

Dr. Rafiq Zakaria Campus

Maulana Azad Educational Trust's

Y. B. CHAVAN COLLEGE OF PHARMACY

(B. Pharm, M. Pharm & Research Centre)

ISO 21001:2018 & ISO 14001:2015 CERTIFIED | NIRF-2022 ALL INDIA RANK 65TH

NAAC ACCREDITATION "A" GRADE WITH 3.23 CGPA SCORE

1.3.2 Number of courses that include experiential learning through project work/field work/internship during the year.

Pharmacy Council of India New Delhi

Rules & Syllabus for the Bachelor of Pharmacy (B. Pharm) Course

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

CHAPTER- I: REGULATIONS

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 2016-17. 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 semestershall 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/extracurricular 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 Projectover the duration of eight semesters. The credits are distributed semester-wise as shown in Table IX. Courses generally progress in sequences, building competencies and their positioning indicates certain academic maturity on the part of the learners. Learners are expected to follow the semester-wise schedule of courses given in the syllabus.

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

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.

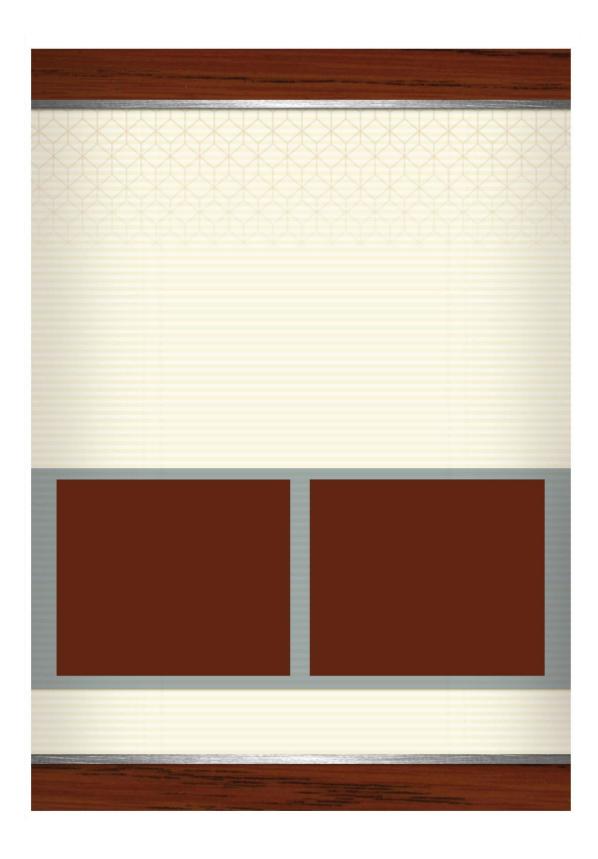
Table-VII: Course of study for semester VII

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP701T	Instrumental Methods of Analysis – Theory	3	1	4
BP702T	Industrial PharmacyII – Theory	3	1	4
BP703T	Pharmacy Practice – Theory	3	1	4
BP704T	Novel Drug Delivery System – Theory	3	1	4
BP705P	Instrumental Methods of Analysis – Practical	4	-	2
BP706PS	Practice School*	<mark>12</mark>	<u>-</u>	<mark>6</mark>
	Total	28	5	24

^{*} Non University Examination (NUE)

Table-VIII: Course of study for semester VIII

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP801T	Biostatistics and Research Methodology	3	1	4
BP802T	Social and Preventive Pharmacy	3	1	4
BP803ET	Pharma Marketing Management			
BP804ET	Pharmaceutical Regulatory Science			
BP805ET	Pharmacovigilance			
BP806ET	Quality Control and Standardization of Herbals	3 + 3 =	1 + 1 = 2	4 + 4 =
BP807ET	Computer Aided Drug Design	6		8
BP808ET	Cell and Molecular Biology			
BP809ET	Cosmetic Science			
BP810ET	Experimental Pharmacology			
BP811ET	Advanced Instrumentation Techniques			
BP812ET	Dietary Supplements and Nutraceuticals			
BP813PW	Project Work	12	_	<mark>6</mark>
	Total	24	4	22



S-29 June, 2013 AC after Circulars from Cirular No.03 & onwards
DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY

CIRCULAR NO.ACAD/NP/B.Pharm & M.Pharm./Syllabus/21/2013

It is hereby notified for the information of all concerned that, on the recommendation of the Dean, Faculty of Engineering and Technology, the Hon'ble Vice-Chancellor has accepted the *Revised Syllabi and Course Structure of B.Pharmacy and M.Pharmacy, under the Faculty of Engineering and Technology* on behalf of the Academic Council Under Section-14(7) of the Maharashtra Universities Act, 1994 as appended herewith.

This is effective from the Academic Year 2013-2014 and onwards.

All concerned are requested to note the contents of this circular and bring the notice to the students, teachers and staff for their information and necessary action.

University Campus, Aurangabad-431 004. REF.No. ACAD/NPB.& M.PHARM./ SYLLABI / 2013/ 29437-52

Date:- 08-08-2013.

Director,
Board of College and
University Development.

All India Council for Technical Education, New Delhi

Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

Industry Institute Partnership Cell Govt. College of Pharmacy, Aurangabad



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PART - B

M. Pharm. Syllabus (Ordinance, Rules and structure)

Annexure C Structure of Syllabus

There shall be five subject specializations at the Masters of Pharmacy (M. Pharm.)

- Pharmaceutics
- Quality Assurance Techniques (Quality Assurance)
- Pharmaceutical Chemistry
- Pharmaceutical Analysis
- Pharmacology
- Pharmacognosy

Abbreviations: TH: Theory, **PR:** Practical, **SC:** Subject Code, **INT:** Internal, **EXT:** External

Semester 1: All subject specialization

SEM	S	C NI	Subject	HRS.		EXAM	HRS	TH	MARKS	PR N	/IARKS	TOTA	LMARKS	CRE	EDITS
SEIVI	С	S. N.	Subject	TH	Р	TH	PR	EXT	INT	EXT	INT	T	Р	TH	PR
I	S1-MPH1	1	Research Methodology	4		3	-	08	<mark>2</mark> 0			<mark>100</mark>	-	4	
I	S1-MPH2	2	Modern Analytical Techniques	4	8	3	8	80	2	80	2	100	100	4	4
ı	S1-MPH3	3	Computers & Statistics	4	4	3	4	8	2	40	1 0	100	5 0	4	2
I	S1-MPH4	4	Nanotechnolog y&	4	8	3	8	8	2	80	2	100	100	4	4

Pharmaceutics

Semester 2:

SEM	SC	S. N.	Subject	HRS. /	WEEK	EXAM	1 HRS		ARKS	PR M		TOTAL	.MARKS		DITS
SEIVI	30	3. IV.	Subject	TH	PR	TH	PR	EXT	INT	EXT	INT	TH	PR	TH	PR
H	S2-MPH1	1	Research Project		8	3				40	<mark>10</mark>		<mark>50</mark>		2
П	S2-MPT2	2	Formulation Concepts and Industrial Pharmacy	4	8	3	8	80	20	80	20	100	100	4	4
П	S2-MPT3	3	Biopharmaceuticsand Pharmacokinetics	4	8	3	4	80	20	80	20	100	100	4	4
П	S2-MPT4	4	Advanced Pharmaceutics - I	4		3		80	20			100		4	

Semester 3:

SEM	SC	C M	Subject	HRS. /	WEEK	EXAN	1 HRS	TH M	ARKS	PR M	ARKS	TOTAL	MARKS	CRE	DITS
SEIVI	SC	S. N.	Subject	TH	PR	TH	PR	EXT	INT	EXT	INT	TH	PR	TH	PR
Ш	S3-MPH1	1	Drug Regulatory aspects and IPR	4		3	-	80	20	-		100		4	
III	S3-MPT2	2	Research work Seminar	-1	8		1	-		100	-1	- 1	<mark>100</mark>		4
III	S3-MPT3	3	Research Project		<mark>16</mark>		2	-		<mark>150</mark>		-	<mark>150</mark>		6
III	S3-MPT4	4	Novel Drug Delivery Systems	4		3	-1	80	20			100		4	
III	S3-MPT5	5	Advanced Pharmaceutics - II	4		3		80	20	-		100		4	

Pharmaceutical Chemistry

Semester 2:

SEM	SC	C N	Subject	HRS. /	/WEEK	EXAN	1 HRS	TH M	IARKS	PR M	IARKS	TOTAL	MARKS	CRE	DITS
SEIVI	30	S. N.	Subject	TH	PR	TH	PR	EXT	INT	EXT	INT	TH	PR	TH	PR
	S2-MPH1	1	Research Project		8	3				<mark>40</mark>	<mark>10</mark>		<mark>50</mark>		2
	S2-MPC2	2	Advanced Pharmaceutical Chemistry - 1	4	8	3	8	80	20	80	20	100	100	4	4
l I	S2-MPC3	3	Advanced Organic Chemistry	4	8	3	4	80	20	80	20	100	100	4	4
I	S2-MPC4	4	Advanced Pharmaceutical Chemistry - 2	4		3		80	20			100		4	

Semester 3:

CEM	22	C N	Cubicat	HRS. /	WEEK	EXAN	/I HRS	TH M	IARKS	PR M	ARKS	TOTAL	MARKS	CREI	DITS
SEM	SC	S. N.	Subject	TH	PR	TH	PR	EXT	INT	EXT	INT	TH	PR	TH	PR
III	S3-MPH1	1	Drug Regulatory aspects & IPR	4		3		80	20			100		4	
Ш	S3-MPC2	2	Research work Seminar		8	-	1			100	-		<mark>100</mark>	-1	4
II	S3-MPC3	3	Research Project		<mark>16</mark>	-	2			<mark>150</mark>			<mark>150</mark>		<mark>6</mark>
III	S3-MPC4	4	Advanced Pharmaceutical Chemistry – 3	4		3	1	80	20			100		4	
Ш	S3-MPC5	5	Advanced Pharmaceutical Chemistry – 4	4		3		80	20			100		4	

Pharmacology

Semester 2:

CENT	SC	C NI	Subject	HRS. /	WEEK	EXAN	1 HRS	TH M	ARKS	PR M	ARKS	TOTAL	.MARKS	CRE	DITS
SEM	3C	S. N.	Subject	TH	PR	TH	PR	EXT	INT	EXT	INT	TH	PR	TH	PR
Ш	S2-MPH1	1	Research Project		8	3				<mark>40</mark>	10		<mark>50</mark>		<mark>2</mark>
Ш	S2-MPL2	2	Advanced Pharmacology-I	4	8	3	8	80	20	80	20	100	100	4	4
II	S2-MPL3	3	Methods in Pharmacology	4	8	3	4	80	20	80	20	100	100	4	4
Ш	S2-MPL4	4	Advanced Pharmacology - 2	4		3	1	80	20			100		4	

Semester 3:

SEM	SC	C N	Subject	HRS. /	WEEK	EXAN	1 HRS	TH M	IARKS	PR M	ARKS	TOTAL	.MARKS	CRE	DITS
SEIVI	30	S. N.	Subject	TH	PR	TH	PR	EXT	INT	EXT	INT	TH	PR	TH	PR
Ш	S3-MPH1	1	Drug Regulatory aspects and IPR	4		3	1	80	20	1		100		4	
Ξ	S3-MPL2	2	Research work Seminar		8	-	1			100			<mark>100</mark>		4
III	S3-MPL3	3	Research Project		<mark>16</mark>	-	2			<mark>150</mark>		-1-	<mark>150</mark>		<mark>6</mark>
Ш	S3-MPL4	4	Advanced Pharmacology-3	4		3		80	20			100		4	
III	S3-MPL5	5	Advanced Pharmacology- 41	4		3	1	80	20	-		100		4	

Quality Assurance Techniques (Quality Assurance)

Semester 2:

SEM	sc	S.N.	Subject	_	WEEK	EXAN	1 HRS	TH M	IARKS	PR M	ARKS	TOTAL	MARKS	CRE	DITS
	62 11011		-	TH	PR	TH	PR	EXT	INT	EXT	INT	TH	PR	TH	PR
- 11	S2-MPH1	1	Research Project		8	3				40	10		50		2
11	S2-MPQ2	2	Pharmaceutical and Biological Evaluation	4	8	3	8	80	20	80	20	100	100	4	4
11	S2-MPQ3	3	Validation	4	8	3	4	80	20	80	20	100	100	4	4
11	S2-MPQ4	4	Stability of drugs and dosage form	4		3		80	20			100		4	

Semester 3:

SEM	SC	S.N.	Subject		WEEK		1 HRS	TH M	IARKS	PR M	IARKS	TOTAL	MARKS	CRE	DITS
			Description 1	TH	PR	TH	PR	EXT	INT	EXT	INT	TH	PR	TH	PR
III	S3-MPH1	1	Drug Regulatory aspects & IPR	4		3		80	20			100		4	
111	S3-MPQ2	2	Research work Seminar	٠	8		- 1			100			100		4
Ш	S3-MPQ3	3	Research Project		16		2			150			150		6
111	S3-MPQ4	4	Quality Management	4		3 ,		80	20			100		4	
Ш	S3-MPQ5	5	Advanced Quality Assurance	4		3		80	20			100		4	

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