Rajasthan University of Health Sciences

Sector-18, Kumbha Marg, Pratap Nagar, Tonk Road, Jaipur-302033 (Raj.)

Faculty of Pharmacy



Ordinance Related to Bachelor of Pharmacy (B. Pharm) Course

(Effective from Batch 2017-18)
As per
Pharmacy Council of India, New Delhi

[Framed under Regulation 6, 7 & 8 of the Bachelor of Pharmacy (B. Pharm) course regulations 2014]

[Amendment in Ordinance No. O.299-W of University of Rajasthan (adopted by RUHS)]

[Recommended by Board of Studies (Faculty of Pharmacy) and approved by Academic Council & Board of Management, RUHS]

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राजस्थान स्वास्थ्य विज्ञान विश्वविद्यालय RAJASTHAN UNIVERSITY OF HEALTH SCIENCES

Sector-18, Kumbha Marg, Pratap Nagar, Tonk Road, Jaipur-302033 (Raj.)

No.: F-8(88)/Notification/Academic/2017/ 11185

Date: 25/.0.../2017

NOTIFICATION NO. 02/2017

With the approval of the Government of India, Pharmacy Council of India, New Delhi had issued Gazette Notification on 10.12.2014 for Bachelor of Pharmacy (B.Pharm.) Regulations, 2014. Academic Council of RUHS in its 108th meeting held on 12.04.2017(under TA-01) has decided to implement the said notification from the academic session 2017-18 which was further approved by the Board of Management on 19.04.2017. Therefore, in compliance of the Regulation No. 6, 7 & 8 issued by PCI by said notification, the existing Ordinance 299-W of University of Rajasthan (as adopted by RUHS) related to B.Pharm Exam is hereby replaced as follows for course of study and practical training related to B.Pharm course:

Ordinance 299-W for the B. Pharm. Degree Program of RUHS

1. Short Title and Commencement:

- i) These ordinances shall be called "The Rajasthan University Ordinances(as adopted by RUHS) (RUHS Amendment) Ordinance, 2017" for the B. Pharm. Degree Program of RUHS.
- ii) They shall come into effect from the Academic Year 2017-18.
- iii) These ordinances framed are subject to modifications from time to time by Pharmacy Council of India.
- 2. Substitution of Ordiance 299-W of University of Rajasthan Orinances (as adopted by RUHS): The existing Ordinance No. 299-W of the University of Rajasthan (as adopted by RUHS) be substituted by the following, namely:-
 - " O.299-W

B. PHARMACY EXAM. (4 YEAR COURSE)

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

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4. Minimum qualification for and other conditions for admission

4.1 First Semester 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. "However, the students possessing 10+2 qualification from Open School Education System of the Central Govt./State Govt. institutions are also be eligible for admission to B.Pharma Course.
- ii) Any other qualification approved by the Pharmacy Council of India as equivalent to any of the above examinations.
- iii) Reservation: Reservation in admission shall be applicable as prescribed by the State Government from time to time.
- iv) Minimum Age: As per directions of Pharmacy Council of India / State Government.

4.2 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.

- 5. Approval of the authority conducting the course of study: No person, institution, societyor trust shall start and conduct B.Pharma programme in the jurisdiction of the University without prior approval of the State Government, the University and the Pharmacy Council of India.
- **6.** Admissions: Admission of candidates to the B.Pharm Semester –I & B.Pharm Semester-III (lateral entry to diploma hoders) shall be made as per the rules/directions of the central admission authority/ State Government.

7. Medium of instruction and examinations

Medium of instruction and examination shall be in English.

8. 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.

9. 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.

10. 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/extracurricular activities is dependent upon the quantum of work expected to be put in for each of these activities per week.

10.1. Credit assignment

10.1.1. 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.

10.2. 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.

11. Academic work

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

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12. 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.

Table-I: Course of study for semester I

	Table 1. Course of study for se			
Course code	Name of the course	No. of	Tuto	Credit
		hours	rial	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*	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	32/34 ³ /36 [#]	4	27/29 3/30 #

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

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^{\$}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)

Table-II: Course of study for semester II

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

^{*}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 – Theory	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 – Practical	4	-	2
BP306P	Physical Pharmaceutics I – Practical	4	_	2
BP307P	Pharmaceutical Microbiology – Practical	4	-	2
BP 308P	Pharmaceutical Engineering –Practical	4	-	2
	Total	28	4	24



Table-IV: Course of study for semester IV

Course code	Name of the course	No. of hours	Tutorial	Credit points
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 and Phytochemistry I- Theory	3	11	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 – Practical	4	_	2
	Total	31	5	28

Table-V: Course of study for semester V

Course	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	11	4
BP504T	Pharmacognosy and Phytochemistry II– Theory	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 – Practical	4	-	2
	Total	27	5	26



Table-VI: Course of study for semester VI

Course	Name of the course	No. of	Tutorial	Credit
code	1(ame of the con-	hours		points
BP601T	Medicinal Chemistry III - Theory	3	1	4
BP602T	Pharmacology III – Theory	3	11	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	11	4
BP607P	Medicinal chemistry III – Practical	4	-	2
BP608P		4		2
BP609P	Herbal Drug Technology – Practical	4	-	2
	Total	30	6	30

Table-VII: Course of study for semester VII

Course	Name of the course	No. of	Tutorial	Credit
code	Name of the course	hours		points
BP701T	Instrumental Methods of Analysis – Theory	3	11	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 - Practical	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			
	Quality Control and Standardization of	3 + 3 =		4+4=
BP806ET	Herbals	6	1+1=2	8
BP807ET	Computer Aided Drug Design			
BP808ET	Cell and Molecular Biology			
BP809ET	Cosmetic Science			
BP810ET	Experimental Pharmacology			
BP811ET	Advanced Instrumentation Techniques			
BP812ET	Dietary Supplements and Nutraceuticals			
BP813PW	Project Work	12	-	6
	Total	24	4	22

Table-IX: Semester wise credits distribution

Semester	Credit Points
I	27/29 ³ /30 [#]
. 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 /212#

^{*} 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 Mathematics / Physics / Chemistry at HSC and appearing for Remedial Biology course.



^{\$}Applicable ONLY for the students studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics course.

13. 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.
- 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.

14. Examinations/Assessments

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

14.1 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.



Tables-X: Schemes for internal assessments and end semester examinations semester wise

			Τ.		Т	7		Т			٦		$\neg \tau$		Τ	Τ			T			1
	Total	Marks		100	100	100	100		90	20			20	20	05	S	20	25		25	675/7253/	100
	- Exams	Duration		3 Hrs	3 Hrs	3 Hrs	3 Hrs		1.5 Hrs	1 5 Hre	SIII C.I		4 Hrs	4 Hrs	7 117	4 HIS	4 Hrs	J.H.c	SILI 7	2 Hrs	31.5/333/	SIU CC
	End Semester Exams	Marks		75	7.5	75	75	61	35	2,0	CC.		35	35		35	35		cı	15	490/5253/	540
		Total		25	25	25	30	67	15		<u></u>		15	15		15	15		10	10	185/2003/210"	
Semester I	essment	ams	Duration	1 Hr	1 Hr	H.		는 보	1 Hr		Ħ		4 Hrs	4 Hrs		4 Hrs	4 Hrs		2 Hrs	2 Hrs	23/243/26#	Hrs
Semo	Internal Assessment	Sessional Exams	Marks	15	15	31		15	10		10		10	10	21	10	10		\$	5	115/1253/130#	
		Continuous	Mode	10	01	01	0.1	10	5		2		. \$	v	,	5	5		5	5	101/53/80#	
		Name of the course		Human Anatomy and Dhysiology I- Theory	Pharmaceutical Analysis I –	I neorly	Pharmaceutical Increanic	Chemistry – Theory	Communication skills –	I neory *	Kelliediai Diology/	Mathematics - I heory*	Human Anatomy and Physiology – Practical	Pharmaceutical Analysis I –	Practical	Pharmaceutics I – Practical	Pharmaceutical Inorganic	Cilcilistiy — riactical	Communication skills – Practical*	Remedial Biology –	Tiaciicai	
		code		BP101T	BP102T	1	1	BP104T	BP105T	Tagyora		BP106RMT	BP107P	1	DF100F	BP109P			BP111P	BP112RBP		

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



Semester II

(I	Internal Assessment	essment		End Semester Exams	ster Exams	Total
Course	Name of the course	Continuous	Sessional Exams	l Exams	Total	Marks	Duration	Marks
2002		Mode	Marks	Duration	Torm			
BP201T	Human Anatomy and Physiology	10	15	1 Hr	25	75	3 Hrs	100
	II – Theory							
RP202T	Pharmaceutical Organic	10	15	#	25	75	3 Hrs	100
	Chemistry I – Theory) (
BP203T	Biochemistry – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP204T	Pathophysiology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BD205T	Computer Applications in	10	15	1 Hr	25	50	2 Hrs	75
100210	Pharmacy – Theory*	2	<u> </u>	1				
BP206T	Environmental sciences – Theory*	10	15	1 Hr	25	20	2 Hrs	75
BD207P	Human Anatomy and Physiology	v	10	4 Hrs	15	35	4 Hrs	20
7/07/17	II -Practical	ì	21		1			
RP708P	Pharmaceutical Organic	\$	10	4 Hrs	15	35	4 Hrs	20
	Chemistry I– Practical	,						
BP209P	Biochemistry – Practical	5	10	4 Hrs	15	35	4 Hrs	20
RP710P	Computer Applications in	v	v	2 Hrs	10	15	2 Hrs	25
101217	Pharmacy - Practical*))					
	Total	08	125	20 Hrs	205	520	30 Hrs	725
		,						

* The subject experts at college level shall conduct examinations



Semester III

Continuous
Mode
10
10

Semester IV

Course			Internal Assessment	sessment		End Seme	End Semester Exams	Total
	Name of the course	Continuous	Sessions	Sessional Exams	Total	Marks	Duration	Marks
code		Mode	Marks	Duration	Lorai			
F10744	Pharmaceutical Organic	10	15	Ľ.	75	75	3 Hrs	100
BP4011	Chemistry III– Theory	10	C	TT 1	7	2		
BP402T	BP402T Medicinal Chemistry I - Theory	10	15	1 Hr	25	75	3 Hrs	100
BP403T	Physical Pharmaceutics II –	10	15	1 Hr	25	75	3 Hrs	100
	Theory							00,
BP404T	BP404T Pharmacology I – Theory BP405T	10	15	1 Hr	25	75	3 Hrs	100
Pharmacc	Pharmacoonoxy I – Theory BP406P	10	15	1 Hr	25	75	3 Hrs	100
Medicina	Medicinal Chemistry I – Practical	\ \cdot \	10	4 Hr	15	35	4 Hrs	50
BDA07P	Physical Pharmaceutics II –	o v	10	4 Hrs	15	35	4 Hrs	50
1/04 10	Dractical							
RP408P	BDANSD Pharmacology I - Dractical	5	10	4 Hrs	15	35	4 Hrs	20
100710	niminacology 1 – 1 lactical	v	2	4 Hrs	15	35	4 Hrs	50
DF409F	Dr409r riidiiideogiiosy 1 – riacucai	20	115	21 Hrs	185	515	31 Hrs	200
	Total							

Semester V

Continuous Sessional Exams Total Marks Duration Total Marks 10 15 1 Hr 25 75 5 10 4 Hr 15 35 5 10 4 Hr 15 35 5 10 4 Hr 15 35 65 105 17 Hr 170 480				Internal Assessment	sessment		End Seme	End Semester Exams	Total
Mode Marks Duration 101 Cheory 10 15 1 Hr 25 75 cory 10 15 1 Hr 25 75 y 10 15 1 Hr 25 75 nce - 10 15 1 Hr 25 75 ctical 5 10 4 Hr 15 35 al 5 10 4 Hr 15 35 cal 5 10 4 Hr 15 35 Total 65 105 17 Hr 170 480	Course	Name of the course	Continuous	Sessions	il Exams	Total	Marke	Duration .	Marks
Theory 10 15 1 Hr 25 75 ory 10 15 1 Hr 25 75 y 10 15 1 Hr 25 75 y 10 15 1 Hr 25 75 nce - 10 15 1 Hr 25 75 ctical 5 10 4 Hr 15 35 al 5 10 4 Hr 15 35 cal 5 10 4 Hr 15 35 Total 65 105 17 Hr 170 480	code		Mode	Marks	Duration	LOCAL			
ory 10 15 1 Hr 25 75 y 10 15 1 Hr 25 75 nce - 10 15 1 Hr 25 75 ctical 5 10 4 Hr 15 35 al 5 10 4 Hr 15 35 cal 5 10 4 Hr 15 35 Total 65 105 17 Hr 170 480	BP501T	Medicinal Chemistry II – Theory	10	15	1 Hr	25	75	3 Hrs	100
y 10 15 1 Hr 25 75 y 10 15 1 Hr 25 75 ctical 5 10 4 Hr 15 35 al 5 10 4 Hr 15 35 cal 5 10 4 Hr 15 35 Total 65 105 17 Hr 170 480	BP502T	Industrial Pharmacyl – Theory	10	15	1 Hr	25	75	3 Hrs	100
y 10 15 1 Hr 25 75 nce - 10 15 1 Hr 25 75 ctical 5 10 4 Hr 15 35 al 5 10 4 Hr 15 35 cal 5 10 4 Hr 15 35 Total 65 105 17 Hr 170 480	BP503T	Pharmacology II – Theory	10	15	1 Hr	25	75	3 Hrs	100
Pharmaceutical Jurisprudence – 10 15 1 Hr 25 75 Theory Industrial Pharmacyl- Practical 5 10 4 Hr 15 35 Pharmacology II – Practical 5 10 4 Hr 15 35 Pharmacognosy II – Practical 5 10 4 Hr 15 35 Pharmacognosy II – Practical 5 10 4 Hr 15 35 Total 65 17 Hr 170 480	BP504T	Pharmacognosy II – Theory	10	15	1 Hr	25	75	3 Hrs	100
5 10 4Hr 15 35 5 10 4Hr 15 35 5 10 4Hr 15 35 10 4Hr 15 35	BP505T	Pharmaceutical Jurisprudence –	10	15	1 Hr	25	75	3 Hrs	100
5 10 4Hr 15 35 5 10 4Hr 15 35 10 4Hr 15 35	BP50KP	Incoly Industrial Pharmacyl— Practical	٧	10	4 Hr	15	35	4 Hrs	50
Pharmacognosy II – Practical 5 10 4 Hr 15 35 Total 65 105 17 Hr 170 480	BP507P	Pharmacology II – Practical	2 3	10	4 Hr	15	35	4 Hrs	50
Total 65 105 17 Hr 170 480	BP508P	Pharmacognosv II – Practical	5	10	4 Hr	15	35	4 Hrs	50
_		Total	65	105	17 Hr	170	480	27 Hrs	929

Semester VI

							ŗ	
			Internal Assessment	sessment		End Seme	End Semester Exams	Total
Course	Name of the course	Continuous	Sessiona	Sessional Exams	Total	Marks	Duration	Marks
code		Mode	Marks	Duration				
N TIUS	BD601T Medicinal Chemistry III - Theory	10	15	1 Hr	25	75	3 Hrs	100
1 1 100 F T C D F F	BP602T Pharmacology III – Theory	10	15	出出	25	75	3 Hrs	100
RP603T	Herbal Drug Technology –	10	15	1 Hr	25	75	3 Hrs	100
	Theory							2
T-7074	Biopharmaceutics and	10	15	1 Hr	25	75	3 Hrs	100
BF0041	Pharmacokinetics – Theory	-						
TEOL	Pharmaceutical	10	15	1 Hr	25	75	3 Hrs	100
BF0051	Biotechnology-Theory	2						
T909c	BP606T Quality Assurance—Theory	10	15	1 Hr	25	75	3 Hrs	90
	Medicinal chemistry III –		-	4 TI.	15	35	4 Hrs	20
BP607P	Practical	9	10	4 HIS	CI	3		
RP608P	-	٧	10	4 Hrs	15	35	4 Hrs	20
		, , ,	10	4 Hrs	15	35	4 Hrs	50
ВР609Р	Practical)	•					150
	Total	75	120	18 Hrs	195	555	30 Hrs	OC/
	lotai							

Semester VII

				,		End Se	End Semester	
Course			Internal Assessment	sessment		Exa	Exams	Total
code	Name of the course	Continuous	Session	Sessional Exams	Total	Marke	Duration	Marks
		Mode	Marks	Duration	10141	TATES IN		
BP701T	Instrumental Methods of Analysis	10	15	1 Hr	25	75	3 Hrs	100
	- Theory							
BP702T	 	10	15	1 Hr	25	75	3 Hrs	100
		10	15	1 Hr	25	75	3 Hrs	100
PN70A	Novel Drug Delivery System –	10	15	1 Hr	25	75	3 Hrs	100
110110	Theory	21	2					
BD705 D	Instrumental Methods of Analysis	5	10	4 Hrs	15	35	4 Hrs	50
100/10	- Practical) .)					
RP706 PS	BP706 PS Practice School*	25	·	1	25	125	5 Hrs	150
	Total	10	20	8Hrs	140	460	21 Hrs	909
	TMACT							

* The subject experts at college level shall conduct examinations

Semester VIII

			Internal Assessment	essment		End Semes	End Semester Exams	Total
Course	Name of the course	Continuous	Sessions	Sessional Exams	Total	Marks	Duration	Marks
cone		Mode	Marks	Duration	IOLAI	CALIENT IN		
BP801T	Biostatistics and Research	10	15	1 Hr	25	75	3 Hrs	100
	Methodology - Theory	2	}					
RP807T	Social and Preventive Pharmacy	10	15	H	25	75	3 Hrs	100
	- Theory		2					
BP803ET	Pharmaceutical Marketing –							
	Theory					-		
RP804FT	Pharmaceutical Regulatory							
	Science – Theory							
BP805ET	Pharmacovigilance – Theory							
	Quality Control and						41100	
BP806ET	Standardization of Herbals –	-	15 - 15 -)	75 + 75	3+3=6	100+
	Theory	10 + 10	- 61 + 61	1 + 1 -	50 50			100
BP807ET	Computer Aided Drug Design – Theory	07 =	000	SILI 7	3	2	3	200
BP808ET	Cell and Molecular Biology –						·	
	I lieury							
BP809ET	Cosmetic Science – Theory					•		
BP810ET	Experimental Pharmacology – Theory		· ·					
BD\$11ET	Advanced Instrumentation	F						
ו מווסום	Techniques – Theory							
BP812PW	Project Work	I	1	'		150	4 Hrs	OCI

_	7	
1	520	
	16 Hrs	
	450	
	100	
	4 Hrs	
	09	
	40	
	Total	



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

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

Theory	γ	Maxi	mum
Criteria		Ma	
Attendance (Refer Table – XII)		4	2
Academic activities (Average of any 3 activities e.g. quiz, assignation open book test, field work, group discussion and seminar)	ment,	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

14.2.1. 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

I. Multiple Choice Questions (MCQs)

OR

Objective Type Questions (5 x 2)

(Answer all the questions)

I. Long Answers (Answer 1 out of 2)

II. Short Answers (Answer 2 out of 3)

$$= 10 \times 1 = 10$$

OR

$$= 05 \times 2 = 10$$

$$= 1 \times 10 = 10$$

$$= 2 \times 5 = 10$$

Total

Total

Total

16.

17.

For subjects having Non University Examination

I. Long Answers (Answer 1 out of 2)

II. Short Answers (Answer 4 out of 6)

$$= 1 \times 10 = 10$$

$$= 4 \times 5 = 20$$

Total = 30 marks

Question paper pattern for practical sessional examinations

I. Synopsis

II. Experiments

III. Viva voce

= 10

= 25

= 05

Total = 40 marks

18. 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.

19. Carry forward of marks

In case a student fails to secure the minimum 50% in any Theory or Practical course as specified in 17, then he/she shall reappear for the end semester examination of that course. However his/her marks of the Internal Assessment shall be carried overand he/she shall be entitled for grade obtained by him/her on passing.

20. 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.

21. 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.

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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

Objective Type Questions (10 x 2) = $10 \times 2 = 20$

(Answer all the questions) = $2 \times 10 = 20$

II. Long Answers (Answer 2 out of 3) =
$$2 \times 10 = 20$$

III. Short Answers (Answer 7 out of 9) = $7 \times 5 = 35$

For 50 marks paper

I. Long Answers (Answer 2 out of 3) =
$$2 \times 10 = 20$$

II. Short Answers (Answer 6 out of 8) = $6 \times 5 = 30$

For 35 marks paper

II. Short 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

	Total	=	35 marks
III. Viva voce		=	5
II. Experiments			
· -			25
I. Synopsis			5
tion paper pattern zer ter	•		_

22. Academic Progression:

No student shall be admitted to any examination unless he/she fulfills 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 I, II, III, IV, V and VI 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 33.

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 and VI 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 33.

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.

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.

23. Grading of performances

22.1. Letter grades and grade points allocations:

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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	Letter Grade	Grade Point	Performance
Marks Obtained		10	Outstanding
90.00 – 100	0	0	. Excellent
80.00 - 89.99	A	8	Good
70.00 – 79.99	C	7	Fair
$\frac{60.00 - 69.99}{50.00 - 59.99}$	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.

24. 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:

$$SGPA = \frac{C_1G_1 + C_2G_2 + C_3G_3 + C_4G_4 + C_5G_5}{C_1 + C_2 + C_3 + C_4 + C_5}$$

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25. 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:

$$SGPA = \frac{C_1G_1 + C_2G_2 + C_3G_3 + C_4* ZERO + C_5G_5}{C_1 + C_2 + C_3 + C_4 + C_5}$$

26. 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,

27. 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

28. 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 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).

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.

Objective(s) of the work done Methodology adopted Results and Discussions Conclusions and Outcomes	2	15 Marks 20 Marks 20 Marks 20 Marks
	Total	75 Marks

Total	75 Marks
	25 Marks 20 Marks 30 Marks
Total	75 Marks

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.

29. 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 institute.

30. 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.

31. 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.

32. Award of degree

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

33. 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.

34. 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.

The syllabus for each subject of study shall be as prescribed 35. Syllabus: by the Pharmacy Council of India from time to time.

(Jaswant Singh) REGISTRAR

No.: F-8(88)/Notification/Academic/2017/ 11486 - 1501 Copy to the following for information and necessary action:-

Date: 25/.S../2017

1- O.S.D. Higher Education, Governor's Secretariat, Rajbhawan, Jaipur

2- P.S. to Hon'ble Vice-Chancellor, RUHS, Jaipur

- 3- Secretary, Medical Education, Government of Rajasthan, Jaipur
- 4- Registrar cum Secretary, Pharmacy Council of India, New Delhi
- 5- Secretary, All India Council for Technical Education, New Delhi
- 6- Addl. Director (Acad.), Directorate of Medical Education, Government of Rajasthan, Jaipur

7- Pro Vice-Chancellor, RUHS, Jaipur

- 8- Dean, Faculty of Pharmacy, RUHS, Jaipur
- 9- Principals of all Pharmacy Colleges affiliated to RUHS
- 10- Financial Advisor, RUHS, Jaipur
- 11- Controller of Examinations, RUHS, Jaipur
- 12-OIC, Entrance Cell, RUHS
- 13- Dy. Registrar (Academic), RUHS, Jaipur

14- Assistant Registrar, Exam/Secrecy, RUHS, Jaipur

15- Nodal Officer, RUHS website for uploading this notification on the website of RUHS for information of all concerning.

16-Guard file.

Assistant Registrar (Academic-II)