
		University (End Semester Exam)	Institute		Total
			Sessional Exams	Continuous Mode	
BP401T	Pharmaceutical Organic Chemistry-III (Theory)	75	15	10	100
BP402T	Medicinal Chemistry-I (Theory)	75	15	10	100
BP403T	Physical Pharmaceutics-II (Theory)	75	15	10	100
BP404T	Pharmacology-I (Theory)	75	15	10	100
BP405T	Pharmacognosy & Phytochemistry-I (Theory)	75	15	10	100
BP402P	Medicinal Chemistry-I (Practical)	35	10	5	50
BP403P	Physical Pharmaceutics-II (Practical)	35	10	5	50
BP404P	Pharmacology-I (Practical)	35	10	5	50
BP405P	Pharmacognosy & Phytochemistry-I (Practical)	35	10	5	50
Total		515	115	70	700

Table V: Assessment scheme for B. Pharm semester V

Course Code	Name of the Course	Marks Distribution			
		University (End Semester Exam)	Institute		Total
			Sessional Exams	Continuous Mode	
BP501T	Medicinal Chemistry-II (Theory)	75	15	10	100
BP502T	Industrial Pharmacy-I (Theory)	75	15	10	100
BP503T	Pharmacology-II (Theory)	75	15	10	100
BP504T	Pharmacognosy and Phytochemistry-II (Theory)	75	15	10	100
BP505T	Pharmaceutical Jurisprudence (Theory)	75	15	10	100
BP502P	Industrial Pharmacy-I (Practical)	35	10	5	50
BP503P	Pharmacology-II (Practical)	35	10	5	50
BP504P	Pharmacognosy and Phytochemistry-II (Practical)	35	10	5	50
Total		480	105	65	650

Table VI: Assessment scheme for B. Pharm semester VI

Course Code	Name of the Course	Marks Distribution			
		University (End Semester Exam)	Institute		Total
			Sessional Exams	Continuous Mode	
BP601T	Medicinal Chemistry-III (Theory)	75	15	10	100
BP602T	Pharmacology-III (Theory)	75	15	10	100
BP603T	Herbal Drug Technology (Theory)	75	15	10	100
BP604T	Industrial Pharmacy-II (Theory)	75	15	10	100
BP605T	Pharmaceutical Biotechnology (Theory)	75	15	10	100
BP601P	Medicinal Chemistry-III (Practical)	35	10	5	50
BP602P	Pharmacology-III (Practical)	35	10	5	50
BP603P	Herbal Drug Technology (Practical)	35	10	5	50
Total		480	105	65	650

Table VII: Assessment scheme for B. Pharm semester VII

Course Code	Name of the Course	Marks Distribution			
		University (End Semester Exam)	Institute		Total
			Sessional Exams	Continuous Mode	
BP701T	Instrumental Method of Analysis	75	15	10	100
BP702T	Biopharmaceutics and Pharmacokinetics (Theory)	75	15	10	100
BP703T	Novel Drug Delivery System (Theory)	75	15	10	100
BP704T	Pharmacy Practice (Theory)	75	15	10	100
BP706T	Quality Assurance	75	15	10	100
BP701P	Instrumental Method of Analysis (Practical)	35	10	5	50
BP705P	Practice School*	125	-	25	150
Total		535	85	80	700

Table VIII: Assessment scheme for B. Pharm semester VIII

Course Code	Name of the Course	Marks Distribution							
		University (End Semester Exam)	Institute		Total				
			Sessional Exams	Continuous Mode					
BP801T	Biostatistics and Research Methodology (Theory)	75	15	10	100				
BP802T	Social and Preventive Pharmacy (Theory)	75	15	10	100				
BP803T	Pharma Marketing Management (Theory)	(Any two courses with above mark distribution)							
BP804T	Pharmaceutical Regulatory Science (Theory)								
BP805T	Pharmacovigilance (Theory)								
BP806T	Quality Control and Standardization of Herbals (Theory)								
BP807T	Computer Aided Drug Design (Theory)								
BP808T	Cell and Molecular Biology (Theory)								
BP809T	Cosmetic Science (Theory)								
BP810T	Experimental Pharmacology (Theory)								
BP811T	Advanced Instrumentation Techniques (Theory)								
BP812T	Dietary Supplements and Nutraceuticals (Theory)								
BP813T	Pharmaceutical Product Development (Theory)								
BP814P	Project Work					125	-	25	150
Total						425	60	65	550