UNIVERSITY OF PUNE

FACULTY OF PHARMACEUTICAL SCIENCES



COURSE STRUCTURE & SYLLABI BACHELOR OF PHARMACY (B. Pharm.) COURSE

(EFFECTIVE FROM ACADEMIC YEAR 2008-09)

R-I: AIMS & OBJECTIVES OF THE COURSE

AIMS:

The Pharmacy graduates are required to learn and acquire adequate knowledge, necessary skills to practice the profession of pharmacy. The graduate should have thorough knowledge of synthesis & analysis of medicinal agents, their mode and mechanism of action, drug interactions, patient counseling and adequate technical information to be exchanged with the physician and other health professionals. The graduates are required to acquire in depth knowledge of formulation, quality assurance and storage of various pharmaceutical dosage forms including herbal medicines. The graduates should also understand the concept of community pharmacy and be able to participate in health care programmes of Government and private sector. They are also required to detail the physicians and market the medicinal agents for diagnosis, prevention and therapeutic purposes. The graduate pharmacist should also act as bridge between the Physician and Patients for achieving better health of community.

OBJECTIVES:

The following objectives of the course should be achieved by acquiring an in-depth knowledge & thorough understanding, necessary skills and developing the right attitude. Therefore they are categorized into following heads.

a. Knowledge and Understanding

The graduates should acquire the following during their B. Pharm. Course.

- 1. Adequate knowledge and scientific information regarding basic principles of Pharmaceutical & Medicinal Chemistry, Pharmaceutics including Cosmeticology, Pharmacology, Pharmacognosy including herbal medicines.
- 2. Adequate knowledge of practical aspects of
- a. Synthesis of APIs & its intermediates and analysis of various pharmaceutical dosage forms
- b. Formulation developments & quality assurance of various pharmaceutical dosage forms including those of herbal origin as per standards of official books, WHO and other regulatory agencies like USFDA, MHRA, UK etc.
- c. Pharmacological screening and biological standardization and *in-vivo* drug interactions.
- d. Preparation & analysis of suitable plants material/extracts of medicinal importance for various herbal formulations.
- e. Clinical studies for patient counseling leading to physical and social well being of the patients.
- f. Product detailing, marketing, distribution and selling of pharmaceutical products.

b. Skills:

A graduate should be able to demonstrate following skills necessary for practice of a Pharmacy

a. Able to synthesize, purify, identify and analyze medicinal agents.

- b. Able to formulate, store, dispense, analyze the prescriptions and manufacture the pharmaceutical products.
- c. Able to learn and apply the quality assurance principles in regulatory and ethical aspects
- d. Able to extract, purify, identify and understand the therapeutic value of herbal/crude/natural products
- e. Able to screen various medicinal agents using animal models for pharmacological activity.

c. Attitudes:

A graduate should develop the following attitudes during the course.

- a. Willing to apply the current knowledge of Pharmacy in the best interest of the patients and the community.
- b. Maintain high standards of professional ethics in discharging professional obligations.
- c. Continuously upgrade professional information and be conversant with latest advances in the field of pharmacy to serve community better.
- d. Willing to participate in continuing education programmes PCI/AICTE/ University of Pune to upgrade the knowledge and professional skills.
- e. To help and participate in the implementation of National Health Programmes.

R-II: DURATION AND PATTERN

The Bachelor of Pharmacy (B. Pharm.) degree course shall be of four years duration as annual pattern of examination.

R-III: ADMISSIONS:

Admissions to the Course shall be made as per the admission rules made by Govt. of Maharashtra from time to time as per the eligibility criterion mentioned hereunder in R-IV.

R-IV: ELIGIBILITY CRITERIA

A. In order to be eligible for admission to First Year B. Pharm. course, a candidate should have

- 1. Passed the HSC (Std. XII) examination of Maharashtra State Board of Secondary and Higher Secondary Education or its equivalent examination with:
 - > English as one of the subjects
 - > Both subjects mentioned under Group -I and
 - > Any one of the subjects mentioned under Group-II

Group-I 1. Physics 2. Chemistry
Group-II 1.Mathematics 2.Biology 3.Biotechnology
4.Computer Science

Secured minimum 50% marks (45% for backward class candidates from Maharashtra State only) in Physics, Chemistry and the subject of maximum marks amongst the 4 subjects of Group-II, added together.

OR

- 2. Passed the Diploma in Pharmacy examination from an institution in Maharashtra or outside Maharashtra affiliated to Maharashtra State Board of Technical Education (MSBTE) or any other examining authority approved by Pharmacy Council of India with minimum 50 % marks in aggregate after (10+2) Science i.e. HSC or its equivalent examination.
- B. In order to be eligible for admission to Direct Second Year of B. Pharm. (lateral entry), a candidate should have passed the Diploma in Pharmacy examination from an institution in Maharashtra or outside Maharashtra affiliated to Maharashtra State Board of Technical Education (MSBTE) or any other examining authority approved by Pharmacy Council of India with minimum 60 % marks in aggregate after (10+2) Science i.e. HSC or its equivalent examination.

NOTE: In case of eligibility criterion decided by the Govt. of Maharashtra differs from above, university authorities shall decide the eligibility criterion from time to time.

R-V: MEDIUM OF INSTRUCTION AND EXAMINATION

The medium of instruction and examination shall be English.

R-VI: STRUCTURE OF B. PHARM. COURSE

The following will be the course structure of First Year, Second Year, Third Year and Final Year B. Pharm.

FIRST YEAR B. PHARM.

Sr.	Subject	Theory Hours	Practical
No.		Per Week	Hours Per Week
1.1	Pharmaceutics-I	3	3
1.2	Modern Dispensing Practices	2	3
1.3	Pharmaceutical Inorganic Chemistry	3	3
1.4	Pharmaceutical Organic Chemistry – I	3	3
1.5	Anatomy Physiology & Health Education	3	3
1.6	Pharmaceutical Engineering	2	-
1.7	Computer Applications & Bio-statistics	2	1 Hr. Demo
	TOTAL	18	16

SECOND YEAR B. PHARM.

Sr.	Subject	Theory Hours	Practical Hours	
No.		per Week	Per Week	
2.1	Physical Pharmacy	3	3	
2.2	Pharmaceutical Microbiology &	3	3	
	Immunology			
2.3	Pharmaceutical Biochemistry	3	3	
2.4	Pharmaceutical Organic Chemistry –II	3	3	
2.5	Pharmaceutical Analysis-I	2	3	
2.6	Pharmacognosy-I	3		
2.7	Pharmacology-I	3		
2.8	Environmental Sciences	40 hrs / Year		
	TOTAL	20	15	

THIRD YEAR B. PHARM.

Sr.	Subject	Theory Hours	Practical Hours
No.		per Week	Per Week
3.1	Pharmaceutics -II	3	3
3.2	Pharmaceutical Biotechnology	2	-
3.3	Medicinal Chemistry –I	3	3
3.4	Pharmaceutical Analysis-II	3	3
3.5	Pharmacology-II	3	3
3.6	Pharmacognosy-II	3	3
3.7	Pharmaceutical Business Management	2	
3.8	Project Work		
	TOTAL	19	15

FINAL YEAR B. PHARM.

Sr. No.	Subject	Theory Hours per Week	Practical Hours Per Week
4.1	Pharmaceutics-III	3	3
4.2	Bio-pharmaceutics & Pharmacokinetics	2	
4.3	Medicinal Chemistry – II	3	3
4.4	Pharmaceutical Analysis-III	3	3
4.5	Pharmacology -III	3	3
4.6	Pharmacognosy-III	3	3
4.7	Pharmaceutical Jurisprudence	2	
	TOTAL	19	15

R-VII: DEPARTMENTS AND THEIR SUBJECT HEADS:

For the purpose of calculation of departmental workload, appointments of examiners by 32(5) committees and specialization of teachers at master degree level for teaching various subjects, there shall following four departments based on four boards of studies. The subjects have been grouped under each department as under.

Sr. No	Pharmaceutics	Pharmaceutical Chemistry	Pharmacology	Pharmacognosy
1	Pharmaceutics-I	Pharmaceutical Inorganic Chemistry	Anatomy Physiology & Health Education	Pharmacognosy-I
2	Modern Dispensing Practices	Pharmaceutical Organic Chemistry – I	Pharmacology-I	Pharmacognosy-II
3	Physical Pharmacy	Pharmaceutical Biochemistry	Pharmacology-II	Pharmacognosy-III
4	Pharmaceutical Microbiology & Immunology	Pharmaceutical Organic Chemistry –II	Pharmacology -III	-
5	Pharmaceutical Engineering	Pharmaceutical Analysis-I	-	-
6	Pharmaceutics -II	Medicinal Chemistry –I	-	-
7	Pharmaceutical Business Management	Pharmaceutical Analysis-II	-	-
8	Pharmaceutical Biotechnology	Medicinal Chemistry – II	-	-
9	Pharmaceutics-III	Pharmaceutical Analysis-III	-	-
10	Bio-pharmaceutics & Pharmacokinetics	-	-	-
11	Computer Applications & Bio-statistics	-	-	-
12	Pharmaceutical Jurisprudence	-	-	-

R-VIII: SCHEME OF EXAMINATION

FIRST YEAR B. PHARM.

Sr.	Subject	Theory Examination				Practical Examination			
No		Univ	ersity	Sessional	Total	Univ	ersity	Sessional	Total
		Hrs	Marks	Marks	Marks	Hrs	Marks	Marks	Marks
1.1	Pharmaceutics-I	3	80	20	100	4	80	20	100
1.2	Modern	3	80	20	100	4	80	20	100
	Dispensing								
	Practices								
1.3	Pharmaceutical	3	80	20	100	4	80	20	100
	Inorganic								
	Chemistry								
1.4	Pharmaceutical	3	80	20	100	4	80	20	100
	Organic								
	Chemistry – I								
1.5	Anatomy	3	80	20	100	4	80	20	100
	Physiology &								
	Health								
	Education								
1.6	Pharmaceutical	3	80	20	100	-	-	-	-
	Engineering								
1.7	Computer	3	80	20	100	-	-	-	-
	Applications &								
	Bio-statistics								

SECOND YEAR B. PHARM.

Sr.	Subject	Theo	ry Examin	ation	Practical Examination				
No		Univ	ersity	Sessional	Total	Univ	ersity	Sessional	Total
		Hrs	Marks	Marks	Marks	Hrs	Marks	Marks	Marks
2.1	Physical Pharmacy	3	80	20	100	4	80	20	100
2.2	Pharmaceutical	3	80	20	100	4	80	20	100
	Microbiology &								
	Immunology								
2.3	Pharmaceutical	3	80	20	100	4	80	20	100
	Biochemistry								
2.4	Pharmaceutical	3	80	20	100	4	80	20	100
	Organic Chemistry								
	–II								
2.5	Pharmaceutical	3	80	20	100	4	80	20	100
	Analysis-I								
2.6	Pharmacognosy-I	3	80	20	100	-	-	-	-
2.7	Pharmacology-I	3	80	20	100	-	-	-	-

THIRD YEAR B. PHARM.

Sr.	Subject	Theo	ry Examin	ation		Practical Examination			
No		Univ	ersity	Sessional	Total	Unive	ersity Sessional		Total
		Hrs	Marks	Marks	Marks	Hrs	Marks	Marks	Marks
3.1	Pharmaceutics - II	3	80	20	100	4	80	20	100
3.2	Pharmaceutical Biotechnology	3	80	20	100	-	-	-	-
3.3	Medicinal Chemistry –I	3	80	20	100	4	80	20	100
3.4	Pharmaceutical Analysis-II	3	80	20	100	4	80	20	100
3.5	Pharmacology-II	3	80	20	100	4	80	20	100
3.6	Pharmacognosy- II	3	80	20	100	4	80	20	100
3.7	Pharmaceutical Business Management	3	80	20	100	-	-	-	-

FINAL YEAR B. PHARM.

Sr.	Subject	Theory Examination					Practical Examination			
No		Univ	ersity	Sessional	Total	Univ	ersity	Sessional	Total	
		Hrs	Marks	Marks	Marks	Hrs	Marks	Marks	Marks	
4.1	Pharmaceutics-III	3	80	20	100	4	80	20	100	
4.2	Bio-pharmaceutics & Pharmacokinetics	3	80	20	100	-	-	-	-	
4.3	Medicinal Chemistry – II	3	80	20	100	4	80	20	100	
4.4	Pharmaceutical Analysis-III	3	80	20	100	4	80	20	100	
4.5	Pharmacology -III	3	80	20	100	4	80	20	100	
4.6	Pharmacognosy-III	3	80	20	100	4	80	20	100	
4.7	Pharmaceutical Jurisprudence	3	80	20	100	-	-	-	-	

R-IX: THE NATURE OF QUESTION PAPERS

The question paper for theory university examination for all subjects shall have two sections each carrying 40 marks. The question paper for theory sessional examination in all subjects shall be of 20 marks. The pattern of question paper for each section shall be as under:

Sr.	Type of question	Marks/	No of	Total	Options (If any)
No		Question	Question	marks	
1	Long Answer	10	01	10	Any 01 out of 02
	question				
2	Short answer question	03	05	15	Any 05 out of 07
3	Short notes	05	03	15	Any 03 out of 05
	Total			40	

Note:

- 1. There shall be no word limit set for long answer questions.
- 2. Paper setters should cover entire syllabus while setting the question paper. The relative weightage of marks for the topics is clearly mentioned in the syllabus.
- 3. The detailed guidelines with respect these changes shall be given to all paper setters by the university.

R-X: GRANT OF TERMS

- 1. The course of study in each subject will be not less than 30 weeks ie. 180 days in a year.
- 2. No student shall be allowed to appear for the University Examination unless he/she has attended 75% of theory lectures and practicals separately of each subject.

Note: Regular record of attendance both in Theory and Practical shall be maintained by the teaching staff of the respective subject and Principal of the institute shall certify the attendance for the purpose of grant of terms.

R-XI: INTERNAL ASSESSMENT:

The teaching institute will hold at least three sessional examinations for Theory and Practical evenly spread over a year for the purpose of internal assessment. Sessional marks will be calculated as the average of the best two performances at these examinations. These marks will be submitted to University before commencement of the University Examinations. A candidate failing in any of the University examinations will have a chance to improve sessional marks.

R-XII: EXAMINATIONS:

The University will conduct the examinations at the end of every academic year. The nomenclature of these examinations shall be as follows:

- 1. First Year B. Pharm. Examination
- 2. Second Year B. Pharm Examination
- 3. Third Year B. Pharm Examination
- 4. Final Year B. Pharm Examination

University will also conduct Supplementary examinations in the month of November/December every year.

In each paper of the theory examination, there will be two sections and each section will have three questions compulsory with internal options. In the practical examination, the candidate will also be examined orally.

R-XIII: STANDARDS OF PASSING

There shall be separate head of passing in each subject of theory and practical of a B. Pharm course. For example a candidate passing in practical examination of the said subject need not reappear for practical examination even if he is failed in the respective subject of theory and vice versa.

To pass in each examination of B. Pharm. Course the candidate should have obtained

- a. at least 40% of the marks in Theory (excluding Sessional Marks i.e. 32 out of 80 & 40 out of 100) and 45% of the marks in Practical (excluding Sessional Marks i.e. 36 out of 80 & 45 out of 100) separately in each subject and
- b. at least 50% of the total marks assigned to that examination.

R-XIV: ATKT/BACKLOG

- a. A candidate failing in an examination will be allowed to carry a backlog of any twotheory heads & any two practical heads next year. The candidate must pass these four subjects independently or simultaneously at the next exam. The term 'subject' means separate for both theory and practical.
- b. A failing/ATKT candidate who has passed in a particular subject may, at his/her option, be exempted from appearing in that subject at a subsequent examination.
- c. No candidate will be admitted to Third Year B. Pharm unless he/she has passed in all subjects of First Year B. Pharm. examination.
- d. No candidate will be admitted to Final Year B. Pharm unless he/she has passed in all subjects of Second Year B. Pharm examination.

R-XV: AWARD OF CLASS/DECLARATION OF RESULTS

Class of Bachelors of Pharmacy Degree shall be awarded to the candidate based on his/her marks obtained at Third & Final year examination taken together. The subject or subjects in whom a successful candidate may have secured distinction will be shown on his mark-sheet. In order to obtain distinction in a subject at an examination, the candidate should pass the examination in the first attempt and should obtain 70% of the full marks in that subject. Only those candidates who have passed an examination in one attempt will be eligible for any prize or scholarship to be awarded for that examination.

The following shall be the mode of Award of Class at an examination.

- 1. Candidates obtaining 70% or more of Grand Total: First Class with Distinction.
- 2. Candidates obtaining 60% or more but less than 70 % of Grand Total; First Class.
- 3. Candidates obtaining 50 % or more but less than 60% of Grand Total: Second Class.

The names of first five merit candidates from the list of successful candidates will be shown in the notification of result of the examination published by the University. Every candidate shall be required to undergo at least one months Practical training (continuous or in parts) at any time after the end of the Second Year B Pharm Examination, in a Recognized Pharmaceutical Manufacturing Concern or in an Analytical Laboratory or in a Chemical Manufacturing Unit or Pharmaceutical Research Organization or Hospital (Clinical Pharmacy), failing which, he/she will not be eligible for conferment of degree by the University.

R-XVI: ENVIRONMENTAL SCIENCES

An additional course in environmental sciences shall be conducted as per following guidelines.

- 1. A course in Environmental Awareness with duration of six months (30 lectures of one hour duration & field work of 10 hours duration.) shall be introduced at the second year of degree course B.Pharm as a compulsory course.
- 2. An additional course fee of Rs. 500 per student shall be charged to meet the expenditure on the conduct of the course.
- 3. A course Coordinator shall be appointed to organize teaching and evaluation by the Principal.
- 4. Qualifications of a Teacher.
 - University approved teacher (minimum lecturer) in any subject possessing substantial knowledge to teach a course on environmental studies shall be eligible to teach the course. Principal of the College shall be authorized to determine the eligibility of the teacher on environmental studies
- 5. This course is to be introduced from the second year B.Pharm with 40 clock hours teaching including field visit.
- 6. The college on behalf of the University shall conduct the examination of this subject immediately before or after annual examinations of S.Y./T.Y./Final Year B.Pharm.
- 7. The student should clear this subject before passing the Final Year B.Pharm examination.
- 8. A candidate has to pass in this course in order to obtain degree certificate. If the candidate passes in all subjects of degree course but fails in this paper, he will not be eligible to obtain degree certificate.
- 9. Examination: the College shall organize the evaluation as per pattern suggested below.
 - The Principal shall submit the result sheet to the Controller of Examination, University of Pune on or before the end of the final year University Examinations of B. Pharm. course. The result shall reflect on the final Mark statement of each student. The results of University examination of the student who fail to get Minimum 'C' Grade in this course shall be kept in reserve till the concerned student complete the course and secure to required Minimum C Grade.

The question paper shall include the questions as under

A. Multiple choice questions :50 Marks
B. Essay type questions :25 Marks
C. Field works :25 Marks

Total: 100 Marks Passing Marks: 40 Marks.

Following Grades shall be awarded to the candidates based on their marks obtained.

Grade-O: above 75 **Grade-A:** 61 to 75 **Grade-B:** 51 to 60 **Grade-C:** 40 to 50

R-XVII: PROJECT WORK

The project work shall be introduced at third year B.Pharm as per the following guidelines.

1. Objectives:

The objectives of the project work are to

- 1. Develop research aptitude.
- 2. Sharpen communication & presentation skills.
- 3. Provide exposure to literature survey as well as research methodology.
- 4. Develop and improve logical, creative, Interpretational and analytical abilities

2. Duration of the work & Dates of submission

Project shall be completed in one academic year (i.e. on Holidays, Sunday, Diwali Vacation etc. i.e. 10 months from June to March/April

- a. The topic and selection of guide shall be done in months of June-July.
- b. The Synopsis shall be submitted on and before 15th October.
- c. Final project / dissertation submission on and before 31 March
- d. Final presentation and viva-voce on and before 30 April.

3. Selection of the Project Topic

Topic should be Lab oriented, Study oriented or survey oriented or Computer oriented. These may be from field relevant to pharmacy like Pharmaceutics, Pharmaceutical Chemistry, Medicinal Chemistry, Pharmacognosy, Bio-pharmaceutics, Pharmacokinetics, Pharmaceutical Analysis, Formulation Development, Chemical Process Development, Drug Design, Clinical and Hospital Pharmacy, Community Pharmacy, Biotechnology, Bioinformatics, Cheminformatics, Ayurveda, Cosmeticology, Regulatory Affairs, Intellectual Property Rights, Patents, Forensic and Jurisprudence, Mining of information from literature as well as electronic database, Reviews, Pharmaceutical sales & marketing, Pharma Packaging, etc.

Note: - The above list is comprehensive, but not limiting. Any other topics relevant to Pharmacy can also be chosen.

Separate topic to be assigned to each student. Wherever, the broad area is same, the aspects to be researched by an individual candidate should be clearly focused and spelt out in the title itself.

Topics allotment can be done in the end of second year itself so students can utilize their vacation and do more meaningful and comprehensive work.

4. Allocation of Guides and Students

- a. On an average each of the staff members (Whose minimum qualification is M. Pharm.) should be involved as a Guide (Supervisor).
- b. Per guide, on as average 5 students can be allocated.
- c. A judicious balance of selection *vis-a-vis* guide and students should maintained, without imposing on either side.
- d. In a few cases a co-guide (Outside the college, but related with the topic) can also be involved.
- e. In case of any anomaly or disagreement, the final basis of allocation/selection shall be based on the S.Y. B. Pharm merit (internal) of the students.

5. The project Coordinator

One of the Staff members shall be assigned as the Project coordinator for a given Academic Year.

6. Duties of the Coordinator

- a. Overall co-ordination
- b. Facilitator in Guide-Student allotment.
- c. Preparation of schedules and Time tables.
- d. Arrangement of Seminars & Multimedia (A/V) facilities, Classrooms, Labs, etc.
- e. Helping the guide in the arrangement for availing external help for the project work, like Workplace, Literature survey permission, Analytical facility, Biological survey, Data analysis, etc. However, mainly have to make such arrangements.
- f. All relevant documentation and filing
- g. Submission of marks to and communication with College and University exam sections.

7. Role of the Project Guide

- **a.** Allocation and Definition of the Topic for the Project.
- **b.** Providing internal facilities as well as arranging external facilities that are necessary for the successful completion of the Project Work.
- **c.** Guiding, Supervising and monitoring the Progress of the Work.

d. Helping in compilation of results, their analysis and interpretation as well as final compilation of the entire project work and its submission and presentation in the most appropriate manner.

8. Evaluation and Marking Pattern

Total marks shall be out of 100, of which minimum 50% i.e., 50 marks are required for passing in the subject. The marks obtained by a candidate shall be converted in to grades as follow and grades shall appear on the mark sheet of the third year B. Pham.

- 1. Grade O: 75 and above marks out of 100
- 2. Grade A: 60 and less than 75 marks out of 100
- 3. Grade B: 50 and less than 60 marks out of 100

Marks can be split up into two major portions/ allocations as follows:

A. Project work and Report (Dissertation) : 50 marks
B. Presentation (Seminar) & Viva-voce : 50 marks

A. Project Report (Dissertation)- It shall be submitted in a hardbound form neatly typewritten document on good quality paper (Executive Bond paper). ---- 50 marks

A.1 Actual project Report

Breakup of Marks for the actual Report: Total 50 marks

a.	Definition of aim / clarity of objectives	10
b.	Results and Discussion	20
c.	Literature	10
d.	Overall Quality & Regularity	10

(**Overall quality includes** – typographical, grammatical, organizational qualities, numbering of figures, references, pages, etc

Regularity includes: day-to-day work involvement and punctuality of the student)

B. Presentation (Seminar) & Viva-voce: 50 marks

B.1 The Presentation / Seminar shall have maximum 30 marks with following breakup.

a. Communication skills	10
b. Quality of Slides (PowerPoint)	10
c. Duration (within time allotted)	10

B.2 Viva-voce/Question- Answers

Viva-voce/Question-Answers shall have maximum 20 marks with breakup as under

a. Mannerism (Confidence & Expression)	10
b. Quality of Answers	10

9. Size and number of reports

Synopsis: 4- 20 pages, 3 Hardbound copies

Project: 50-75 pages, 3 Hardbound copies (Guide, Examiner College)

Besides these also, one soft copy (Print ready) as 2 continuous files – Synopsis and Project, to be submitted by the candidate.

10. Remuneration:

The University shall pay the remuneration to Guide, Examiner and Project Co-ordinator as may be decided by the University authorities.

Note: Any publication (or its acceptance proof) related to the Project Work in a reputed journal, shall be given due weightage in the marks allocation to the Project.

Check List for the Items of the Final Report (Dissertation)

1	Is the Report "Cover / Title page in proper format?	Yes/No
2	Is 'Supervisor's Certificate' in proper format? Has it been signed?	Yes/No
3	Is 'Abstract' included in the report? Is it in the proper format?	Yes/No
4	Does the 'Contents' page include the chapter page numbers?	Yes/No
5	Does the report contain the summary of the literature survey?	Yes/No
6	Is the 'Aim of the Work properly defined with clarity of thoughts?	Yes/No
7	Are the pages numbered properly?	Yes/No
8	Are the figures numbered properly?	Yes/No
9	Are the tables numbered properly?	Yes/No
10	Are the tables & figures titled properly?	Yes/No
11	Are the tables & figures numbers referred in the text?	Yes/No
12	Are the appendices numbered properly?	Yes/No
13	Does the report contain "Conclusion' of the work?	Yes/No
14	Are references/bibliography given?	Yes/No
15	Have the references been cited in the report?	Yes/No
16	Is the citation of the references done in a standard format?	Yes/No

R-XVIII: MISCELLANEOUS

This revised curriculum (including regulations, structure and syllabi) will be in force for academic year 2008-09 and onwards for First Year B. Pharm, for academic year 2009-10 onwards for Second Year B. Pharm., for academic year 2010-11 and onwards for Third Year B. Pharm., and for academic year 2011-12 and onwards for Final Year B. Pharm.

A candidate failing in an examination with old course will have to clear that examination with old course only. However, he/she will have to take the subsequent higher examinations with new courses. The University will decide the equivalence of old and new syllabus for such students from time to time.