

**THE TAMILNADU DR. M.G.R. MEDICAL UNIVERSITY
CHENNAI-600 032**



**REGULATIONS AND SYLLABUS
M.PHARMACY DEGREE COURSE 2006-2007.**

THE TAMILNADU DR. M.G.R. MEDICAL UNIVERSITY
CHENNAI – 600 032
M.PHARMACY COURSE

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<p>Note: The Core-Syllabus furnished in this Book-let is only Out-line. The Post-Graduate students should read exhaustively the Text-Books, Reference Books, Journals, etc, for a thorough understanding of the subject.</p>		

**THE TAMILNADU DR. M.G.R. MEDICAL UNIVERSITY
CHENNAI - 600 032**

Regulations of the University

In exercise of the powers conferred by Section 44 of The Tamil Nadu Dr. M.G.R. Medical University, Chennai , Act, 1987 (Tamil Nadu Act 37 of 1987), the Standing Academic Board of the Tamil Nadu Dr. M.G.R. Medical University, Chennai, hereby makes the following regulations.

1. SHORT TITLE AND COMMENCEMENT

These regulations shall be called “THE REGULATIONS FOR THE M. PHARMACY DEGREE COURSE OF THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY, CHENNAI”.

They shall come into force from the academic year 2006-2007 session.

The regulation and syllabi are subject to modifications by the Standing Academic Board from time to time.

REGULATIONS

2. ELIGIBILITY :

Candidates for admission to first year of the Master of Pharmacy Post-Graduate Degree course shall be required to have passed the B. Pharmacy Degree of this University or any other University recognized as equivalent thereto by the authority of this University.

3. ELIGIBILITY CERTIFICATE:

The Candidate who has passed the qualifying examination as specified in Regulation No.1 above from any other Universities other than the Tamil Nadu Dr. M.G.R. Medical University, before seeking admission to any one of the affiliated institutions shall obtain an Eligibility Certificate from the University by remitting the prescribed fees along with application form, which shall be downloaded from the University web site (www.tnmmu.ac.in).

It was resolved that the candidates should obtain Eligibility Certificate before admission. Due to some unavoidable reason, if the candidate got admission only on the last day of the cut-off date then the candidate shall directly go and join the College without Eligibility Certificate. The institution shall admit such candidates without Eligibility Certificate with a condition that the Eligibility Certificate should be produced within 15 days.

It was also resolved that the candidates should apply to the University directly for Eligibility Certificate and the Institutions need not apply on behalf of the candidate. (As per 31st S.A.B. held on 29.06.2006).

4. PHYSICAL FITNESS CERTIFICATE:

Every candidate before admission to the course shall submit to the Principal of the Institution a Certificate of Medical Fitness from an authorized Medical Officer that the candidate is physically fit to undergo the academic course and does not suffer from any disability or contagious disease.

5. REGISTRATION:

A Candidate admitted into Master of Pharmacy Post-Graduate Degree course in any one of the affiliated institutions of The Tamil Nadu Dr. M.G.R. Medical University, Chennai, shall submit the prescribed application form for registration duly filled along with prescribed fee and declaration in the format, as in Annexure to the Academic Officer of this University through the affiliated institution within 60 days from the cut-off date prescribed for Master of Pharmacy Post Graduate course for admission.

6. DURATION OF THE COURSE AND COURSE OF STUDY:

- a) The period of certified study and training of the M. Pharmacy Post-Graduate degree course shall be Two academic years.
- b) No exemption shall be given from this period of study and training for any other experience gained prior to the admission of the course.

7. CUT-OFF DATES FOR ADMISSION TO EXAMINATIONS :

The candidates admitted upto 31st May shall be registered to take up their First year examination after fulfillment of the regulations from 15th March of the next year.

All kinds of admissions shall be completed on or before 31st May of the academic year. There shall not be any admission after 31st May, even if seats are vacant.

8. COMMENCEMENT OF THE COURSE :

The Academic year for M. Pharmacy Course shall commence from the 1st April of the year of admission.

9. MEDIUM OF INSTRUCTION:

English shall be the medium of instruction for all the subjects of study for examinations of the M. Pharmacy course.

10. WORKING DAYS IN AN ACADEMIC YEAR:

Each academic year shall consist of not less than 240 working days.

11. ATTENDANCE REQUIRED FOR ADMISSION TO EXAMINATION :

- a) No candidate shall be permitted to appear in any one of the parts of M. Pharmacy Course Examinations, unless he / she has attended the course in all the subjects for the prescribed period in an affiliated Institution recognized by this University and has produced the necessary certificate of study, attendance progress and satisfactory conduct, from the Head of the Institution.
- b) A candidate is required to put in minimum of 80% of attendance in both theory and practical separately in each subject before admission to the examination.
- c) A candidate lacking in the prescribed attendance and progress in any one subject in theory and practical classes, wherever necessary in the first appearance shall not be permitted for admission to the entire examination.

12. CONDONATION FOR LACK OF ATTENDANCE :

There shall be no condonation of lack of attendance in Post-Graduate courses.

13. COMMENCEMENT OF EXAMINATION :

March 15th/September 15th

Theory examinations will not be held on Saturdays and Sundays. If the date of commencement of the examination falls on public holiday, the next working day will be the date of commencement of examinations.

14. INTERNAL ASSESSMENT:

The Internal Assessment should consist of the following points for evaluation :-

- i) Theory.
- ii) Practical / Clinical.
- iii) Viva Voce.

The Internal Assessment of the candidate has to be assessed on the above points and a report has to be submitted by the Institution once in three months as detailed below :

- i) First Internal Assessment - At the end of 3 months.
- ii) Second Internal Assessment - At the end of 6 months.

iii) Third Internal Assessment - One month prior to the University Examination.

The average of the Theory, Practical and Oral should be added and aggregate must be taken and sent to the University as Internal Assessment Marks. In all the subjects obtaining minimum 35% of marks in Internal Assessment is mandatory to appear for the University Examinations.

15. REVALUATION / RETOTALLING OF ANSWER PAPER:

There shall be no revaluation of the answer papers of failed candidates in any Post-Graduate examination. However, the failed candidate shall apply for retotalling through their College / Institutions.

16. NUMBER OF APPEARANCE(S)

A Candidate registered for Two years M. Pharmacy Post-Graduate Degree course must qualify in the Examinations within four years of the date of his / her admission.

17. DURATION FOR COMPLETION OF THE COURSE OF STUDY :

The duration for the completion of the course shall be fixed as double the time of the course and the students have to pass within the said period otherwise they have to get fresh admission.

18. TRAINING IN OUTSIDE CENTRES

The Head of the Post-Graduate Departments should make necessary arrangements for their Post-Graduate candidates to undergo training in various skills in other centres within outside the state if facilities are not available in their own institution or hospitals.

19. QUESTION PAPER PATTERN:

The existing Question Paper Pattern is modified in respect of all the subjects pertaining to all Under Graduate/Post Graduate Degree Courses and to follow the uniform Question Paper Pattern as given below:

20 MCQs	20 x 1	=	20 Marks.
6 Short Notes	6 x 5	=	30 Marks.
2 Essay Questions	2 x 15	=	30 Marks.
1 Long Essay Question	1 x 20	=	20 Marks.

Note: The long essay question for 20 Marks shall be one single question or it shall consist of two sections a & b.
Other papers having 90 marks, 75 marks, 35 marks etc., the Question Paper Pattern and marks shall be distributed proportionately.

The above modification shall take effect from August 2006 Examinations onwards.

After detailed discussion, the Standing Academic Board resolved to remove MCQs (20 Marks) from the Question Paper Pattern for all Post Graduate and Higher Speciality Courses and to maintain uniformity the following pattern of Question Paper shall be adopted for all the Post Graduate and Higher Speciality Courses.

2 Essays (2 x 20)	=	40 Marks
10 Short Notes (10 x 6)	=	60 Marks

		100 Marks

The above modification shall come into effect from February 2008 examinations onwards. (As per 32nd SAB dated 21.12.2006).

20. MARKS QUALIFYING FOR A PASS :

50 % of marks in the University Theory examination.

50% of marks in the University Practical examination.

50% of marks in aggregate in Theory, Practical IA & Oral taken together.

21. SUBJECTS OF STUDY :

I YEAR

Common to All Branches

Paper-I Modern Pharmaceutical Analytical Techniques.

BRANCH I PHARMACEUTICS

Paper II Industrial Pharmacy.

Paper III Bio-Pharmaceutics and Pharmacokinetics.

Paper IV Advances in Drug Delivery System.

BRANCH II PHARMACEUTICAL CHEMISTRY

Paper II Advanced Organic Chemistry.

Paper III Advanced Medicinal Chemistry.

Paper IV Natural Products of Medicinal Interest.

BRANCH III PHARMACOGNOSY

- Paper II Pharmacognosy.
Paper III Biogenesis and Chemistry of Natural Products.
Paper IV Phytochemistry and Biotechnology.

BRANCH IV PHARMACOLOGY

- Paper II Pharmacology & Toxicology.
Paper III Biological Standardisation and Pharmacological Screening Methods.
Paper IV Drug Design, and Molecular Pharmacology.

BRANCH V PHARMACEUTICAL ANALYSIS

- Paper II Pharmaceutical and Cosmetic Analysis.
Paper III Advanced Pharmaceutical Analysis.
Paper IV Quality Control & Quality Assurance.

BRANCH VI PHARMACEUTICAL BIOTECHNOLOGY

- Paper II Pharmaceutical Aspects of Microbial and Cellular Biology.
Paper III Bio- process Technology.
Paper IV Advances in Pharmaceutical Biotechnology.

BRANCH VII PHARMACY PRACTICE

- Paper II Pharmacotherapeutics.
(including Pathophysiology)
Paper III Hospital & Community Pharmacy.
Paper IV Clinical Pharmacy.

BRANCH VIII PHYTOPHARMACY AND PHYTOMEDICINE

- Paper II Advanced Pharmacognosy.
Paper III Herbal Drug Development and Standardization.
Paper IV Indian System of Medicines.

II YEAR

Seminar and Viva Voce on Dissertation.

22. SCHEME OF EXAMINATIONS:

The Scheme of Examinations is as follows :-

(Duration Hours :- Dur. Hrs.; I.A. :- Sec. Marks).

COURSE OF STUDY/WEEK: 3 Hrs.

Examination Time Duration : 3 Hrs./Paper

Sl. No.	SUBJECT	THEORY				
		SCHEME OF EXAMINATION				
		Univ. Marks	I.A	Oral	Total	
I YEAR						
Paper I	Common for all Branches	100	25	25	150	
Branch – I						
Paper II	Industrial Pharmacy	100	25	25	150	
Paper III	Biopharmaceutics & Pharmacokinetics	100	25	25	150	
Paper IV	Advances in Drug Delivery System	100	25	25	150	
Branch – II						
Paper II	Advanced Organic Chemistry	100	25	25	150	
Paper III	Advanced Medicinal Chemistry	100	25	25	150	
Paper IV	Natural Products of Medicinal Interest	100	25	25	150	
Branch - III						
Paper II	Pharmacognosy	100	25	25	150	
Paper III	Biogenesis & Chemistry of Natural Products	100	25	25	150	
Paper IV	Phytochemistry & Biotechnology	100	25	25	150	
Branch – IV						
Paper II	Pharmacology & Toxicology	100	25	25	150	
Paper III	Biological Standardization & Pharmacological Screening Methods	100	25	25	150	
Paper IV	Drug Design & Molecular Pharmacology	100	25	25	150	

Branch – V

Paper II	Pharmaceutical and Cosmetic Analysis	100	25	25	150
Paper III	Advanced Pharmaceutical Analysis	100	25	25	150
Paper IV	Quality Control & Quality Assurance	100	25	25	150

Branch – VI

Paper II	Pharmaceutical Aspects of Microbial and Cellular Biology	100	25	25	150
Paper III	Bio-process Technology	100	25	25	150
Paper IV	Advances in Pharmaceutical Biotechnology	100	25	25	150

Branch – VII

Paper II	Pharmacotherapeutics	100	25	25	150
Paper III	Hospital & Community Pharmacy	100	25	25	150
Paper IV	Clinical Pharmacy	100	25	25	150

Branch – VIII

Paper II	Advanced Pharmacognosy	100	25	25	150
Paper III	Herbal Drug Development and Standardization	100	25	25	150
Paper IV	Indian Systems of Medicine	100	25	25	150

COURSE OF STUDY/WEEK : 4 Hrs.
Examination Time Duration : 6 Hrs.

Sl. No.	Specialisation Code	SUBJECT	<u>PRACTICALS</u>			
			<u>SCHEME OF XAMINATION</u>			
			Univ. Marks	I.A.	Rec.	Total
<u>I YEAR</u>						
Paper I	Common for all Branches	Modern Pharmaceutical Analytical Techniques	70	20	10	100
Branch – I						
Paper II		Industrial Pharmacy	70	20	10	100
Paper III		Biopharmaceutics & Pharmacokinetics	70	20	10	100
Paper IV		Advances in Drug Delivery System	70	20	10	100
Branch – II						
Paper II		Advanced Organic Chemistry	70	20	10	100
Paper III		Advanced Medicinal Chemistry	70	20	10	100
Paper IV		Natural Products of Medicinal Interest	70	20	10	100
Branch – III						
Paper II		Pharmacognosy	70	20	10	100
Paper III		Biogenesis & Chemistry of Natural Products	70	20	10	100
Paper IV		Phytochemistry & Biotechnology	70	20	10	100
Branch – IV						
Paper II		Pharmacology and Toxicology	70	20	10	100
Paper III		Biological Standardization & Pharmacological Screening Methods	70	20	10	100
Paper IV		Drug Design & Molecular Pharmacology	70	20	10	100

Branch – V

Paper II	Pharmaceutical and Cosmetic Analysis	70	20	10	100
Paper III	Advanced Pharmaceutical Analysis	70	20	10	100
Paper IV	Quality Control & Quality Assurance	70	20	10	100

Branch – VI

Paper II	Pharmaceutical Aspects of Microbial and Cellular Biology	70	20	10	100
Paper III	Bio-process Technology	70	20	10	100
Paper IV	Advances in Pharmaceutical Biotechnology	70	20	10	100

Branch – VII

Paper II	Pharmacotherapeutics – Clinical / Practical	70	20	10	100
Paper III	Hospital & Community Pharmacy	70	20	10	100
Paper IV	Clinical Pharmacy	70	20	10	100

Branch – VIII

Paper II	Advanced Pharmacognosy	70	20	10	100
Paper III	Herbal Drug Development and Standardization	70	20	10	100
Paper IV	Indian System of Medicines	70	20	10	100

23. DISSERTATION & EVALUATION OF DISSERTATION :

- a) The topic of the dissertation should be submitted within 3 months after the commencement of 2nd year. The candidate should also inform the name of the Guide for the dissertation to the University while submitting the dissertation topic.
- b) If any changes in the dissertation topic, the same has to be informed within 6 months after commencement of 2nd year.

- c) The dissertation should be submitted one month in advance to the II year M.Pharmacy examinations duly signed by the Professor of that branch and the same has to be forwarded to the Controller of Examinations through the Dean or Principal of the College.
- d) A candidate who has completed I year M. Pharmacy with fulfillment of attendance criteria is eligible to take II year M. Pharmacy examinations.
- e) If the candidate fails in the Written / Practical Examination or fails to appear the 1st year examination, but his / her dissertation is approved, the approval of the dissertation shall be carried over to the subsequent examinations.
- f) A guide can supervise a maximum of 3 students in an academic year.

24. DETAILS OF THE EXAMINATIONS

- a) At the time of practical examination, each candidate shall submit to the examiner or examiners concerned his laboratory note books duly certified by his teachers as a bonafide record of work done by the concerned teachers and the marks sent to the University before the Examinations.
- b) The candidates may be allowed at the discretion of the examiners to bring to the practical examinations in any of the subjects of the M. Pharmacy examination any book or books they choose.

25. RE-ADMISSION AFTER BREAK OF STUDY :

Re-admission shall be made as per the University Common Regulations duly condoning the break of study for all courses.

26. VACATION :

The Heads of Institutions shall declare 6 weeks vacation in an academic year to the students. The period(s) of vacation can be decided by the Head of the Institution.

27. MIGRATION / TRANSFER OF CANDIDATES :

Request for Migration / Transfer of candidates during the course of study from one affiliated college to another affiliated college of this University or from another University shall not be granted under any circumstances.

28. a.) AWARD OF MEDALS AND PRIZES:

The University shall award at its Convocation Medals and Prizes to outstanding candidates as and when instituted by the donors as per the schedule prescribed for the award.

b.) AWARDING DISTINCTION AND RANKS:

The Standing Academic Board resolved to award distinction to the successful candidates who have passed all the subjects from First Year to Final Year in the first attempt and completed the course in Four Years and secured an aggregate of 75% of marks.

The Standing Academic Board also resolved to award FIRST TEN University Ranks in each batch of candidates who have passed all the subjects from First Year to Final Year in the first attempt and completed the course, taking their cumulative aggregate into consideration. The Rank list may be published in the University Website and the Rank Certificates may be issued to the candidates.

This will be implemented for the batch of students of all the courses appearing for Final Examination in August 2007 onwards.

It was further resolved that the above conditions for award of Distinction and First Ten University Ranks will be applicable for all disciplines (As per 32nd S.A.B. dated 21.12.2006).

29. AUTHORITY TO ISSUE TRANSCRIPT:

The Controller of Examination shall be the Authority for issuing Transcript of marks after remitting the prescribed fee of Rs.1000/- (Rupees One Thousand only) or the fee as may be prescribed from time to time.

**ANNEXURE
DECLARATION**

I.....
Son/Daughter of
Residing at.....
and admitted to the I year of(Name of the course /
U.G./P.G.) at(Name of the college)
do hereby solemnly affirm and sincerely state as follows:

I declare that I shall abide by the rules and regulations prescribed by the
Tamil Nadu Dr.M.G.R. Medical University, Chennai for the
.....(course) including regulations for readmission after the
break of study.

Date:

Signature of the candidate.

/Counter signed/

Dean / Principal / Director

(College / Institution date seal)

REGISTRAR

/TRUE COPY/

ASSISTANT REGISTRAR.