

*Scheme for M. Pharm*

ADMISSION  
&  
EXAMINATION RULES  
&  
SYLLABUS  
FOR  
*MASTER IN PHARMACY*



DEPARTMENT OF PHARMACEUTICAL SCIENCES  
*UNIVERSITY OF KASHMIR*  
NAAC Accredited Grade "A"

# CONTENTS

S.No	Contents	Page no
<b>ADMISSION &amp; EXAMINATION RULES - MASTER OF PHARMACY</b>		
1.	Programme	01
2.	Duration	01
3.	Medium of Instruction & Examination	01
4.	Eligibility of Admission	01
5.	Course Structure	02
	i) Pharmaceutical Chemistry	02
	ii) Pharmacology	03
	iii) Pharmaceutics	03
	iv) Pharmacognosy & Phytochemistry	04
	v) Pharmacy Practice	04
6.	Scheme of Examination	05
	i) Pharmaceutical Chemistry	06
	ii) Pharmacology	06
	iii) Pharmaceutics	07
	iv) Pharmacognosy & Phytochemistry	07
	v) Pharmacy Practice	08
7.	Internal Assessment	08
8.	Attendance	09
9.	Eligibility For Admission To Examination	09
10.	Annual And Supplementary Examination	10
11.	Promotion	11
12.	Award Of Merit	11

## SYLLABUS

13.	Syllabus for M.Pharm in Pharmaceutical Chemistry	13
14.	Syllabus for M.Pharm in Pharmacology	19
15.	Syllabus for M.Pharm in Pharmaceutics	26
16.	Syllabus for M.Pharm in Pharmacognosy & Phytochemistry	33
17.	Syllabus for M.Pharm in Pharmacy Practice	41

# DEPARTMENT OF PHARMACEUTICAL SCIENCES

UNIVERSITY OF KASHMIR

## ADMISSION AND EXAMINATION RULES FOR MASTER IN PHARMACY

**1. PROGRAMME:-** Master of Pharmacy (M.Pharm) in the following subjects

- i) Pharmaceutical Chemistry
- ii) Pharmacology
- iii) Pharmaceutics
- iv) Pharmacognosy and Phytochemistry
- v) Pharmacy Practice

It shall be a full time regular course. During an academic year, a candidate shall be enrolled only for one programme of study and shall not appear in any other examination of this or any other University.

**2. DURATION:-** Two years which shall be designated as follows

- i) M.Pharm I<sup>st</sup> year
- ii) M.Pharm II<sup>nd</sup> year

**3. MEDIUM OF INSTRUCTION AND EXAMINATION:-** English

**4. ELIGIBILITY OF ADMISSION:** A candidate who is a state subject of J&K and has passed Bachelor of Pharmacy degree from University of Kashmir or any other Institute recognized by UGC/ AICTE with at least aggregate of 55% marks in B.Pharm theory shall be eligible for appearing in the entrance examination to be conducted by University of Kashmir.

**GATE** qualified candidates will be given preference in admission and they will be exempted from appearing in the University entrance test. Admission to various branches of M. Pharm will be made on the basis of merit list prepared in accordance with **GATE** percentile score.

The merit of **Non- Gate** candidates, shall be determined as under:

- |   |     |
|---|-----|
| i) Weightage for entrance Examination:  | 60% |
| ii) Weightage for academics in B.Pharm: | 40% |

Further the admission of Non-Gate candidates to a particular specialization will depend on the availability of seats in the respective specializations after filling up of the seats by GATE-qualified candidates.

**Note:** There will be total of 10 seats in M.Pharm with two seats in each discipline. Due to limited no. of seats, only two seats shall be available for reserved categories and

shall be offered to two candidates who top in the merit list of Reserved Categories, provided that only one candidate shall be taken from one category.

## 5.COURSE STRUCTURE:

### FIRST YEAR (SECTION -A) (Common for all Specializations)

Code	Subject	Marks		Total
		Internal	External	
MAT-I	Modern Pharmaceutical Analytical Techniques (Theory)	20	80	100
MAT-II	Modern Pharmaceutical Analytical Techniques (Practical)	20	80	100

### (SECTION -B)

## PHARMACEUTICAL CHEMISTRY

### FIRST YEAR

MPC-I	Pharm.Chem.I (Drug Design) (Theory)	20	80	100
MPC-II	Pharm.Chem.II (Chemistry of Natural Products) (Theory)	20	80	100
MPC-III	Pharm.Chem. III (Medicinal Chemistry) (Theory)	20	80	100
MPC-IV	Pharm.Chem. Practical – I	20	80	100
MPC-V	Pharm.Chem. Practical –II	20	80	100

### SECOND YEAR

	Preparation of Synopsis/ Seminar			50
	Thesis			150
	Viva Voce			100

Total of Section A & B

1000



# PHARMACOLOGY

## FIRST YEAR

MPL-I	Pharmacology-I (Basic Principles of Drug Therapy & Clinical Pharmacology) (Theory)	20	80	100
MPL-II	Pharmacology-II (Recent Advances and Emerging Trends in Pharmacological Sciences) (Theory)	20	80	100
MPL-III	Pharmacology-III (Pharmacological Methods and Toxicology) (Theory)	20	80	100
MPL-IV	Pharmacology Practical -I	20	80	100
MPL-V	Pharmacology Practical -II	20	80	100

## SECOND YEAR

	Preparation of Synopsis /Seminar			50
	Thesis			150
	Viva Voce			100

Total of Section A & B

1000

# PHARMACEUTICS

## FIRST YEAR

MPT-I	Pharmaceutics-I (Product Development & Packaging Technology) (Theory)	20	80	100
MPT-II	Pharmaceutics-II (Biopharmaceutics, Pharmacokinetics and Novel drug delivery system) (Theory)	20	80	100
MPT -III	Pharmaceutics -III (DRA, intellectual property Rights & Quality Assurance ) (Theory)	20	80	100
MPT-IV	Pharmaceutics Practical -I	20	80	100
MPT-V	Pharmaceutics Practical -II	20	80	100

## SECOND YEAR

	Preparation of Synopsis /Seminar			50
	Thesis			150
	Viva Voce			100

Total of Section A & B

1000

# PHARMACOGNOSY & PHYTOCHEMISTRY

## FIRST YEAR

MPG-I	Pharmacognosy & Phytochemistry-I (Advances in Pharmacognosy) (Theory)	20	80	100
MPG-II	Pharmacognosy & Phytochemistry -II (Phytochemistry & Biogenesis) (Theory)	20	80	100
MPG-III	Pharmacognosy-III (Cultivation & Standardization of Medicinal Plants) (Theory)	20	80	100
MPG-IV	Pharmacognosy & Phytochemistry Practical -I	20	80	100
MPG-V	Pharmacognosy & Phytochemistry Practical -II	20	80	100

## SECOND YEAR

	Preparation of Synopsis			50
	Thesis			150
	Viva Voce			100

Total of Section A & B

1000

## PHARMACY PRACTICE

### FIRST YEAR

MPP-I	Pharmacy Practice-I (Clinical Pharmacy Pharmacokinetics & Toxicology) (Theory)	20	80	100
MPP-II	Pharmacy Practice -II (Pharmaco therapeutics including pathophysiology) (Theory)	20	80	100
MPP-III	Pharmacy Practice -III (Hospital & Community Pharmacy)	20	80	100
MPP-IV	Pharmacy Practice Practical -I	20	80	100
MPP-V	Pharmacy Practice Practical -II	20	80	100

### SECOND YEAR

	Preparation of Synopsis/ Seminar			50
	Thesis			150
	Viva Voce			100

Total of Section A & B

1000

**SECOND YEAR**

	Preparation of Synopsis/Seminar					50
	Thesis					150
	Viva Voce					100

Total of Section A & B                      1000

**YEAR WISE DISTRIBUTION OF COURSE IN M.PHARM PHARMACY PRACTICE****FIRST YEAR**

MPP-I	Pharmacy-Practice-I (Clinical Pharmacy Pharmacokinetics & Toxicology)	Theory	3	20	80	100
MPP-II	Pharmacy Practice -II (Pharmacotherapeutics including pathophysiology)	Theory	3	20	80	100
MPP-III	Pharmacy Practice -III (Hospital & Community Pharmacy)	Theory	3	20	80	100
MPP-IV	Pharmacy Practice	Practical -I	6-12	20	80	100
MPP-V	Pharmacy Practice	Practical -II	6-12	20	80	100

**SECOND YEAR**

	Preparation of Synopsis/ Seminar					50
	Thesis					150
	Viva Voce					100

Total of Section A & B                      1000

*primarily*

Research work in second year of M.Pharm shall be carried out in the Department of Pharmaceutical Sciences, University of Kashmir or in any Govt. approved Pharm. Industry, R & D laboratory, Analytical testing laboratory or Hospitals etc, in which case a Co-Supervisor, if required, may be from such relevant institution.

**7. INTERNAL ASSESSMENT:**

- a) For the purpose of awarding sessional marks, the performance of students shall be evaluated continuously on the basis of written tests, seminars/viva voce. etc. in each course. These will be given by the respective teachers.



## 11. PROMOTION:

- a) Students securing at least 50% marks in each of the subjects separately in the theory as well as practical examinations shall be promoted to the next higher class.
- b) A student shall be promoted to next year of the programme if he/she has passed in each theory and practical separately. However, a student may carry over a maximum of two theory papers or practicals to the next year. A candidate will be given a total of three attempts, inclusive of the first attempt to clear the papers, in which he/she fails to qualify. Promotion to the next higher class will be considered subject to rules, relating to the maximum period of stay at the University, viz Passing the 1<sup>st</sup> year examination within two academic years, and successfully completing all the requirements of the programme of study within 4 years from admission.

## 12. AWARD OF MERIT

- a) The result of the successful candidate shall be classified at the end of the final year examination on the basis of the aggregate marks, theory and practicals secured by the candidate in the 1<sup>st</sup> year and 2<sup>nd</sup> year.

Distinction	75% and above
1 <sup>st</sup> Division	60% - 74.9%
2 <sup>nd</sup> Division	50% - 59.9%.
- b) Candidate securing 75% marks or above in 1<sup>st</sup> attempt shall be declared to have obtained distinction.