## **MOHAN BABU UNIVERSITY**

Sree Sainath Nagar, Tirupati – 517 102



## MB SCHOOL OF PHARMACEUTICAL SCIENCES

## **BACHELOR OF PHARMACY**

# MBU23 Academic Regulations and Curriculum (Version 1.0)

(Applicable to B.Pharm Programs offered by MB School of Pharmaceutical Sciences in MBU from 2023-24 onwards)

**Choice Based Credit System (CBCS)** 



## **MOHAN BABU UNIVERSITY**

## **Vision**

To be a globally respected institution with an innovative and entrepreneurial culture that offers transformative education to advance sustainability and societal good.

## **Mission**

- Develop industry-focused professionals with a global perspective.
- Offer academic programs that provide transformative learning experience founded on the spirit of curiosity, innovation, and integrity.
- Create confluence of research, innovation, and ideation to bring aboutsustainable and socially relevant enterprises.
- Uphold high standards of professional ethics leading to harmonious relationship with environment and society.

## **MB SCHOOL OF PHARMACEUTICAL SCIENCES**

## **Vision**

To be a global leader in the field of Pharmaceutical Education and Health Care Management by providing Quality Education, Training, Research and Entrepreneurial Ecosystem.

## **Mission**

- > Developing competencies and skills to solve problems in the field of Pharmaceutical Sciences through contemporary Curriculum and congenial learning environment.
- Imbibing ethics and values in students for effective Pharmaceutical practice through curricular, co-curricular and extra-curricular activities.
- ➤ Encourage faculty and staff to excel in their respective fields and demonstrate the best of their abilities by way of continuing education, research and consultancy.

## PROGRAM EDUCATIONAL OBJECTIVES

After completion of graduation, the graduates of B.Pharmacy will be able to

- **PEO1.** Pursue higher education, learning and research in reputed institutions in the field of Pharmaceutical sciences
- **PEO2.** Accomplished successful professional carrier in manufacturing analysis and marketing of pharmaceuticals
- **PEO3.** Evolve as entrepreneurs by acquiring required skills to develop medicines in the emerging world of pharmaceutical industry
- **PEO4** Develop novel drug delivery systems using research and solving complex health related problems through lifelong learning and exhibit high ethical attitude in professional practise.

## **PROGRAM OUTCOMES**

On successful completion of the Program, the graduates of B.PharmacyProgram will be able to:

- **PO1. Pharmacy knowledge** possess knowledge and comprehensive of the core & basic knowledge associated profession including pharmaceutical sciences, manufacturing practices & Administrative pharmacy.
- **PO2. ANALYSE** health problems, interpret data and arrive at meaningful conclusions involving scientific inferences
- **PO3.** Design drugs and drug delivery systems to meet desired needs considering **public health and safety,** and the cultural, societal, and environmental considerations.
- **PO4.** Understand and **solve complex problems** in pharmacy by conducting experimental investigations
- **PO5.** Apply appropriate **methods and techniques** and understand utilization of resources appropriately to complex activities in pharmacy.
- **P06.** Understand the effect of pharmaceutical solutions on legal, cultural, social and public health and safety aspects
- **P07. Develop** sustainable solutions and understand their effect on society and environment
- **PO8.** Apply ethical principles & pharmaceutical regulatory standards to pharmacy practice professional responsibilities
- PO9. Work as an individual and as a member of a team, to plan and to integrate knowledge of various disciplines in pharmacy and to lead teams in multidisciplinary settings
- **PO10.** Make effective **oral presentations and communicate** technical ideas to a broad audience using written and oral means

- **PO11. Lead and manage** multidisciplinary teams by applying principles of pharmaceutical science and management principles
- **PO12. Adapt** to the changes and advancements in technology and engage in independent and **lifelong learning**

## **PROGRAM SPECIFIC OUTCOMES**

On successful completion of the Program, the graduates of B.Pharmacy program will be able to:

- **PSO1.** Apply appropriate tools and techniques for design and development of Pharmaceutical Dosage forms and drug delivery systems.
- **PSO2.** Apply suitable methods to understand the process and analyze the reactions, mechanisms, isolation, method development and validation of natural, semi-synthetic and synthetic drugs.
- **PSO3.** Understand the pharmacological concepts of drugs and apply appropriate tools to evaluate the effect of drugs and its therapeutic outcomes.
- **PSO4** Create leaders in the pioneer of medicines.

#### 1. Preamble

Modern era students would like to take decisions on their own and plan their future accordingly. Students would like to pursue education as per their pace. On other hand, employers expect multidisciplinary competency, leadership skills and computer literacy along with lifelong learning skills from the students. The conventional learning system has narrow scope with regard to flexibility in choosing courses of their choice to become a well-rounded personality. It is essential that the present education system should address this and provide wide opportunities for students to choose programs and courses of their interest in order to realize their full potential which in turn leads to the nation development. Further, natural resources are depleted globally at a faster rate. Hence, sustainable development has become the agenda for the complete world to preserve natural resources and environment for the sake of future generations. In addition, the world is embracing disruptive technologies to improve the quality of life. Also, students should be nurtured with skills on higher order cognitive capacities, research, innovation, incubation and entrepreneurship; life skills; social consciousness, inclusiveness, equality, culture, languages, literature, ethics and values; basic arts, crafts, humanities, games, sports and fitness.

In this context, Mohan Babu University has taken initiative and brought out Academic Regulations addressing Choice Based Credit System, sustainable development, disruptive technologies, rapid change in knowledge landscape, change in employment landscape, change in global ecosystem and other areas of national and international importance to change country's educational landscape and in turn country's landscape.

MBU23 Academic Regulations embrace Choice Based Credit System, multidisciplinary approach, project based learning, enhanced practical component, etc.

## 2. Scope

The rules and regulations stated herein shall be called "MBU23 Academic Regulations" in its complete form. MBU23 academic regulations as given in this document are applicable to students admitted in B.Pharm Programs offered under MBU from the academic year 2023-24 onwards. All academic programs under MBU23 shall be decided by the Academic council. MBU23 is applicable for both existing as well as new programs offered by the MBU, until and unless it is explicitly stated.

## 3. Regulations for UG Programs offered under MBU

These regulations shall be called "The Revised Regulations for the B.Pharm Degree Program (CBCS) of the Pharmacy Council of India, New Delhi". They shall come into effect in the academic year 2023-24. The regulations framed are subject to modifications from time to time by the Pharmacy Council of India. Mohan Babu University (MBU) has adopted the Pharmacy Council of India's Choice Based Credit System (CBCS) regulation and is now being implemented from 2023–24 onwards.

## 4. Choice Based Credit System (CBCS)

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 by the student for each of these activities per week/per activity.

## 5. Definitions and Nomenclature

'**Degree**' means the academic award conferred upon a student on successful completion of any program of study designed to achieve the defined attributes.

**'Program**' means cohesive arrangement of courses, co-curricular and extracurricular activities to accomplish predetermined objectives leading to the awarding of a degree in a branch or discipline. Some Degree programs also provide options to specialize in a specific domain of interest in a branch or discipline.

'**Course**' means any combination of lecture, tutorial, practical and project based learning sessions of a subject studied in a semester, like Pharmaceutics, Pharmacology, Pharmaceutical Analysis and Chemistry etc.

## 6. Admission

#### 6.1 Number of Seats:

The number of seats in B. Pharm program for which admission is to be made will be decided by the Board of Management, MBU with approval from Pharmacy Council of India.

## 6.2 Nationality and Age:

Resident Indian or Non-Resident Indian (NRI), holder of PIO or OCI card issued by Government of India is eligible to apply for the Selection Process.

Note: NRIs, holders of PIO or OCI card issued by Government of India must apply under international student category only.

A student should have attained the age of 17+ years on the 31st December of the year in which he/she is seeking admission.

## 6.3 Program Eligibility Criteria for B. Pharm Program

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.

#### 6.4 Eligibility Criteria for B. Pharm lateral entry (to third semester)

Student shall have successfully completed D.Pharm. from an institution approved by the Pharmacy Council of India under section 12 of the Pharmacy Act.

**6.5 Authority for Admission:** Any matter related to admission to any program, the decision of the Admission Committee is final.

If, at any time after admission, it is found that a candidate has not fulfilled the requirements stipulated in the offer of admission, the concerned School Dean may revoke the admission of the candidate and report the matter to the Vice Chancellor.

In Addition to the above, admissions will be based on the rules and regulations of the UGC/Competent authorities in force at the time of admissions.

## 7. Program offered by MB School of Pharmaceutical Sciences

List of B. Pharm specializations offered by MBU

School	Programs
School of Pharmaceutical Sciences	B. Pharmacy
School of Pharmaceutical Sciences	B. Pharmacy (Lateral Entry)

## 8. Academic System

#### 8.1 Semester

B. Pharm programs offered by MB School of Pharmaceutical Sciences shall follow the Semester system. There will be two semesters in an academic year.

#### 8.2 Curriculum

The university Academic Regulations shall have 5-digit alpha-numeric representation that refers to University Name followed by last two digits of Calendar Year viz. MBU23 Regulations. Program Curriculum shall have the corresponding Academic Year representation. Students admitted into a program shall adopt a curriculum specified by the Academic Council for that academic year. Unless otherwise stated explicitly by the Academic Council, any curriculum changes will be applicable to the students admitted in the subsequent year and the existing batches continue to follow the curriculum prescribed at the time of their joining the program.

## 8.3 Course Classification

Courses may be classified as Theory, Practical, Practice school, Industrial Training and Project Work.

#### 8.4 Course Credit Assignment

Credits shall be assigned to each Course with L: T: P: C (Lecture Hours: Tutorial Hours: Practical Hours: Credits) Structure, as defined below:

- ✓ Theory Course: One Lecture Hour (L) per week in a semester: 01 Credit
- ✓ Practical Course: One Practical Hour (P) Per week in a semester: 0.5 Credit
- ✓ Tutorial: One Tutorial Hour (T) Per week in a semester: 01 Credit

The contact periods are not specified for the courses like Practice school, Industrial training and Project work. However, credits assigned are based on the complexity of the work.

## 8.5 Syllabus

The syllabus of a course provides what the student will learn in the course of study. Each course syllabus document contains course code, course title, L T P C, course description, course outcomes, module-wise topics, duration to cover each module, text books, reference books, video lectures and web resources for additional learning.

#### 8.6 Course Handout

A Course Handout consists of a detailed plan of lectures and its mode of delivery, List of Exercises/Experiential learning, Resources, Evaluation methods, Model Question paper and CO Attainment Targets.

#### 9. Academic Calendar

The academic calendar includes the dates with regard to course registrations, spell of instructions, continuous internal assessment tests, semester-end theory examinations, practical examinations and semester holidays. The Registrar will communicate the Academic calendar to the Departments/ Schools, and the same will be available on the website. The dates and schedules in the academic calendar may change in specific programs due to regulatory and local requirements. In such cases, the concerned School Dean with prior authorization will communicate the changes to the students. The revised academic calendar will also made available on the website.

## 10. Course Registration

Immediately after joining the University, each student shall be assigned a Mentor by the Department/School concerned. The mentor shall discuss with the student their academic performance semester-wise, periodically, and guide the student on the nature and number of courses to be registered in the ensuing semester, within the framework of that program curriculum.

- ❖ Through the course registration process, every semester, it is mandatory for the students to register for the courses specified in the semester as and when notified, with the approval of the mentor.
- ❖ The students may be asked to undergo non-credited Bridge Courses for necessary fundamental disciplines as recommended by the program curriculum.
- Students shall not be permitted to register for the courses if the student has any outstanding dues to the University.
- ❖ For registering V Semester End Examinations, the student is eligible only if he/she successfully completed all courses till II-Semester as per their program course structure.

#### 10.1 Arrear Examination:

- ❖ If a student fails a course, then the student is allowed to register for arrear examinations as and when notified.
- ❖ If a student has backlog courses after completion of the program of study, a provision is given to clear the courses by appearing any number of arrear examinations upon the notifications within the stipulated program duration as mentioned in section 19.

## 11. Attendance Requirements

- ❖ A student shall be eligible to appear for semester-end examinations if he acquires a minimum of 80% of attendance in aggregate of all the courses in a semester.
- ❖ Condonation of shortage of attendance in aggregate up to 10% (70% and above and below 80%) in each semester may be granted by the School Dean.
- ❖ Shortage of attendance below 70% in aggregate shall in no case be condoned.
- Students whose shortage of attendance is not condoned in any semester shall not be eligible to take their semester-end examination and their registration shall stand cancelled.
- ❖ Student shall not be promoted to the next semester unless he satisfies the attendance requirements of the semester, as applicable. The student may seek readmission for the semester when offered next. He will not be allowed to register for the courses of the semester while he is in detention.
- ❖ Stipulated fee shall be payable to the college towards condonation of shortage of attendance. In the remaining 20% of attendance, the student shall manage medical/personnel/casual/official absence for organizing events/ seminars/ workshops/ technical/ cultural festivals/ competitions/ participation in co-curricular/ extra-curricular events/NCC/NSS activities or any other reason. However, attendance shall be given at actuals for participating in NCC/NSS activities at National level.

## 11.1 Academic requirements for promotion/completion of program of study:

- ❖ No student shall be permitted to write External Examination unless he/she fulfills the norms given in item No.:11 (Attendance Requirements).
- ❖ A student shall not be promoted from second year to third year of program of study if he not PASS all the courses/ subjects pertaining to first year program of study (includes Odd and even semester).
- ❖ A student shall not be promoted from Third to Fourth year of program of study if he not PASS all the courses/ subjects pertaining to second year program of study (includes Odd and even semester).
- ❖ Lateral entry student shall not be promoted from Third to Fourth year of program of study if he not PASS all the courses/ subjects pertaining to second year program of study.
- If a student detained in any of the semester due to shortage of attendance or not satisfying the academic requirements, then he is eligible for readmission into the same semester when offered next.

## 12. Evaluation Criteria

12.1 All components in any Program of Study shall be evaluated through Internal Evaluation and/or Semester End Evaluation.

	,	ester End Evaluation	···
Course Type	Marks	Examination and Evaluation	Scheme of Examination
			Two Mid Examinations each for 30 marks shall be conducted and each shall be scaled to 15 marks.
		Mid 15 Examination (60 Minutes)	question carries 2 marks [Q. No. 1 (a) to (e)].
			The student shall be assessed based on the following parameters two times in a semester.
Theory (100 Marks)	25	Continuous 10 Assessment	• Attendance – Max. 4 Marks  Percentage of Attendance  95 – 100 4 90 – 94 3 85 – 89 2
			25 Marks, the average of sum of Mid-I & First Continuous ks and sum of Mid-II & Second Continuous Assessment marks ed.
			The examination shall be conducted for 75 marks
	75	Semester End Examination (180 Minutes)	The question paper shall be of three parts i.e., Part-A, Part-B, and Part-C.  Part-A shall contain ten short-answer questions and each shall be evaluated for 2 marks [Q. No. 1 (a) to (j)].  Part-B shall contain three descriptive questions [from Q. No. 2 to 4)] of which the student must answer two questions and each shall be evaluated for 10 marks.  Part-C shall contain nine descriptive questions [from Q. No. 5 to 13)] of which the student must answer seven questions and each shall be evaluated for 5 marks.

Course Type	Marks	Examination and Evaluation	Scheme of Examination		
	25	Mid Examination (60 Minutes)	Shall be followed the same mentioned above against Mic Examination and Continuous Assessment.		
Theory (75 Marks)	50	Semester End Examination (120 Minutes)	The examination shall be conducted for 50 marks  The question paper shall be of two parts i.e., Part-A, and Part-B.  Part-A shall contain three descriptive questions [from Q. No. 1 to 3)] of which the student must answer two questions and each shall be evaluated for 10 marks.  Part-B shall contain eight descriptive questions [from Q. No 4 to 11)] of which the student must answer six question and each shall be evaluated for 5 marks.		
Theory (50	15	Mid Examination (60 Minutes)	<ul> <li>Two Mid Examinations each for 30 marks shall be conducted and each shall be scaled to 15 marks.</li> <li>The question paper for Mid-I &amp; Mid-II shall be of three parts i.e., Part-A, Part-B, and Part-C.</li> <li>Part-A shall contain 5 Short answer questions. Each question carries 2 marks [Q. No. 1 (a) to (e)].</li> <li>Part-B shall contain Two descriptive questions [from Q No. 2 to 3)] of which the student must answer on question and shall be evaluated for 10 marks.</li> <li>Part-C shall contain Three descriptive questions [from Q No. 4 to 6)] of which the student must answer two questions and each shall be evaluated for 5 marks.</li> </ul>		
Marks)	35	Semester End Examination (120 Minutes)	The examination shall be conducted for 35 marks  The question paper shall be of two parts i.e., Part-A and Part-B.  Part-A shall contain two descriptive questions [from Q. No. 1 to 2)] of which the student must answer one question which shall be evaluated for 10 marks.  Part-B shall contain seven descriptive questions [from Q. No 3 to 9)] of which the student must answer five question and each shall be evaluated for 5 marks.		

## 12.2

Course Type	Marks	Examination and Evaluation		Scheme of Examination
Theory (100 Marks)	25	15	Mid Examination (60 Minutes)	<ul> <li>Two Mid Examinations each for 30 marks shall be conducted and each shall be scaled to 15 marks.</li> <li>The question paper for Mid-I &amp; Mid-II shall be of three parts i.e., Part-A, Part-B, and Part-C.</li> <li>Part-A shall contain 5 Short answer questions. Each question carries 2 marks [Q. No. 1 (a) to (e)].</li> <li>Part-B shall contain Two descriptive questions [from Q. No. 2 to 3)] of which the student must answer one</li> </ul>

			<ul> <li>question and shall be evaluated for 10 marks.</li> <li>Part-C shall contain Three descriptive questions [from Q. No. 4 to 6)] of which the student must answer two questions and each shall be evaluated for 5 marks.</li> </ul>
			The student shall be assessed based on the following parameters two times in a semester.
			Attendance – Max. 4 Marks
			Percentage of Marks Attendance
			95 – 100 4
		Continuous	90 – 94 3
	10	Assessment	85 – 89 2
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	80 – 84 1
			Academic activities – Max. 3 Marks
			(Average of any 3 activities Eg. Quiz, Assignment, Open Book Test, Fieldwork, Group Discussion and Seminar)
			Student-Teacher interaction – Max. 3 Marks
	Ass		Marks, the average of sum of Mid-I & First Continuous and sum of Mid-II & Second Continuous Assessment marks d.
			The examination shall be conducted for 75 marks
			The question paper shall be of three parts i.e., Part-A, Part-B, and Part-C.
75	Semester End Examination		Part-A shall contain ten short-answer questions and each shall be evaluated for 2 marks [Q. No. 1 (a) to (j)].
75 Examination (180 Minutes)			Part-B shall contain three descriptive questions [from Q. No. 2 to 4)] of which the student must answer two questions and each shall be evaluated for 10 marks.
			Part-C shall contain nine descriptive questions [from Q. No. 5 to 13)] of which the student must answer seven questions and each shall be evaluated for 5 marks.

Course Type	Marks	Examination and Evaluation	Scheme of Examination
	25	Mid Examination (60 Minutes)	Shall be followed the same mentioned above against Mic Examination and Continuous Assessment.
Theory (75 Marks)	50	Semester End Examination (120 Minutes)	The examination shall be conducted for 50 marks  The question paper shall be of two parts i.e., Part-A, and Part-B.  Part-A shall contain three descriptive questions [from Q. No. 1 to 3)] of which the student must answer two questions and each shall be evaluated for 10 marks.  Part-B shall contain eight descriptive questions [from Q. No. 10]

			4 to 11)] of which the student must answer six questions and each shall be evaluated for 5 marks.
			Two Mid Examinations each for 30 marks shall be conducted
			and each shall be scaled to 15 marks.
Theory (50 Marks)	15	Mid Examination (60 Minutes)	<ul> <li>The question paper for Mid-I &amp; Mid-II shall be of three parts i.e., Part-A, Part-B, and Part-C.</li> <li>Part-A shall contain 5 Short answer questions. Each question carries 2 marks [Q. No. 1 (a) to (e)].</li> <li>Part-B shall contain Two descriptive questions [from Q. No. 2 to 3)] of which the student must answer one question and shall be evaluated for 10 marks.</li> <li>Part-C shall contain Three descriptive questions [from Q. No. 4 to 6)] of which the student must answer two questions and each shall be evaluated for 5 marks.</li> </ul>
Marks)			The examination shall be conducted for 35 marks
	35	Semester End Examination (120 Minutes)	The question paper shall be of two parts i.e., Part-A and Part-B.  Part-A shall contain two descriptive questions [from Q. No. 1 to 2)] of which the student must answer one question which shall be evaluated for 10 marks.
			Part-B shall contain seven descriptive questions [from Q. No. 3 to 9)] of which the student must answer five questions and each shall be evaluated for 5 marks.
		•	
Course Type	Marks	Examination and Evaluation	Scheme of Examination
	Marks 25		Scheme of Examination  Shall be followed the same mentioned above against Mid Examination and Continuous Assessment.
		and Evaluation  Mid Examination	Shall be followed the same mentioned above against
		and Evaluation  Mid Examination	Shall be followed the same mentioned above against Mid Examination and Continuous Assessment.  The examination shall be conducted for 50 marks  The question paper shall be of two parts i.e., Part-A and Part-B.  Part-A shall contain three descriptive questions [from Q. No. 1 to 3)] of which the student must answer two questions and each shall be evaluated for 10 marks.
Theory (75	25	and Evaluation  Mid Examination (60 Minutes)  Semester End Examination	Shall be followed the same mentioned above against Mid Examination and Continuous Assessment.  The examination shall be conducted for 50 marks  The question paper shall be of two parts i.e., Part-A and Part-B.  Part-A shall contain three descriptive questions [from Q. No. 1 to 3)] of which the student must answer two
Theory (75	25	and Evaluation  Mid Examination (60 Minutes)  Semester End Examination	Shall be followed the same mentioned above against Mid Examination and Continuous Assessment.  The examination shall be conducted for 50 marks The question paper shall be of two parts i.e., Part-A and Part-B.  Part-A shall contain three descriptive questions [from Q. No. 1 to 3)] of which the student must answer two questions and each shall be evaluated for 10 marks.  Part-B shall contain eight descriptive questions [from Q. No. 4 to 11)] of which the student must answer six

		answer two questions and each shall be evaluated for 5 marks.
		The examination shall be conducted for 35 marks
		The question paper shall be of two parts i.e., Part-A and Part-B.
35	Semester End Examination (120 Minutes)	Part-A shall contain two descriptive questions [from Q. No. 1 to 2)] of which the student must answer one question which shall be evaluated for 10 marks.
		Part-B shall contain seven descriptive questions [from Q. No. 3 to 9)] of which the student must answer five questions and each shall be evaluated for 5 marks.

Course Type	Marks	Examination and Evaluation		Scheme of Examination
	15	5	Continuous Assessment	The evaluation shall be on the following parameters.  Attendance - 2 marks  Percentage of Attendance Marks  95 - 100 2 90 - 94 1.5 85 - 89 1 80 - 84 0.5 Less than 80 0  Practical records, regular viva-voce, etc 3 marks  Two Internal Examinations shall be conducted. Each
Practical (50 Marks)		10	Internal Examination (240 Minutes)	examination shall be conducted for 40 marks and scaled to 10 marks. The average shall be finalized for a maximum of 10 marks.  • Evaluation shall be on the following parameters.  > Synopsis for 10 marks  > Major Experiment for 15 marks  > Minor experiment for 10 marks  > Viva voce for 5 marks.  The distribution of marks may be altered as per the course requirement.
	35	Semester End Examination (240 Minutes)		<ul> <li>Evaluation shall be on following parameters.</li> <li>Synopsis for 5 marks</li> <li>Major Experiment for 15 marks,</li> <li>Minor experiment for 10 marks</li> <li>Viva voce for 5 marks.</li> <li>The distribution of marks may be altered as per the course requirement.</li> </ul>
Practical (25 Marks)	10	5	Continuous Assessment	The evaluation shall be on the following parameters.  Attendance – 2 marks  Percentage of Attendance Marks  95 – 100  90 – 94  1.5

				85 – 89	1	
				80 – 84	0.5	
				Less than 80	0	
			P	ractical records, regular marks	viva-voce	, etc. – 3
	5	Internal Examination (120 Minutes)  Two Internal Examinations shall be conducted. Each examination shall be conducted for 20 marks and scaled to 5 marks. The average shall be finalized for a maximum of 5 marks.  • Evaluation shall be on the following parameters.  > Synopsis for 5 marks  > Experiment for 10 marks  > Viva voce for 5 marks.  The distribution of marks may be altered as per the course requirement.				marks and nalized for a rameters.
15	E	kamination	The	Synopsis for 3 marks Experiment for 10 marks Viva voce for 2 marks. distribution of marks may	,	
Marks				Scheme of Exan	nination	
	15	Mid Examination (60 Minutes)	scho The form	ol and shall pursue. student must present his of a presentation. The uated based on the following  Criteria	understar presentati g paramet Marks	nding in the on shall be
				Content	5	
25	10	Continuous Assessment	para	student shall be assessed meters two times in a seme	based on sester.	the following
	Marks	Se Exame 15  Marks Exame 25	Semester End Examination (2 Hours)  Marks  Examination and Evaluation  Mid Examination (60 Minutes)  Continuous	Internal Examination (120 Minutes)  Semester End Examination (2 Hours)  The cours  Figure 15  The cours  Marks  Examination and Evaluation  A stuschool The form evaluation  (60 Minutes)  The cours  A stuschool The form evaluation  (70 Minutes)  The form evaluation  The form evaluation  The form evaluation  Continuous	Internal Examination shall be conducted scaled to 5 marks. The average maximum of 5 marks.  Internal Examination shall be on the formaximum of 5 marks.  Evaluation shall be on the formaximum of 5 marks.  Evaluation shall be on the formaximum of 5 marks.  Evaluation shall be on the formaximum of 5 marks.  Evaluation shall be on follow of marks may course requirement.  Evaluation shall be on follow of marks may course requirement.  Examination (2 Hours)  Marks  Examination and Evaluation  Fine distribution of marks may course requirement.  A student has to select the course school and shall pursue.  The student must present his form of a presentation. The evaluated based on the following.  Content  Presentation  The student shall be assessed parameters two times in a seme and parameters two times in a seme of tendance of ten	Practical records, regular viva-voce marks  Two Internal Examinations shall be conducted for 20 scaled to 5 marks. The average shall be financian (120 Minutes)  Internal Examination (120 Minutes)  Semester End Examination (2 Hours)  Figure 15  Examination (2 Hours)  Marks  Examination and Evaluation  A student has to select the course module school and shall pursue.  Mid Examination (60 Minutes)  Mid Examination and Evaluation  The student must present his understar form of a presentation. The presentation form of a presentation. The presentation of marks may be altered form of a presentation. The presentation of marks may be altered form of a presentation. The presentation of marks may be altered form of a presentation. The presentation of marks may be altered form of a presentation. The presentation of marks may be altered form of a presentation. The presentation of marks may be altered form of a presentation. The presentation of marks may be altered form of a presentation. The presentation of marks may be altered form of a presentation. The presentation of marks may be altered form of a presentation. The presentation of marks may be altered form of a presentation. The presentation of marks may be altered form of a presentation. The presentation of marks may be altered form of a presentation. The presentation of marks may be altered form of a presentation. The presentation of a presentation of marks may be altered form of a presentation. The presentation of marks may be altered form of a presentation of marks may be altered form of a presentation.  The student must present his understar form of a presentation. The presentation of marks may be altered form of a presentation.  Continuous and the following parameters the form of a presentation of marks may be altered for 10 marks.  A student has to select the course module school and shall pursue.  The student has to select the course module school and shall pursue.  The student has to select the course module school and shall pursue.  The student has to select

			The complete study shall be presented along with report. The performance shall be evaluated for 125 marks based on the following parameters
		Semester End	Criteria Marks
	125	Examination	Relevance of Topic 10
		(60 Minutes)	Content 25
		,	Scripting and editing 25
			Presentation & Slides 50
			Discussion and Viva 15
Project work	150	Semester End Examination	Detailed in Section 13.2
Industrial Training	-	-	Detailed in Section 13.3

## 12.2 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 be given any one of the elective subjects opted by the student in semester VIII. The project shall be carried out in group not exceeding 5 in number. The project report shall be submitted in triplicate (typed & bound copy).

The internal and external examiner appointed by the Dean of the school 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**

S.No	Name of the heading	Max. marks
1	Objective of the work done	15 marks
2	Methodology adopted	20 marks
3	Results and discussions	20 marks
4	Conclusion and Outcomes	20 marks
	Total	75 marks

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

## **Evaluation of Presentation**

S.No	Name of the heading	Max. marks
1	Presentation of work	25 marks
2	Communication skills	20 marks
3	Question and answer skills	30 marks
	Total	75 marks

## 12.3 Industrial training

Students shall undergo Industrial training each with a minimum of 150 hours spread over 4 weeks in a Pharmaceutical Industry/Hospital. It includes the 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.

- ❖ Students are required to undergo training after Semester VI and before the commencement of Semester VII. They should submit their training certificate duly signed by the authority of the training organization to the dean of the school. They will also need to give a presentation to the Institutional Evaluation Committee (IEC) constituted by the Dean.
- The IEC should assess the presentation and training report. If a student receives a not-satisfactory report by the IEC, he will continue to give his presentation until he receives a satisfactory report during the VII semester.

There shall be NO Credits awarded for industrial training.

## 12.4. Recounting /Revaluation/Personal Verification/ Challenging Evaluation:

Students shall be permitted to apply for Recounting /Revaluation/Personal Verification/ Challenging Evaluation of the Semester End Examination answer scripts within a stipulated period after payment of the prescribed fee. After completion of the process of Recounting/ Revaluation/Personal Verification/ Challenging Evaluation, the records are updated with changes if any, and the student shall be issued a revised grade sheet. If there are no changes, the student shall be intimated the same through a notice.

### 12.5 Improvement of Internal Assessment

A student shall have the opportunity to improve his/ her performance only once in the mid exam component of internal assessment. The reconduct of mid exam shall be completed before the commencement of end examination of that semester.

## 13. Course Wise Grading of Students

Each student shall be awarded Letter Grades and Grade Points (GP) based on the aggregate of marks obtained through Internal Evaluation and Semester End Evaluation in a course.

#### 13.1 Absolute Grading

Based on the performance, each student shall be awarded a final letter grade at the end of semester for each course. The letter grades and their corresponding grade points are given in table no 4.

Letter Grades and Corresponding Grade Points equivalent to percentage of marks

% of Marks obtained	Letter Grade	Performance	Grade Points (GP)
≥90	0	Outstanding	10
≥80 to <90	А	Excellent	9
≥70 to < 80	В	Good	8
≥ 60 to < 70	С	Fair	7
≥ 50 to < 60	D	Average	6
<50	F	Fail	0
Absent	Ab	Fail	0

A student is considered to have successfully completed a course and earned the credits if he / she secured a letter grade other than "F" or "Ab" in that course. A letter grade "F" or "Ab" in any course implies a failure in that course. The student should reappear for the said examination in the due course.

**Pass Marks:** In Absolute Grading, a student shall be declared as "PASS" in a course if he/she secures a minimum of 50% of the total marks obtained from Internal assessment and Semester End Evaluation. Otherwise, he/she shall be declared as "FAIL" in that course.

**13.2 Semester Grade Point Average (SGPA):** SGPA shall be calculated as given below on a "10 point scale" as an index of the student's performance:

$$SGPA = \frac{\sum (C \ X \ GP)}{\sum C}$$

Where "C" denotes the "credits" assigned to the courses undertaken in that semester and "GP" denotes the "grade points" earned by the student in the respective courses.

**Note:** SGPA is calculated only for the candidates who appeared in the semester-end regular examinations in a particular semester.

## 13.3 Cumulative Grade Point Average (CGPA):

The CGPA shall be calculated for a candidate who appeared in the Semester End Examination (including Regular & Arrear) till that semester. The CGPA shall be displayed in the Grade sheet of the Regular Semester-end examinations and also in the consolidated Grade Sheet issued at the end of the program. The CGPA is computed on a 10-point scale as given below:

$$CGPA = \frac{\sum (C \ X \ GP)}{\sum C}$$

Where, C denotes the credits assigned to courses undertaken up to the end of the Program and GP denotes the grade points earned by the student in the respective courses.

Both SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

## 13.4 Award of Class – The CGPA requirement for the award of class is as follow

**CGPA** requirement - Awarding of Class

CGPA Secured	Class Awarded
≥ 7.5	First Class with Distinction
≥6.0 and <7.49	First Class
≥5.0 and <5.99	Second Class

## 14. Grade Sheet

A grade sheet shall be issued to each student indicating the SGPA and CGPA, provided if he passed all the courses registered in the regular semester-end examinations.

### 15. Consolidated Grade Sheet

After successful completion of the entire Program of study, a Consolidated Grade Sheet indicating the performance in all academic years shall be issued as a final record. Duplicate Consolidated Grade Sheet shall also be issued, if required, after payment of the requisite fee.

## 16. Withholding of Results

Results may be withheld in a semester, if

- The student has any dues to the Department/ School/ University
- Action arising out of malpractice is pending
- Action arising out of indiscipline is pending

The student whose result was withheld shall not be allowed/promoted to the next higher semester.

## 17. Credit Transfer

- ❖ If a student discontinued in any of the semester and later, he wishes to continue in the same program, then the he shall follow the latest regulations and curriculum that is being implemented during readmission into the same semester. However, the earned credits before discontinued shall be transferred to his credit account and he has to complete his degree within the stipulated program duration as mentioned in section 19.
- ❖ A similar procedure shall be adopted for the candidates who are seeking admission from other universities into various eligible programs of the University, subject to the condition that those Universities are recognized and approved for credit transfer by MBU.
- ❖ If the other Universities follow a different system, then the program School into which the student is seeking admission/ transfer shall work out on equivalence of credits that are to be transferred with valid supporting documentation.
- ❖ The number of credits thus transferred will be considered for the minimum credit requirements of the program, but not considered for the GPA/ CGPA calculations. The credits thus transferred will be indicated as total credits at the bottom of the Consolidated Grade Sheet as 'Total Credits Transferred from (Name of the Institute, place and Country)' and no breakup of courses will be listed.
- ❖ Award of degree classification is purely based on the GPA/CGPA calculations considering credits earned during the program of study with the MBU.

## 18. Program Duration

Minimum Duration: The minimum duration for B. Pharm Program is detailed below

A regular/ lateral entry student is said to be completed the program only if he/she earns required credits, as specified in their program curriculum. However, the degree shall be awarded only upon the completion of minimum duration of the program concerned.

**Maximum Duration:** if a regular/ lateral entry student has backlog courses even after the completion of the minimum duration limit, an additional grace period equivalent to double the period of minimum duration of the program of study shall be extended. Under no circumstances, the period of study shall be extended beyond the above limit and thereafter his/her studentship stands cancelled automatically. No separate intimation in this regard will be sent to the student.

## 19. Award of Degree

**Eligibility:** A student shall be eligible for the award of B. Pharm. Degree if he fulfills all the following conditions:

- The minimum Credit requirement for the award of B.Pharm Degree is detailed below
  - ✓ B.Pharm Regular Program of study shall have a total of **208** credits.
  - ✓ B.Pharm Lateral Entry Program of study shall have a total of 208 credits. However, 149 Credits through B.Pharm Program (from III-Sem to VIII Sem), additional 7 Credits by offering Communication Skills (Theory & Practical) of 3 Credits and Computer Applications in Pharmacy (Theory & Practical) of 4 Credits during the

program of study and transfer of **52 Credits** from D.Pharm.

- Successfully acquired the required credits as specified in the curriculum corresponding to the Program of study within the stipulated time.
- Has NO DUES to the University, Hostel, Library, etc. and to any other amenities provided by the University.
- No disciplinary action is pending against him.

After successful completion of the program and minimum credit requirements as specified in the program curriculum, a Provisional Certificate will be issued to eligible students. The degree will be conferred on the student during the subsequent Convocation.

## 20. Amendments to Regulations

The Academic Council headed by the Vice-Chancellor of the University has the right to revise, amend, or change any component of regulations from time to time. In case of any dispute arising in interpreting the rules, the Academic Council's interpretation shall be the final decision.

## 21. General

The words such as "he", "him", "his" and "her" shall be understood to include all students irrespective of gender connotation.

**Note:** Failure to read and understand the regulations is not an excuse.

## GUIDELINES FOR DISCIPLINARY ACTION FOR MALPRACTICES / IMPROPER CONDUCT IN EXAMINATIONS

Rule	Nature of Malpractices/Improper conduct	Punishment
No.	If the candidate:	
1. (a)	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the course of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the candidate which can be used as an aid in the course of the examination)	Expulsion from the examination hall and cancellation of the performance in that course only.
(b)	Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate or persons in or outside the exam hall in respect of any matter.	Expulsion from the examination hall and cancellation of the performance in that course only of all the candidates involved. In case of an outsider, he will be handed over to the police and a case is registered against him.
2.	Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the course of the examination (theory or practical) in which the candidate is appearing.	Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the courses of that Semester.  The Hall Ticket of the candidate is to be cancelled.
3.	Impersonates any other candidate in connection with the examination.	The candidate who has impersonated shall be expelled from examination hall. The candidate is also debarred for four consecutive semesters from class work and all Semester-end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.  The performance of the original candidate who has been impersonated, shall be cancelled in all the courses of the examination (including labs and project work) already appeared and shall not be allowed to appear for examinations of the remaining courses of that semester. The candidate is also
		debarred for four consecutive semesters from class work and all Semester-end examinations, if his involvement is established. Otherwise, The candidate is debarred for two consecutive semesters from class work and all Semester-end examinations. The continuation of the course by the candidate is

Rule No.	Conduct						
NO.	If the candidate:	subject to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he will be handed over to the police and a case is registered against him.					
4.	Smuggles in the Answer book or additional sheet or takes out or arranges to send out the question paper during the examination or answer book or additional sheet, during or after the examination.	Expulsion from the examination hall and cancellation of performance in that course and all the other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester. The candidate is also debarred for two consecutive semesters from class work and all Semester-end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.					
5.	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.	Cancellation of the performance in that course only.					
6.	Refuses to obey the orders of the Chief Controller of Examinations/Controller of Examinations/any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the Controller of Examinations or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the Controller of Examinations, or any person on duty in or outside the examination hall or any of his relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction of property in the examination hall or any part of the College campus or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination.	In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that course and all other courses the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the courses of that semester. If the candidate physically assaults the invigilator/Controller of the Examinations, then the candidate is also debarred and forfeits his/her seat. In case of outsiders, they will be handed over to the police and a police case is registered against them.					

Rule No.	Nature of Malpractices/Improper conduct	Punishment					
NO.	If the candidate:						
7.	Leaves the exam hall taking away answer script or intentionally tears of the script or any part thereof inside or outside the examination hall.	Expulsion from the examination hall and cancellation of performance in that course and all the other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester. The candidate is also debarred for two consecutive semesters from class work and all Semester-end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.					
8.	Possess any lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester. The candidate is also debarred and forfeits the seat.					

**Note:** Whenever the performance of a student is cancelled in any course(s) due to Malpractice, Then it shall be treated as failed in that course.

## **B. Pharmacy Course Structure**

## **I Semester**

s.	Course	Course Title	Со		ct Pe r We	riods ek	Credits	Scheme of Examination Max. Marks		
No.	Code	course ritie		Total	(c)	Int. Marks	Ext. Marks	Total Marks		
1.	23PC101001	Human Anatomy and Physiology-I	3	1	-	4	4	25	75	100
2.	23PA101001	Pharmaceutical Analysis	3	1	-	4	4	25	75	100
3.	23PH101001	Pharmaceutics	3	1	ı	4	4	25	75	100
4.	23PA101002	Pharmaceutical Inorganic Chemistry	3	1	-	4	4	25	75	100
5.	23PY101001	Communication skills	2	-	1	2	2	15	35	50
6.	23PY101002	Remedial Biology*	2	-	-	2	2	15	35	50
7.	23PY101003	Remedial Mathematics*								
8.	23PC105001	Human Anatomy and Physiology-I Practical	-	-	4	4	2	15	35	50
9.	23PA105001	Pharmaceutical Analysis Practical	1	-	4	4	2	15	35	50
10.	23PH105001	Pharmaceutics Practical	1	-	4	4	2	15	35	50
11.	23PA105002	Pharmaceutical Inorganic Chemistry Practical	-	-	4	4	2	15	35	50
12.	23PY105001	Communication skills Practical	-	-	2	2	1	10	15	25
13.	23PY105002	Remedial Biology Practical*	1	-	2	2	1	10	15	25
		Total	16	4	20	40	30	210	540	750

<sup>\* 1.</sup> Students who had studied Higher Secondary (10+2) with Mathematics, Physics and Chemistry should mandatorily study Remedial Biology (Theory) and Remedial Biology (Practical).

- 2. Student who studied Biology, Physics and Chemistry in Higher Secondary then he/she mandatorily study Remedial Mathematics (Theory) only.
- 3. If a student studied Mathematics and biology in Higher secondary, then the student can choose any one of the above combinations.

## **II Semester**

s.	Course Code	Course Title	Со		ct Pe	riods ek	Credits (c)	Scheme of Examination Max. Marks		
No.			L	Т	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	23PC101002	Human Anatomy and Physiology-II	3	1	-	4	4	25	75	100
2.	23PA101003	Pharmaceutical Organic Chemistry-I	3	1	-	4	4	25	75	100
3.	23PA101004	Biochemistry	3	1	-	4	4	25	75	100
4.	P23PC101003	Pathophysiology	3	1	-	4	4	25	75	100
5.	23PY101004	Computer Applications in Pharmacy*	3	-	-	3	3	25	50	75
6.	23PY101005	Environmental sciences*	3	-	-	3	3	25	50	75
7.	23PC105002	Human Anatomy and Physiology-II Practical	-	-	4	4	2	15	35	50
8.	23PA105003	Pharmaceutical Organic Chemistry-I Practical	-	-	4	4	2	15	35	50
9.	23PA105004	Biochemistry Practical	ı	-	4	4	2	15	35	50
10.	23PY105003	Computer Applications in Pharmacy Practical*	-	-	2	2	1	10	15	25
		Total	18	4	14	36	29	205	520	725

## **III Semester**

S.	Course	Course Title	Co		ct Pe	riods ek	Credits	Scheme of Examination Max. Marks		
No.	Code	course ritte	L	Т	P	Total	(c)	Int. Marks	Ext. Marks	Total Marks
1.	23PA101005	Pharmaceutical Organic Chemistry-II	3	1	1	4	4	25	75	100
2.	23PH101002	Physical Pharmaceutics-I	3	1	-	4	4	25	75	100
3.	23PH101003	Pharmaceutical Microbiology	3	1	-	4	4	25	75	100
4.	23PH101004	Pharmaceutical Engineering	3	1	-	4	4	25	75	100
5.	23PA105005	Pharmaceutical Organic Chemistry-II Practical	1	1	4	4	2	15	35	50
6.	23PH105002	Physical Pharmaceutics-I Practical	-		4	4	2	15	35	50
7.	23PH105003	Pharmaceutical Microbiology Practical	-	-	4	4	2	15	35	50
8.	23PH105004	Pharmaceutical Engineering Practical	-	1	4	4	2	15	35	50
Total			12	4	16	32	24	160	440	600
9.	23PY101001	Communication skills **	2	-	-	2	2	15	35	50
10.	23PY105001	Communication skills Practical **	-	-	2	2	1	10	15	25

<sup>\*\*</sup> For Lateral Entry Students only.

## **IV Semester**

S.	Course	Course Title	Со		ct Pe	riods ek	Credits	Scheme of Examination Max. Marks		
No.	Code	Course ritte	L	т	Р	Total	(c)	Int. Marks	Ext. Marks	Total Marks
1.	23PA101006	Pharmaceutical Organic Chemistry-III	3	1	1	4	4	25	75	100
2.	23PA101007	Medicinal Chemistry-I	3	1	ı	4	4	25	75	100
3.	23PH101005	Physical Pharmaceutics-II	3	1	1	4	4	25	75	100
4.	23PC101004	Pharmacology-I	3	1	1	4	4	25	75	100
5.	23PY101006	Pharmacognosy and Phytochemistry-I	3	1	-	4	4	25	75	100
6.	23PA105006	Medicinal Chemistry-I Practical	-	-	4	4	2	15	35	50
7.	23PH105005	Physical Pharmaceutics-II Practical	-	-	4	4	2	15	35	50
8.	23PC105003	Pharmacology-I Practical	-	1	4	4	2	15	35	50
9.	23PY105004	Pharmacognosy and Phytochemistry-I Practical	-	-	4	4	2	15	35	50
Total			15	5	16	36	28	185	515	700
10.	23PY101004	Computer Applications in Pharmacy**	3	-	-	3	3	25	50	75
11.	23PY105003	Computer Applications in Pharmacy Practical**	-	-	2	2	1	10	15	25

<sup>\*\*</sup> For Lateral Entry Students only.

## **V** Semester

			Co	nta	ct Pe	riods		Scheme of Examination		
S.	Course	Course Title		pe	r We	ek	Credits (c)	Max. Marks		
No. Code	Code		L	Т	Р	Total		Int. Marks	Ext. Marks	Total Marks
1.	23PA101008	Medicinal Chemistry-II	3	1	-	4	4	25	75	100
2.	23PH101006	Industrial Pharmacy-I	3	1	-	4	4	25	75	100
3.	23PC101005	Pharmacology-II	3	1	-	4	4	25	75	100
4.	23PY101007	Pharmacognosy and Phytochemistry-II	3	1	-	4	4	25	75	100
5.	23PH101007	Pharmaceutical Jurisprudence	3	1	-	4	4	25	75	100
6.	23PH105006	Industrial Pharmacy-I Practical	-	-	4	4	2	15	35	50
7.	23PC105004	Pharmacology-II Practical	-	-	4	4	2	15	35	50
8.	23PY105005	Pharmacognosy and Phytochemistry-II Practical	-	-	4	4	2	15	35	50
		Total	15	5	12	32	26	170	480	650

## **VI Semester**

S.	Course	Course Title	Со		ct Pe r We	eriods ek	Credits	Scheme of Examination Max. Marks		
No.	Code		L	Т	P	Total	(c)	Int. Marks	Ext. Marks	Total Marks
1.	23PA101009	Medicinal Chemistry-III	3	1	-	4	4	25	75	100
2.	23PC101006	Pharmacology-III	3	1	-	4	4	25	75	100
3.	23PY101008	Herbal Drug Technology	3	1	-	4	4	25	75	100
4.	23PH101008	Biopharmaceutics and Pharmacokinetics	3	1	-	4	4	25	75	100
5.	23PH101009	Pharmaceutical Biotechnology	3	1	-	4	4	25	75	100
6.	23PA101010	Quality Assurance	3	1	-	4	4	25	75	100
7.	23PA105007	Medicinal chemistry-III Practical	-	-	4	4	2	15	35	50
8.	23PC105005	Pharmacology-III Practical	-	-	4	4	2	15	35	50
9.	23PY105006	Herbal Drug Technology Practical	-	-	4	4	2	15	35	50
		Total	18	6	12	36	30	195	555	750

## **VII Semester**

S. No.	Course Code	Course Title	Contact Periods per Week				Credits	Scheme of Examination Max. Marks		
			L	т	P	Total	(c)	Int. Marks	Ext. Marks	Total Marks
1.	23PA101011	Instrumental Methods of Analysis	3	1	-	4	4	25	75	100
2.	23PH101010	Industrial Pharmacy-II	3	1	-	4	4	25	75	100
3.	23PP101001	Pharmacy Practice	3	1	-	4	4	25	75	100
4.	23PH101011	Novel Drug Delivery System	3	1	-	4	4	25	75	100
5.	23PA105008	Instrumental Methods of Analysis Practical	-	-	4	4	2	15	35	50
6.	23PY111001	Practice School	-	-	12	12	6	25	125	150
7.	23PY111002	Industrial Training	-	-	-	-	-	-	-	-
Total				4	16	32	24	140	460	600

## **VIII Semester**

S. No.	Course Code	Course Title	Contact Periods per Week				Credits (c)	Scheme of Examination Max. Marks		
			L	Т	P	Total	(c)	Int. Marks	Ext. Marks	Total Marks
1.	23PY101009	Biostatistics and Research Methodology	3	1	-	4	4	25	75	100
2.	23PC101007	Social and Preventive Pharmacy	3	1	-	4	4	25	75	100
	Elective (Any two courses)									
3.	23PH101012	Pharma Marketing Management	3+	1+	-	4 +4	4+ 4	25 + 25	75 + 75	100+ 100
4.	23PH101013	Pharmaceutical Regulatory Science								
5.	23PP101002	Pharmacovigilance								
6.	23PY101010	Quality Control and Standardization of Herbals								
7.	23PA101012	Computer Aided Drug Design								
8.	23PH101014	Cell and Molecular Biology								
9.	23PH101015	Cosmetic Science								
10.	23PC101008	Experimental Pharmacology	-							
11.	23PA101013	Techniques								
12.	23PH101016	Dietary Supplements and Nutraceuticals								
13.	23PY109001	Project Work			12	12	6		150	150
	Total				12	28	22	100	450	550