Academic Regulations

School of Pharmacy and Life Sciences

(UG & PG)

Centurion
University
Shaping Lives...
Empowering Communities...

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA

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Academic Regulations

of

School of Pharmacy and Life Sciences

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AY: 2017-18

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About School of Pharmacy and Life Sciences

The School of Pharmacy and Life Sciences (SoPLS) was established in 2016, as a constituent school under the umbrella of Centurion University of Technology and Management, which strides towards excellence, by adopting a system of qualitative policies and processes with continue improvements to enhance student's skill and talent for their exemplary contribution to the society, the nation and the world. The School is offering Diploma in Pharmacy (D. Pharm) with 2 years programme, Bachelor of Pharmacy (B. Pharm) with 4 years programme, Master of Pharmacy (M. Pharm) with 2 years programme having 3 distinct Specializations in Pharmaceutics, Industrial Pharmacy, Pharmaceutical Analysis, approved by Pharmacy Council of India, New Delhi. School also offering Ph. D in novel product oriented research programme of pharmacy. In the subsequent year, school extends its programme in its other sister campuses like Balangir, Rayagada and Balasore. At present, the school is running with 1000 nos. of students with highly qualified and experienced faculty members across all th campus. School has state-of-the-art physical infrastructure and learning resources with latest generation ICT facilities with CPCSEA recognised Animal House. SoPLS Provides sets of allied skill and value added course to the students to increase the work proficiency among them. SoPLS facilitates the students to undergo medical, industrial and community pharmacy internship to ensure the real time field exposure to every student. SoPLS shall strive to become "**Centre of Academic and Research Excellence**" in the field of Medicine. The school also runs with various certified skilled course and value-added professional courses to target and empowering knowledge to the graduate, post graduate and Ph. D scholars to provide Impact Oriented Education.

VISION

To be a globally recognized centre for Teaching, Research and Entrepreneurial Training in Pharmaceutical Sciences and to provide Healthcare services for Societal needs.

MISSION

- Nurture young minds into knowledgeable, skillful and ethical professionals to serve for the society.
- To support research in diverse ways by launching partnerships and collaborations.
- To ensure affordable health care by developing pharmaceutical formulations using in house resources.
- To inculcate the mindset for entrepreneurship and innovativeness to enrich the healthcare system.

ACADEMIC REGULATIONS B. PHARM

1. Short Title and Commencement

These regulations shall be called as "The Revised Regulations for the B. Pharm. Degree Program (CBCS)of the Pharmacy Council of India, New Delhi". They shall come into effect from the Academic Year 2017-18. The regulations framed are subject to modifications from time to time by Pharmacy Council of India.

2. Minimum qualification for admission

2.1 First year B. Pharm:

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

2.2 B. Pharm lateral entry (to third semester):

A pass in D. Pharm. course from an institution approved by the Pharmacy Council of India under section 12 of the Pharmacy Act.

3. Duration of the program

The course of study for B. Pharm shall extend over a period of eight semesters (four academic years) and six semesters (three academic years) for lateral entry students. The curricula and syllabi for the program shall be prescribed from time to time by Pharmacy Council of India, New Delhi.

4. Medium of instruction and examinations

Medium of instruction and examination shall be in English.

5. Working days in each semester

Each semester shall consist of 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.

6. Attendance and progress

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

7. Program/Course credit structure

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

7.1. Credit assignment

7.1.1. Theory and Laboratory courses

Courses are broadly classified as Theory and Practical. Theory courses consist of lecture (L) and /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.

7.2. 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 Project over the duration of eight semesters. The credits are distributed semester-wise as shown in Table IX. Courses generally progress in sequences, building competencies and their positioning indicates certain academic maturity on the part of the learners. Learners are expected to follow the semester-wise schedule of courses given in the syllabus.

The lateral entry students shall get 52 credit points transferred from their D. Pharm program. Such students shall take up additional remedial courses of ‘Communication Skills’ (Theory and Practical) and ‘Computer Applications in Pharmacy’ (Theory and Practical) equivalent to 3 and 4 credit points respectively, a total of 7 credit points to attain 59 credit points, the maximum of I and II semesters.

8. Academic work

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

9. Course of Study

The course of study for B. Pharm shall include Semester Wise Theory & Practical as given in Table – I to VIII. The number of hours to be devoted to each theory, 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

Course Code	Name of the Course	No. of hours	Tutorial	Credit Points
BPHT1101	Human Anatomy and Physiology I– Theory	3	1	4
BPHT1102	Pharmaceutical Analysis – Theory	3	1	4
BPHT1103	Pharmaceutics I – Theory	3	1	4
BPHT1104	Pharmaceutical Inorganic Chemistry – Theory	3	1	4
BPHT1105	Communication skills – Theory*	2	-	2
BPHT1106/ BPHT1107	Remedial Biology/ Remedial Mathematics – Theory*	2	-	2
BPHL1101	Human Anatomy and Physiology – Practical	4	-	2
BPHL1102	Pharmaceutical Analysis – Practical	4	-	2
BPHL1103	Pharmaceutics I – Practical	4	-	2
BPHL1104	Pharmaceutical Inorganic Chemistry – Practical	4	-	2
BPHL1105	Communication skills – Practical*	2	-	1
BPHL1106	Remedial Biology – Practical*	2	-	1
	Total	**32/34$/36#**	**04**	**27/29$/30#**

#Applicable ONLY for the students who have studied Mathematics / Physics / Chemistry 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.

* Non University Examination (NUE)

Table-II: Course of study for semester-II

Course Code	Name of the Course	No. of hours	Tutorial	Credit Points
BPHT1201	Human Anatomy and Physiology II – Theory	3	1	4
BPHT1202	Pharmaceutical Organic Chemistry I – Theory	3	1	4
BPHT1203	Biochemistry – Theory	3	1	4
BPHT1204	Pathophysiology – Theory	3	1	4
BPHT1205	Computer Applications in Pharmacy – Theory*	3	-	3
BPHT1206	Environmental sciences – Theory*	3	-	3
BPHL1201	Human Anatomy and Physiology II –Practical	4	-	2
BPHL1202	Pharmaceutical Organic Chemistry I– Practical	4	-	2
BPHL1203	Biochemistry – Practical	4	-	2
BPHL1204	Computer Applications in Pharmacy – Practical*	2	-	1
	Total	**32**	**4**	**29**

Table-III: Course of study for semester-III

Course Code	Name of the Course	No. of hours	Tutorial	Credit Points
BPHT2101	Pharmaceutical Organic Chemistry II – Theory	3	1	4
BPHT2102	Physical Pharmaceutics I – Theory	3	1	4
BPHT2103	Pharmaceutical Microbiology – Theory	3	1	4
BPHT2104	Pharmaceutical Engineering – Theory	3	1	4
BPHL2101	Pharmaceutical Organic Chemistry II – Practical	4	-	2
BPHL2102	Physical Pharmaceutics I – Practical	4	-	2
BPHL2103	Pharmaceutical Microbiology – Practical	4	-	2
BPHL2104	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
BPHT2201	Pharmaceutical Organic Chemistry III– Theory	3	1	4
BPHT2202	Medicinal Chemistry I – Theory	3	1	4
BPHT2203	Physical Pharmaceutics II – Theory	3	1	4
BPHT2204	Pharmacology I – Theory	3	1	4
BPHT2205	Pharmacognosy and Phytochemistry I– Theory	3	1	4
BPHL2201	Medicinal Chemistry I – Practical	4	-	2
BPHL2202	Physical Pharmaceutics II – Practical	4		2
BPHL2203	Pharmacology I – Practical	4	-	2
BPHL2204	Pharmacognosy and Phytochemistry I – Practical	4	-	2
	Total	**31**	**5**	**28**

Table-V: Course of study for Semester-V

Course Code	Name of the Course	No. of hours	Tutorial	Credit Points
BPHT3101	Medicinal Chemistry II – Theory	3	1	4
BPHT3102	Industrial Pharmacy I– Theory	3	1	4
BPHT3103	Pharmacology II – Theory	3	1	4
BPHT3104	Pharmacognosy and Phytochemistry II– Theory	3	1	4
BPHT3105	Pharmaceutical Jurisprudence – Theory	3	1	4
BPHL3101	Industrial Pharmacy I – Practical	4	-	2
BPHL3102	Pharmacology II – Practical	4	-	2
BPHL3103	Pharmacognosy and Phytochemistry II – Practical	4	-	2
	Total	**27**	**5**	**26**

Table-VI: Course of study for semester-VI

Course Code	Name of the Course	No. of hours	Tutorial	Credit Points
BPHT3201	Medicinal Chemistry III – Theory	3	1	4
BPHT3202	Pharmacology III – Theory	3	1	4
BPHT3203	Herbal Drug Technology – Theory	3	1	4
BPHT3204	Biopharmaceutics and Pharmacokinetics – Theory	3	1	4
BPHT3205	Pharmaceutical Biotechnology – Theory	3	1	4
BPHT3206	Pharmaceutical Quality Assurance –Theory	3	1	4
BPHL3201	Medicinal Chemistry III – Practical	4	-	2
BPHL3202	Pharmacology III – Practical	4	-	2
BPHL3203	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
BPHT4101	Instrumental Methods of Analysis – Theory	3	1	4
BPHT4102	Industrial Pharmacy II – Theory	3	1	4
BPHT4103	Pharmacy Practice – Theory	3	1	4
BPHT4104	Novel Drug Delivery System – Theory	3	1	4
BPHL4101	Instrumental Methods of Analysis – Practical	4	-	2
BPHL4102	Practice School*	12	-	6
	Total	**28**	**5**	**24**

Table-VIII: Course of study for semester-VIII

Course Code	Name of the Course	No. of hours	Tutorial	Credit Points
BPHT4201	Biostatistics and Research Methodology	3	1	4
BPHT4202	Social and Preventive Pharmacy	3	1	4
BPHT4203	Pharma Marketing Management	3+3=6	1+1=2	4+4=8
BPHT4204	Pharmaceutical Regulatory Science			
BPHT4205	Pharmacovigilance			
BPHT4206	Quality Control and Standardizations of Herbals			
BPHT4207	Computer Aided Drug Design			
BPHT4208	Cell and Molecular Biology			
BPHT4209	Cosmetic Science			
BPHT4210	Experimental Pharmacology			
BPHT4211	Advanced Instrumentation Techniques			
BPHT4212	Dietary Supplements and Nutraceutical			
BPHP4201	Project Work			
	Total	**24**	**4**	**22**

Table-IX: Semester wise credits distribution

Semester	Credit Points
I	**27/29$/30#**
II	**29**
III	**24**
IV	**28**
V	**26**
VI	**30**
VII	**24**
VIII	**22**
Extracurricular/ Co curricular activities	**01***
Total credit points for the program	**211/213$/214#**

*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 university 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**.**

10. Program Committee

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

   A senior teacher shall be the Chairperson; One Teacher from each department handling B. Pharm courses; and four student representatives of the program (one from each academic year), nominated by the Head of the institution.
3. Duties of the Program Committee:
   i. Periodically reviewing the progress of the classes.
   ii. Discussing the problems concerning curriculum, syllabus and the conduct of classes.
   iii. Discussing with the course teachers on the nature and scope of assessment for the course and the same shall be announced to the students at the beginning of respective semesters.
   iv. Communicating its recommendation to the Head of the institution on academic matters.
   v. The Program Committee shall meet at least thrice in a semester preferably at the end of each Sessional exam (Internal Assessment) and before the end semester exam.

11. Examinations/Assessments

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

11.1 End semester examinations

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

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

Semester I

Course Code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continous Mode	Sessional Marks	Exam Duration	Total	Marks	Duration	
BPHT1101	Human Anatomy and Physiology I– Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT1102	Pharmaceutical Analysis – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT1103	Pharmaceutics I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT1104	Pharmaceutical Inorganic Chemistry – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT1105	Communication skills – Theory *	5	10	1 Hr	15	35	1.5 Hrs	50
BPHT1106/ BPHT1107	Remedial Biology/ Mathematics – Theory*	5	10	1 Hr	15	35	1.5 Hrs	50
BPHL1101	Human Anatomy and Physiology – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL1102	Pharmaceutical Analysis – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL1103	Pharmaceutics I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL1104	Pharmaceutical Inorganic Chemistry – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL1105	Communication skills – Practical*	5	5	2 Hrs	10	15	2 Hrs	25
BPHL1106	Remedial Biology – Practical*	5	5	2 Hrs	10	15	2 Hrs	25
TOTAL		**70/75$/80#**	**115/125$/130#**	**23/24$/26# Hrs**	**185/200$/210#**	**490/525$/ 540#**	**31.5/33$/ 35# Hrs**	**675/725$/ 750#**

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

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

* Non University Examination (NUE)

Semester II

Course Code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continous Mode	Sessional Marks	Exam Duration	Total	Marks	Duration	
BPHT1201	Human Anatomy and Physiology II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT1202	Pharmaceutical Organic Chemistry I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT1203	Biochemistry – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT1204	Pathophysiology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT1205	Computer Applications in Pharmacy – Theory*	10	15	1 Hr	25	75	2 Hrs	75
BPHT1206	Environmental sciences – Theory*	10	15	1 Hr	25	75	2 Hrs	75
BPHL1201	Human Anatomy and Physiology II –Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL1202	Pharmaceutical Organic Chemistry I– Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL1203	Biochemistry – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL1204	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 at college level shall conduct examinations

Semester III

Course Code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Marks	Exam Duration	Total	Marks	Duration	
BPHT2101	Pharmaceutical Organic Chemistry II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT2102	Physical Pharmaceutics I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT2103	Pharmaceutical Microbiology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT2104	Pharmaceutical Engineering – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHL2101	Pharmaceutical Organic Chemistry II – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL2102	Physical Pharmaceutics I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL2103	Pharmaceutical Microbiology – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL2104	Pharmaceutical Engineering –Practical	5	10	4 Hrs	15	35	4 Hrs	50
TOTAL		60	100	20 Hrs	160	440	28 Hrs	600

Semester IV

Course Code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Marks	Exam Duration	Total	Marks	Duration	
BPHT2201	Pharmaceutical Organic Chemistry III– Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT2202	Medicinal Chemistry I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT2203	Physical Pharmaceutics II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT2204	Pharmacology I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT2205	Pharmacognosy –I Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHL2201	Medicinal Chemistry I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL2202	Physical Pharmaceutics II – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL2203	Pharmacology I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL2204	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 Code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Marks	Exam Duration	Total	Marks	Duration	
BPHT3101	Medicinal Chemistry II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT3102	Industrial Pharmacy I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT3103	Pharmacology II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT3104	Pharmacognosy II– Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT3105	Pharmaceutical Jurisprudence – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHL3101	Industrial Pharmacy I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL3102	Pharmacology II – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL3103	Pharmacognosy II – Practical	5	10	4 Hrs	15	35	4 Hrs	50
TOTAL		**65**	**105**	**17 Hr**	**170**	**480**	**27 Hrs**	**650**

Semester VI

Course Code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Marks	Exam Duration	Total	Marks	Duration	
BPHT3201	Medicinal Chemistry III – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT3202	Pharmacology III – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT3203	Herbal Drug Technology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT3204	Biopharmaceutics and Pharmacokinetics – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT3205	Pharmaceutical Biotechnology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT3206	Pharmaceutical Quality Assurance –Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHL3201	Medicinal Chemistry III – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL3202	Pharmacology III – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL3203	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 Code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Marks	Exam Duration	Total	Marks	Duration	
BPHT4101	Instrumental Methods of Analysis – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT4102	Industrial Pharmacy II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT4103	Pharmacy Practice – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHT4104	Novel Drug Delivery System – Theory	10	15	1 Hr	25	75	3 Hrs	100
BPHL4101	Instrumental Methods of Analysis – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BPHL4102	Practice School*	25	-	-	25	125	5 Hrs	150
	TOTAL	**70**	**70**	**8 Hrs**	**140**	**460**	**21 Hrs**	**600**

* The subject experts at college level shall conduct examinations

Semester VIII

Course Code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Marks	Exam Duration	Total	Marks	Duration	
BPHT4201	Biostatistics and Research Methodology	10	15	1 Hr	25	75	3 Hrs	100
BPHT4202	Social and Preventive Pharmacy	10	15	1 Hr	25	75	3 Hrs	100
BPHT4203	Pharmaceutical Marketing	10+10=20	15 + 15 = 30	1 + 1 = 2 Hrs	25 + 25 = 50	75 + 75 = 150	3 + 3 = 6 Hrs	100 + 100 = 200
BPHT4204	Pharmaceutical Regulatory Science							
BPHT4205	Pharmacovigilance							
BPHT4206	Quality Control and Standardizations of Herbals							
BPHT4207	Computer Aided Drug Design							
BPHT4208	Cell and Molecular Biology							
BPHT4209	Cosmetic Science							
BPHT4210	Experimental Pharmacology							
BPHT4211	Advanced Instrumentation Techniques							
BPHT4212	Dietary supplements and Nutraceuticals							
BPHP4201	Project Work	-	-	-	-	150	4 Hrs	150
	TOTAL	**40**	**60**	**4 Hrs**	**100**	**450**	**21 Hrs**	**550**

11.2. Internal assessment: Continuous mode

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

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

Theory		
Criteria	**Maximum Marks**	
Attendance (Refer Table – XII)	4	**2**
Academic activities (Average of any 3 activities e.g. quiz, assignment, open book test, field work, group discussion and seminar)	**3**	**1.5**
Student – Teacher interaction	**3**	**1.5**
Total	**10**	**5**

Practical	
Attendance (Refer Table – XII)	**2**
Based on Practical Records, Regular viva voce, etc.	**3**
Total	**5**

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

Percentage of Attendance	**Theory**	**Practical**
95 – 100	4	2
90 – 94	3	1.5
85 – 89	2	1
80 – 84	1	0.5
Less than 80	0	0

11.2.1. Sessional Exams

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

Category	**Particulars**	**Marks Distribution**
I	Multiple Choice Questions (MCQs) OR Objective type Questions (Answer all the questions)	10 X 1=10 OR 05 X 2=10
II	Long Answers (Answer 1 out of 2)	1 X 10 =10
III	Short Answers (Answer 2 out of 3)	2 X5= 10

Total	**30 Marks**

For subjects having Non University Examination

Category	Particulars	Marks Distribution
I	Long Answers (Answer 1 out of 2)	10 X 1=10
II	Short Answers (Answer 4 out of 6)	4 X 5 =20
	Total	**30 Marks**

Question paper pattern for practical Sessional examinations

Category	Particulars	Marks Distribution
I	Synopsis	10
II	Experiments	25
III	Viva voce	05
	Total	**40 Marks**

12. Promotion and award of grades

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

13. Carry forward of marks

In case a student fails to secure the minimum 50% in any Theory or Practical course as specified in 12, then he/she shall reappear for the end semester examination of that course. However, his/her marks of the Internal Assessment shall be carried over and he/she shall be entitled for grade obtained by him/her on passing.

14. Improvement of internal assessment

A student shall have the opportunity to improve his/her performance only once in the Sessional exam component of the internal assessment. The re-conduct of the Sessional exam shall be completed before the commencement of next end semester theory examinations.

15. Re-examination of end semester examinations

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

Table-XIII: Tentative schedule of end semester examinations

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

Question paper pattern for end semester theory examinations

For 75 marks paper

Category	Particulars	Marks Distribution
I	Multiple Choice Questions (MCQs) OR Objective Type Questions (10 x 2) (Answer all the questions)	20 X 1=20 OR 10 x 2=20
II	Long Answers (Answer 2 out of 3)	2 X 10 =20
III	Short Answers (Answer 7 out of 9)	7 X5= 35
	Total	**75 Marks**

For 50 marks paper

Category	Particulars	Marks Distribution
I	Long Answers (Answer 2 out of 3)	2 X 10 =20
II	Short Answers (Answer 6 out of 8)	6 X5= 30
	Total	**50 Marks**

For 35 marks paper

Category	Particulars	Marks Distribution
I	Long Answers (Answer 1 out of 2)	1 X 10 =10
II	Short Answers (Answer 5 out of 7)	5 X5= 25
	Total	**35 Marks**

Question paper pattern for end semester practical examinations

Category	Particulars	Marks Distribution
I	Synopsis	5
II	Experiments	25
III	Viva voce	5
	Total	**35 Marks**

16. 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 26.
- A lateral entry student shall be eligible to carry forward all the courses of III, IV and V semesters till the VI semester examinations. However, he/she shall not be eligible to attend the courses of VII semester until all the courses of III and IV semesters are successfully completed.
- A lateral entry student shall be eligible to carry forward all the courses of V, VI and VII semesters till the VIII semester examinations. However, he/she shall not be eligible to get the course completion certificate until all the courses of III, IV, V 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 26.
- Any student who has given more than 4 chances for successful completion of I / III semester courses and more than 3 chances for successful completion of II / IV semester courses shall be permitted to attend V / VII semester classes ONLY during the subsequent academic year as the case may be. In simpler terms there shall NOT be any ODD BATCH for any semester.
- Note: Grade AB should be considered as failed and treated as one head for deciding academic progression. Such rules are also applicable for those students who fail to register for examination(s) of any course in any semester.

17. Grading of performances

17.1 Letter grades and grade points allocations:

Based on the performances, each student shall be awarded a final letter grade at the end of the semester for each course. The letter grades and their corresponding grade points are given in Table – XIV.

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

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

A learner who remains absent for any end semester examination shall be assigned a letter grade of AB and a corresponding grade point of zero. He/she should reappear for the said evaluation/examination in due course.

18. The Semester grade point average (SGPA)

The performance of a student in a semester is indicated by a number called 'Semester Grade Point Average' (SGPA). The SGPA is the weighted average of the grade points obtained in all the courses by the student during the semester. For example, if a student takes five courses (Theory/Practical) in a semester with credits C1, C2, C3, C4 and C5 and the student's grade points in these courses are G1, G2, G3, G4 and G5, respectively, and then students' SGPA is equal to:

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

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:

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

19. Cumulative Grade Point Average (CGPA)

The CGPA is calculated with the SGPA of all the VIII semesters to two decimal points and is indicated in final grade report card/final transcript showing the grades of all VIII semesters and their courses. The CGPA shall reflect the failed status in case of F grade(s), till the course(s) is/are passed. When the course(s)is/are passed by obtaining a pass grade on subsequent examination(s) the CGPA shall only reflect the new grade and not the fail grades earned earlier. The CGPA is calculated as:

$$\text{CGPA} = \frac{C_1S_1 + C_2S_2 + C_3S_3 + C_4S_4 + C_5S_5 + C_6S_6 + C_7S_7 + C_8S_8}{C_1 + C_2 + C_3 + C_4 + C_5 + C_6 + C_7 + C_8}$$

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

20. Declaration of class

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

First Class with Distinction = CGPA of. 7.50 and above

First Class = CGPA of 6.00 to 7.49

Second Class = CGPA of 5.00 to 5.99

21. Project work

All the students shall undertake a project under the supervision of a teacher and submit a report. The area of the project shall directly relate any one of the elective 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.

Evaluation of Dissertation Book:

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

Evaluation of Presentation:

Particulars	Marks Distribution
Presentation of work	25 Marks
Communication skills	20 Marks
Question and answer skills	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.

22. 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.

23. Practice School

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

At the end of the practice school, every student shall submit a printed report (in triplicate) on the practice school he/she attended (not more than 25 pages). Along with the exams of semester VII, the report submitted by the student, knowledge and skills acquired by the

student through practice school shall be evaluated by the subject experts at university/college level and grade point shall be awarded.

24. 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.

25. Award of degree

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

26. 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.

27. 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.

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ACADEMIC REGULATION M. PHARM

1. **Short Title and Commencement**
These regulations shall be called as "The Revised Regulations for the Master of Pharmacy (M. Pharm.) Degree Program - Credit Based Semester System (CBSS) of the Pharmacy Council of India, New Delhi". They shall come into effect from the Academic Year 2021-22. The regulations framed are subject to modifications from time to time by the authorities of the university.

2. Minimum qualification for admission
A Pass in the following examinations
a) B. Pharm Degree examination of an Indian university established by law in India from an institution approved by Pharmacy Council of India and has scored not less than 55 % of the maximum marks (aggregate of 4 years of B.Pharm.)
b) Every student, selected for admission to post graduate pharmacy program in any PCI approved institution should have obtained registration with the State Pharmacy Council or should obtain the same within one month from the date of his/her admission, failing which the admission of the candidate shall be cancelled.

Note: It is mandatory to submit a migration certificate obtained from the respective university where the candidate had passed his/her qualifying degree (B.Pharm.)

3. Duration of the program
The programs of study for M.Pharm. Shall extend over a period of four semesters (two academic years). The curricula and syllabi for the program shall be prescribed from time to time by Pharmacy Council of India, New Delhi.

4. Medium of instruction and examinations
Medium of instruction and examination shall be in English.

5. Working days in each semester
Each semester shall consist of 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 the month of December/January to May/June in every calendar year.

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

7. Program/Course credit structure
As per the philosophy of Credit Based Semester System, certain quantum of academic work viz. theory classes, practical classes, seminars, assignments, 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/per activity.
7.1. Credit assignment

7.1.1. Theory and Laboratory courses

Courses are broadly classified as Theory and Practical. Theory courses consist of lecture (L) and Practical (P) courses consist of hours spent in the laboratory. Credits (C) for a course is dependent on the number of hours of instruction per week in that course, and is obtained by using a multiplier of one (1) for lecture and a multiplier of half (1/2) for practical (laboratory) hours. Thus, for example, a theory course having four lectures per week throughout the semester carries a credit of 4. Similarly, a practical having four laboratory hours per week throughout semester carries a credit of 2. The contact hours of seminars, assignments and research work shall be treated as that of practical courses for the purpose of calculating credits. i.e., the contact hours shall be multiplied by 1/2. Similarly, the contact hours of journal club, research work presentations and discussions with the supervisor shall be considered as theory course and multiplied by 1.

7.2. Minimum credit requirements

The minimum credit points required for the award of M. Pharm. degree is 95. However, based on the credit points earned by the students under the head of co-curricular activities, a student shall earn a maximum of 100 credit points. These credits are divided into Theory courses, Practical, Seminars, Assignments, Research work, Discussions with the supervisor, Journal club and Co-Curricular activities over the duration of four semesters. The credits 23 are distributed semester-wise as shown in Table 5. Courses generally progress in sequence, 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.

8. Academic work

A regular record of attendance both in Theory, Practical, Seminar, Assignment, Journal club, Discussion with the supervisor, Research work presentation and Dissertation shall be maintained by the department / teaching staff of respective courses.

9. Course of study

The course of study for M. Pharm specializations shall include Semester Wise Theory & Practical as given in Table – 1-3. The number of hours to be devoted to each theory and practical course in any semester shall not be less than that shown in Table – 1-3.

Table – 1: Course of study for M. Pharm. (Pharmaceutics)

Course Code	Course	Credit Hours	Credit Points	Hrs./k	Marks
Semester I					
CUTM1583	Modern Pharmaceutical Analytical Technique	4	4	4	100
CUTM1584	Drug Delivery Technique	4	4	4	100
CUTM1585	Modern Pharmaceutics	4	4	4	100
CUTM1586	Regulatory Affairs	4	4	4	100
CUTM1587	Pharmaceutics Practical I	12	6	12	150
CUTM1588	Seminar/Assignment	7	4	7	100
Total		35	26	35	650
Semester II					
CUTM1589	Molecular Pharmaceutics (Nano Tech and Targeted DDS)	4	4	4	100

CUTM1590	Advanced Biopharmaceutics& Pharmacokinetics	4	4	4	100
CUTM1591	Computer Aided Drug Delivery System	4	4	4	100
CUTM1592	Cosmetic and Cosmeceuticals	4	4	4	100
CUTM1593	Pharmaceutics Practical II	12	6	12	150
CUTM1594	Seminar/Assignment	7	4	7	100
Total		35	26	35	650

Table – 2: Course of study for M. Pharm. (Industrial Pharmacy)

Course Code	Course	Credit Hours	Credit Points	Hrs./wk	Marks
Semester I					
CUTM2000	Modern Pharmaceutical Analytical Techniques	4	4	4	100
CUTM2001	Pharmaceutical Formulation Development	4	4	4	100
CUTM2002	Novel drug delivery systems	4	4	4	100
CUTM2003	Intellectual Property Rights	4	4	4	100
CUTM2004	Industrial Pharmacy Practical I	12	6	12	150
CUTM2005	Seminar/Assignment	7	4	7	100
Total		**35**	**26**	**35**	**650**
Semester II					
CUTM2006	Advanced Biopharmaceutics and Pharmacokinetics	4	4	4	100
CUTM2007	Scale up and Technology Transfer	4	4	4	100
CUTM2008	Pharmaceutical Production Technology	4	4	4	100
CUTM2009	Entrepreneurship Management	4	4	4	100
CUTM2010	Industrial Pharmacy Practical II	12	6	12	150
CUTM2011	Seminar/Assignment	7	4	7	100
Total		**35**	**26**	**35**	**650**

Table – 3: Course of study for M. Pharm. (Pharmaceutical Analysis)

Course Code	Course	Credit Hours	Credit Points	Hrs./wk	Marks
Semester I					
CUTM2424	Modern Pharmaceutical Analytical Techniques	4	4	4	100
CUTM2425	Advanced Pharmaceutical Analysis	4	4	4	100
CUTM2426	Pharmaceutical Validation	4	4	4	100
CUTM2427	Food Analysis	4	4	4	100
CUTM2428	Pharmaceutical Analysis Practical I	12	6	12	150
CUTM2429	Seminar/Assignment	7	4	7	100
Total		**35**	**26**	**35**	**650**
Semester II					
CUTM2430	Advanced Instrumental Analysis	4	4	4	100
CUTM2431	Modern Bio-Analytical Techniques	4	4	4	100
CUTM2432	Quality Control and Quality Assurance	4	4	4	100
CUTM2433	Herbal and Cosmetic analysis	4	4	4	100
CUTM2434	Pharmaceutical Analysis Practical II	12	6	12	150
CUTM2435	Seminar/Assignment	7	4	7	100
Total		**35**	**26**	**35**	**650**

Table – 4: Course of study for M. Pharm. III Semester (Pharmaceutics)

Course Code	Course	Credit Hours	Credit Points
CUTM1595	Research Methodology Biostatistics*	4	4
CUTM1596	Journal Club	1	1
CUTM1597	Discussion / Presentation(Proposal Presentation)	2	2
CUTM1598	Research Work	28	14
Total		35	21

* Non University Exam

Table – 5: Course of study for M. Pharm. III Semester (Industrial Pharmacy)

Course Code	Course	Credit Hours	Credit Points
CUTM2012	Research Methodology Biostatistics*	4	4
CUTM2013	Journal Club	1	1
CUTM2014	Discussion / Presentation(Proposal Presentation)	2	2
CUTM2015	Research Work	28	14
Total		35	21

* Non University Exam

Table – 6: Course of study for M. Pharm. III Semester (Pharmaceutical Analysis)

Course Code	Course	Credit Hours	Credit Points
CUTM2436	Research Methodology Biostatistics*	4	4
CUTM2437	Journal Club	1	1
CUTM2438	Discussion / Presentation (Proposal Presentation)	2	2
CUTM2439	Research Work	28	14
Total		35	21

* Non-University Exam

Table – 7: Course of study for M. Pharm. IV Semester (Pharmaceutics)

Course Code	Course	Credit Hours	Credit Points
CUTM1599	Journal Club	1	1
CUTM1600	Research Work	31	16
CUTM1601	Discussion / Final Presentation	3	3
Total		35	20

Table – 8: Course of study for M. Pharm. IV Semester (Industrial Pharmacy)

Course Code	Course	Credit Hours	Credit Points
CUTM2016	Journal Club	1	1
CUTM2017	Research Work	31	16
CUTM2018	Discussion / Final Presentation	3	3
Total		35	20

Table – 9: Course of study for M. Pharm. IV Semester (Pharmaceutical Analysis)

Course Code	Course	Credit Hours	Credit Points
CUTM2440	Journal Club	1	1
CUTM2441	Research Work	31	16
CUTM2442	Discussion / Final Presentation	3	3
Total		35	20

Table – 10: Semester wise credits distribution

Semester	Credit Points
I	26
II	26
III	21
IV	20
Co-curricular Activities (Attending Conference, Scientific Presentations and Other Scholarly Activities)	Minimum=02 Maximum=07*
Total Credit Points	Minimum=95 Maximum=100*

*Credit Points for Co-curricular Activites

Table – 11: Guidelines for Awarding Credit Points for Co-Curricular Activities

Name of the Activity	Maximum Credit Points Eligible / Activity
Participation in National Level Seminar/Conference/Workshop/Symposium/ Training Programs (related to the specialization of the student)	01
Participation in international Level Seminar/Conference/Workshop/Symposium/ Training Programs (related to the specialization of the student)	02
Academic Award/Research Award from State Level/National Agencies	01
Academic Award/Research Award from International Agencies	02
Research / Review Publication in National Journals(Indexed in Scopus / Web of Science)	01
Research / Review Publication in International Journals(Indexed in Scopus / Web of Science)	02

Note: International Conference: Held Outside India

International Journal: The Editorial Board outside India
*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.

10. Program Committee

1. The M. Pharm. programme shall have a Programme Committee constituted by the Head of the institution in consultation with all the Heads of the departments.
2. The composition of the Programme Committee shall be as follows: A teacher at the cadre of Professor shall be the Chairperson; One Teacher from eachM.Pharm specialization and four student representatives (two from each academic year), nominated by the Head of the institution.
3. Duties of the Programme 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 Programme Committee shall meet at least twice in a semester preferably at the end of each sessional exam and before the end semester exam.

11. Examinations/Assessments

The schemes for internal assessment and end semester examinations are given in Table – 12-14.

11.1. End semester examinations

The End Semester Examinations for each theory and practical course through semesters I to IVshall be conducted by the respective university except for the subject 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 – 12: Schemes for internal assessments and end semester (Pharmaceutics)

Course Code	Course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
Semester I								
CUTM1583	Modern Pharmaceuti cal Analytical Techniques	10	15	1 Hr	25	75	3 Hrs	100
CUTM1584	Drug Delivery System	10	15	1 Hr	25	75	3 Hrs	100
CUTM1585	Modern Pharmaceuti cs	10	15	1 Hr	25	75	3Hrs	100
CUTM1586	Regulatory Affair	10	15	1 Hr	25	75	3 Hrs	100
CUTM1587	Pharmaceuti cs Practical I	20	30	6 Hrs	50	100	6 Hrs	150
CUTM1588	Seminar /Assignment	-	-	-	-	-	-	-
Total								650
Semester II								
CUTM1589	Molecular Pharmaceuti cs (Nano Tech and Targeted DDS)	10	15	1 Hr	25	75	3 Hrs	100
CUTM1590	Advanced Biopharmac eutics & Pharmacokin Etics	10	15	1 Hr	25	75	3 Hrs	100
CUTM1591	Computer Aided Drug Delivery System	10	15	1 Hr	25	75	3 Hrs	100
CUTM1592	Cosmetic and	10	15	1 Hr	25	75	3 Hrs	100

	Cosmeceuticals							
CUTM1593	Pharmaceuti cs Practical I	20	30	6 Hrs	50	100	6 Hrs	150
CUTM1594	Seminar /Assignment	-	-	-	-	-	-	100
Total								650

Tables –13: Schemes for internal assessments and end semester (Industrial Pharmacy)

Course Code	Course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
Semester I								
CUTM2000	Modern Pharmaceutical Analytical Techniques	10	15	1 Hr	25	75	3 Hrs	100
CUTM2001	Pharmaceutical Formulation Development	10	15	1 Hr	25	75	3 Hrs	100
CUTM2002	Novel drug delivery systems	10	15	1 Hr	25	75	3Hrs	100
CUTM2003	Intellectual Property Rights	10	15	1 Hr	25	75	3 Hrs	100
CUTM2004	Industrial Pharmacy Practical I	20	30	6 Hrs	50	100	6 Hrs	150
CUTM2005	Seminar/Assignment	-	-	-	-	-	-	-
Total								**650**
Semester II								
CUTM2006	Advanced Biopharmaceutics and Pharmacokinetics	10	15	1 Hr	25	75	3 Hrs	100
CUTM2007	Scale up and Technology Transfer	10	15	1 Hr	25	75	3 Hrs	100
CUTM2008	Pharmaceutical Production Technology	10	15	1 Hr	25	75	3 Hrs	100
CUTM2009	Entrepreneurship Management	10	15	1 Hr	25	75	3 Hrs	100
CUTM2010	Industrial Pharmacy Practical II	20	30	6 Hrs	50	100	6 Hrs	150

CUTM2011	Seminar/Assignment	-	-	-	-	-	-	100
Total								**650**

Tables –14: Schemes for internal assessments and end semester (Pharmaceutical Analysis)

Course Code	**Course**	**Internal Assessment**				**End Semester Exams**		**Total Marks**
		Continuous Mode	**Sessional Exams**		**Total**	**Marks**	**Duration**	
			Marks	**Duration**				
Semester I								
CUTM2424	Modern Pharmaceutical Analytical Techniques	10	15	1 Hr	25	75	3 Hrs	100
CUTM2425	Advanced Pharmaceutical Analysis	10	15	1 Hr	25	75	3 Hrs	100
CUTM2426	Pharmaceutical Validation	10	15	1 Hr	25	75	3Hrs	100
CUTM2427	Food Analysis	10	15	1 Hr	25	75	3 Hrs	100
CUTM2428	Pharmaceutical Analysis Practical I	20	30	6 Hrs	50	100	6 Hrs	150
CUTM2429	Seminar/Assignment	-	-	-	-	-	-	-
Total								**650**
Semester II								
CUTM2430	Advanced Instrumental Analysis	10	15	1 Hr	25	75	3 Hrs	100
CUTM2431	Modern Bio-Analytical Techniques	10	15	1 Hr	25	75	3 Hrs	100
CUTM2432	Quality Control and Quality Assurance	10	15	1 Hr	25	75	3 Hrs	100
CUTM2433	Herbal and Cosmetic analysis	10	15	1 Hr	25	75	3 Hrs	100
CUTM2434	Pharmaceutical Analysis II	20	30	6 Hrs	50	100	6 Hrs	150
CUTM2435	Seminar/Assignment	-	-	-	-	-	-	100
Total								**650**

Tables – 15: Schemes for internal assessments and end semester examinations (Semester III& IV- Pharmaceutics)

Course Code	Course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
Semester III								
CUTM1595	Research Methodology and Biostatistics*	10	15	1 Hr	25	75	3 Hrs	100
CUTM1596	Journal Club	-	-	-	25	-	-	25
CUTM1597	Discussion / Presentation (Proposal Presentation)	-	-	-	50	-	-	50
CUTM1598	Research work	-	-	-	-	350	-	350
Total								525
Semester IV								
CUTM1599	Journal club	-	-	-	25	-	-	25
CUTM1600	Discussion / Presentation (Proposal Presentation)	-	-	-	75	-	-	75
CUTM1601	Research work and Colloquium	-	-	-	-	400	1 Hr	400
Total								500

*Non University Examination

Tables – 16: Schemes for internal assessments and end semester examinations (Semester III& IV- Industrial Pharmacy)

Course Code	Course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
Semester III								
CUTM2012	Research Methodology and Biostatistics*	10	15	1 Hr	25	75	3 Hrs	100
CUTM2013	Journal Club	-	-	-	25	-	-	25
CUTM2014	Discussion / Presentation (Proposal Presentation)	-	-	-	50	-	-	50
CUTM2015	Research work	-	-	-	-	350	-	350
Total								525
Semester IV								
CUTM2016	Journal club	-	-	-	25	-	-	25
CUTM2017	Discussion / Presentation (Proposal Presentation)	-	-	-	75	-	-	75
CUTM2018	Research work and Colloquium	-	-	-	-	400	1 Hr	400
Total								500

*Non University Examination

Tables – 17: Schemes for internal assessments and end semester examinations (Semester III& IV- Pharmaceutical Analysis)

Course Code	Course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
Semester III								

CUTM2436	Research Methodology and Biostatistics*	10	15	1 Hr	25	75	3 Hrs	100
CUTM2437	Journal Club	-	-	-	25	-	-	25
CUTM2438	Discussion / Presentation (Proposal Presentation)	-	-	-	50	-	-	50
CUTM2439	Research work	-	-	-	-	350	-	350
Total								525
Semester IV								
CUTM2440	Journal club	-	-	-	25	-	-	25
CUTM2441	Discussion / Presentation (Proposal Presentation)	-	-	-	75	-	-	75
CUTM2442	Research work and Colloquium	-	-	-	-	400	1 Hr	400
Total								500

*Non University Examination

11.2. Internal assessment: Continuous mode

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

Table – 18: Scheme for awarding internal assessment: Continuous mode

Theory	
Attendance (Refer Table – 10)	8
Student – Teacher interaction	2
Total	10
Practical	
Attendance (Refer Table – 10)	10
Based on Practical Records, Regular viva voce, etc.	10
Total	20

Table – 19: Guidelines for the allotment of marks for attendance

Percentage of Attendance	**Theory**	**Practical**
95-100	8	10
90-94	6	7.5
85-89	4	5
80-84	2	2.5
Less than 80	0	0

11.2.1. Sessional Exams
Two sessional exams shall be conducted for each theory / practical course as per the schedule fixed by the college(s). The scheme of question paper for theory and practical sessional examinations is given in the table. The average marks of two sessional exams shall be computed for internal assessment as per the requirements given in tables.

12. Promotion and award of grades
A student shall be declared PASS and eligible for getting grade in a course of M.Pharm. programme if he/she secures at least 50% marks in that particular course including internal assessment.

13. Carry forward of marks
In case a student fails to secure the minimum 50% in any Theory or Practical course as specified in 12, then he/she shall reappear for the end semester examination of that course. However, his/her marks of the Internal Assessment shall be carried over and he/she shall be entitled for grade obtained by him/her on passing.

14. Improvement of internal assessment
A student shall have the opportunity to improve his/her performance only once in the sessional exam component of the internal assessment. The re-conduct of the sessional exam shall be completed before the commencement of next end semester theory examinations.

15. Reexamination of end semester examinations
Reexamination of end semester examination shall be conducted as per the schedule given in table 20. The exact dates of examinations shall be notified from time to time.
Table – 20: Tentative schedule of end semester examinations

Semester	For Regular Candidates	For Failed Candidates
I and III	November / December	May / June
II and IV	May / June	November / December

16. Allowed to keep terms (ATKT):
No student shall be admitted to any examination unless he/she fulfills the norms given in 6. ATKT rules are applicable as follows:
A student shall be eligible to carry forward all the courses of I and IIsemesters till the III semester examinations. However, he/she shall not be eligible to attend the courses of IV semester until all the courses of I, II and III semesters are successfully completed.

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

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

17. Grading of performances
17.1. Letter grades and grade points allocations:

Based on the performances, each student shall be awarded a final letter grade at the end of the semester for each course. The letter grades and their corresponding grade points are given in Table –21.

Table – 21: Letter grades and grade points equivalent to Percentage of marks and performances

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	B	8	Good
60.00 – 69.99	C	7	Fair
50.00 – 59.99	D	6	Average
Less than 50	F	0	Fail
Absent	AB	0	Fail

A learner who remains absent for any end semester examination shall be assigned a letter grade of AB and a corresponding grade point of zero. He/she should reappear for the said evaluation/examination in due course.

18. The Semester grade point average (SGPA)

The performance of a student in a semester is indicated by a number called 'Semester Grade Point Average' (SGPA). The SGPA is the weighted average of the grade points obtainedin 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 and C4 and the student' s grade points in these courses are G1, G2, G3 and G4, respectively, and then students' SGPA is equal to:

$$SGPA = \frac{C1G1 + C2G2 + C3G3 + C4G4}{C1 + C2 + C3 + C4}$$

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, theSGPA shall then be computed as:

$$SGPA = \frac{C1G1 + C2G2 + C3G3 + C4 * ZERO}{C1 + C2 + C3 + C4}$$

19. Cumulative Grade Point Average (CGPA)

The CGPA is calculated with the SGPA of all the IV semesters to two decimal points and is indicated in final grade report card/final transcript showing the grades of all IV 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) theCGPA shall only reflect the new grade and not the fail grades earned earlier. The CGPA is calculated as:

$$CGPA = \frac{C1S1 + C2S2 + C3S3 + C4S4}{C1 + C2 + C3 + C4}$$

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,….

20. Declaration of class

The class shall be awarded on the basis of CGPA as follows:
First Class with Distinction = CGPA of. 7.50 and above
First Class = CGPA of 6.00 to 7.49
Second Class = CGPA of 5.00 to 5.99

21. Project work

All the students shall undertake a project under the supervision of a teacher in Semester III to IV and submit a report. 4 copies of the project report shall be submitted (typed & bound copy not less than 75 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). The projects shall be evaluated as per the criteria given below.

Evaluation of Dissertation Book:

Objective(s) of the work done		50 Marks
Methodology adopted	150 Marks	
Results and Discussions		250 Marks
Conclusions and Outcomes		50 Marks

	Total500 Marks	

Evaluation of Presentation:

Presentation of work		100 Marks
Communication skills		50 Marks
Question and answer skills		100 Marks

	Total	250 Marks

22. 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 M. Pharm program shall not be eligible for award of ranks. Moreover, the candidates should have completed the M. Pharm program in minimum prescribed number of years, (two years) for the award of Ranks.

23. Award of degree

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

24. 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.

25. Revaluation I Retotaling of answer papers

There is no provision for revaluation of the answer papers in any examination. However, the candidates can apply for retotaling by paying prescribed fee.

26. 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 condo nation fee.

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