

# **BPS Mahila Vishwavidyalaya, Khanpur Kalan (Sonapat)**

**DEPARTMENT OF PHARMACEUTICAL EDUCATION & RESEARCH (DPER)**

## **ORDINANCE**

### **Bachelor of Pharmacy (w.e.f. session 2015-16)**

#### **1. Definitions:**

- 1.1 Programme** stands for Bachelor of Pharmacy (B. Pharm.).
- 1.2 Credit** is the weightage assigned to a paper in terms of contact hours.
- 1.3 Grade** stands for a letter grade assigned to a student on the basis of evaluation of a paper on the 10 point scale.
- 1.4 Grade Point** stands for the numerical equivalent of the letter grade.

#### **2. Duration:**

The normal duration of Bachelor of Pharmacy programme offered by Department of Pharmaceutical Education & Research for a student admitted in I semester is four years, comprising of **eight semesters** and the maximum duration to complete the programme is six years.

The normal duration of Bachelor of Pharmacy programme for a student admitted in III semester (Lateral Entry) is three years, comprising of **six semesters** and the maximum duration to complete the programme is five years.

#### **3. Admissions:**

##### **3.1 Eligibility**

##### **3.1.1 B. Pharm. I Semester: A pass in any of the following examinations:**

- i. A Female 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/Biology as optional subjects individually. "However, the students possessing 10+2 qualification from non-formal and non-class rooms based schooling such as National Institute of Open Schooling; open school systems of States etc. shall not be eligible for admission to B. Pharm. Course."
- ii. Any other qualification approved by the Pharmacy Council of India as equivalent to any of the above examinations.

Provided that a student should complete the age of 17 years on or before 31st December of the year of admission to the course.

Provided that there shall be reservation of seats for the students belonging to the Scheduled Castes, Scheduled Tribes and other Backward Classes in accordance

with the instructions issued by the Central Government/State Government/Union Territory Administration as the case may be from time to time.

Eligibility Criteria may be changed time to time as per regulatory bodies/ the decisions of the University authorities.

### **3.1.2 B. Pharm. III Semester:**

Lateral Entry to the B. Pharmacy Third Semester shall be open to the female candidate **pass in D. Pharm. course** from an institution approved by the Pharmacy Council of India under section 12 of the Pharmacy Act.

Eligibility Criteria may be changed time to time as per regulatory bodies/ the decisions of the University authorities.

### **3.1.3**

No female candidate who is in employment (full-time, part-time, or honorary service) shall be eligible to take admission in Bachelor of Pharmacy programme without taking leave from her office/ institution etc. from the date of admission to the termination of the examination/ including other essential requirements. She has to submit an affidavit in this regard. If found in violation of this rule her admission shall stand cancelled.

## **3.2 Procedure**

**B. Pharm. I & III Semester:** Admissions will be made on the basis of merit/ entrance/ any other criteria decided by the University time to time.

## **4. Fee:**

The programme fee shall be paid by the candidate as prescribed by the University from time to time.

## **5. Teaching Methodology:**

The methods of teaching shall include classroom instructions, assignments, practical, seminars, workshops, skill in computer, etc. The medium of instruction shall be English.

## **6. Credit Weightage:**

Each paper has a certain number of credits which reflect its weightage. Credits of a paper are evaluated as under:

**6.1 Lecture:** One credit per lecture per week per semester will generally be adopted.

**6.2 Tutorial:** One credit per tutorial hour per week per semester will be adopted.

**6.3 Practical:** Half credit per hour per week per semester will be assigned.

**6.4 Independent Study / Seminar / Project:** Weightage equivalent to theory paper will be assigned.

## **7. Examination:**

**7.1** At the end of the each semester, there shall be an examination where each candidate shall be examined in the paper studied by them in that semester. Each semester examination shall be designated as first semester examination, second semester examination, third semester examination and so on.

**7.2** The examination in each semester will be held according to the syllabi approved by the Board of Studies. The panel of Examiners shall be appointed for each paper and shall be recommended by the Under Graduate Board of Studies (UG BOS).

**7.3** The examination shall consist of theory papers and practical examination. Theory papers are to be set by the internal/ external paper setters appointed by the Vice Chancellor from a panel of examiners submitted by the Chairperson of the Pharmacy Department duly approved by the BOS of the concerned department.

**7.4** Practical examination shall be conducted jointly by the external & internal examiners. If an external examiner is not able to join, alternate examiner (including those of the same University Department) may be appointed by the Chairperson of the Pharmacy Department with the intimation to the Controller of Examination in the following preferential order:

- (i) From outside
- (ii) From BPSMV, Khanpur Kalan

**7.5** The examination for all odd semesters will normally be held in December/ January and for all even semesters in May/ June on such dates as provided by the University. The concerned teacher/ paper coordinator should ensure that 100% syllabus is covered in each subject before the semester examination. **Theory examination shall be of three hours and practical examination shall be of four hours duration.** A candidate who fails in theory or practical examination of a subject shall re-appear in theory or practical as the case may be. Practical examination shall also consist of a viva –voce (Oral) examination.

**7.6** Every paper is coordinated by a member of the teaching staff of the department which is offering the paper in a given semester. This faculty member is called the **paper coordinator**. He/ She has the full responsibility of conducting the paper, coordinating the work of the other members of the faculty involved in the paper, holding the midterm class tests (sessionals) & other components prescribed for internal evaluation . For any difficulty, the student is expected to approach the paper coordinator for advice & clarification. All the responsibilities from teaching to the submission of awards will be of the paper coordinator.

**7.7** There shall be at least two periodic sessional examinations for theory subjects in semester. Sessional examinations will be conducted as per time table prescribed by the Chairperson of the Pharmacy Department.

7.8 The marks obtained in the internal evaluation are to be submitted to the examination branch duly signed by the Chairperson of the Pharmacy Department before the close of semester examination.

7.9 **Practical Training:** The student is required to undergo practical training of 150 hrs either in (A) Pharmacy Practice (Hospital/Community pharmacy) or (B) Pharmaceutical and allied Industries spread over a period of not less than one month during the course of study after second year.

7.10 If a candidate, after attending the classes for the paper of studies in the B. Pharmacy Department either not appeared or having appeared in any semester examination has failed in one or more papers for that examination, she can appear for such papers in supplementary examinations without attending a fresh paper of studies for that semester, such a candidate may, in the meantime, prosecute her studies for the next semesters if she has failed in not more than two subjects.

#### 8. Reappear / Supplementary Examination:

Supplementary Examinations For:

S.No.	Semester	Schedule
1	I	Along with regular students of I semester.
2	II	Along with regular students of II semester.
3	III	Along with regular students of III semester.
4	IV	Along with regular students of IV semester.
5	V	Along with regular students of V semester.
6	VI	Along with regular students of VI semester.
7	VII	In all subsequent examinations.
8	VIII	In all subsequent examinations.

#### 9. Evaluation and Grading:

9.1 Twenty five (25) marks for each theory & twenty five (25) marks for each practical subject shall be allotted as sessional marks (Internal Marks).

9.2 There shall be at least two periodic sessional examinations & the best performance shall form the basis of calculating sessional marks for theory examination.

**9.3 The sessional marks in practicals shall be allotted on the following basis:**

- (i) Actual performance in the sessional examination (15 marks)**
- (ii) Day to day assessment in the practical class work, Promptness, viva-voce, record maintenance, etc. (10 marks)**

**9.4 A student shall not be declared to have passed examination unless she secures at least 50% marks in each of the subjects separately in the theory and practical examinations, including sessional marks. In case a student fails to acquire 50% in the aggregate of the internal and external, she will be awarded re-appear in the external paper of that subject. There will be no re-appear in the internal assessment. The marks obtained in the internal assessment of a subject shall be carry forwarded, if a student gets re-appear in the external examination.**

**9.5 Adhoc Grace:**

If there is any discrepancy/ out of syllabus /printing error / untoward incident during the examination, the matter be referred to a Standing committee of:

- (i) Controller of Examinations.**
- (ii) HOD of the Pharmacy Department.**
- (iii) One faculty member concerning the subject.**

The Committee may recommend re-conduct the paper or uniform grace marks to all but that should not exceed 10% marks of that particular paper.

**9.6 Moderation of Marks:**

**(a)Internal Examinations:** If there are more than one teacher associated in any internal assessment, one of the member be made coordinator by the concerned HOD and he along with the others can moderate the marks to maintain uniformity so that no student get undue advantage or disadvantage.

**(b)External Examinations:** If there is unusual variation (very high or very low) in the awards, the COE may refer the matter to a Moderation Committee consisting of

- (i) Controller of Examinations.**
- (ii) HOD of the Pharmacy Department.**
- (iii) One faculty member concerning the subject.**

As per recommendation of the committee the result may be revised.

### 9.7 Grading:

The academic performance of a student shall be graded on a scale as prescribed by the Examination Branch of the University. The department concerned shall only prescribe the pass grade.

9.7.1 After finalization of the marks, the same shall be displayed on the department notice board for duration of two days for information of students. Students, who have a specific grievance against the marks awarded to her, may discuss the same with the concerned Paper Coordinator who after consideration of the grievance of all the students shall finalize the marks to be awarded for the paper.

9.7.2 Before submission of the finalized award list in a prescribed formation to the concerned administrative office, the individual Paper coordinator shall discuss the marks distribution of his/her Faculty of Study. However, the final discussion with regard to marks will rest with the Paper Coordinator.

9.7.3 On receipt of the award list for all papers offered by a given Faculty of Study the concerned administrative office shall put up the consolidated results for that Faculty for discussion and approval from the Department Staff Council (All Faculty Members).

9.7.4 The academic performance of a student shall be graded on a scale prescribed by the University as follows:

Academic Performance	Letter Grades	Grade Points (G)
Outstanding	A+	10
Extra Ordinary	A	09
Excellent	B+	08
Very Good	B	07
Good	C+	06
Average	C	05
Poor	D	04
Very Poor	E	03

The award of grades based upon marks obtained out of 100 shall be made as follows:

Marks		Grade		Marks
90	≤	A+	≤	100
80	≤	A	≤	89
70	≤	B+	≤	79
60	≤	B	≤	69
50	≤	C+	≤	59
40	≤	C	≤	49
30	≤	D	≤	39
20	≤	E	≤	29

**Note:** 1. The pass percentage is 50%, Pass Grade is Grade C+ and higher grades.

2. Grades C, D and E are fail grades.

### 9.7.5 Calculation of Semester Grade Point Average (SGPA) & Cumulative Grade Point Average (CGPA):

The Grade Point Average is calculated as follows:

$$\text{GPA} = \frac{\sum (\text{Number of credits} \times \text{Grade Points})}{\sum (\text{Number of Credits Registered})}$$

For the purpose of calculation of GPA for SGPA only those papers (including projects) will be taken into account in which the student has been awarded pass grade. Here S stands for the sum of

$$(i) \quad \text{SGPA} = \frac{\sum C_i P_i}{\sum C_i}$$

Where

$C_i$  = Number of credits earned in the  $i^{\text{th}}$  paper of a semester for which SGPA is to be calculated.

$P_i$  = Grade point earned in  $i^{\text{th}}$  paper

$I = 1, 2, 3, \dots, n$ , represent the number of papers in which a student is registered in the concerned semester.

$$(ii) \quad \text{CGPA} = \frac{\sum C_j P_j}{\sum C_j}$$

Where

$C_j$  = Number of credits earned in the  $j^{\text{th}}$  paper upto the semester for which CGPA is calculated.

$P_j$  = Grade point earned in the  $j^{\text{th}}$  paper. Any grade lower than the pass grade in a paper shall not be taken into account.

$J = 1, 2, 3, \dots, n$ , represent the number of papers in which student was registered and obtained a grade not lower than C upto the semester for which CGPA is to be calculated.

**9.7.6** If the candidate is not satisfied with the evaluation of the answer sheet of Semester examination, she may apply to the controller of Examinations for re-evaluation in accordance with the rules laid down by the University in this regard.

## 10. Promotion:

**10.1** In the light of PCI Gazette notification mentioned above the committee of UG BOS recommended that the candidate will not be allowed carry over more than four (04) papers of first & second semester taken together of B. Pharm. for promotion in III semester.

**10.2** Similarly a candidate will not be allowed to appear in V semester to carry over more than four (04) subjects of all the previous semesters.

#### **11. Division:**

A student shall not be declared to have passed examination unless she secures at least 50% marks in each of the subjects separately in the theory and practical examinations, including sessional marks. The students securing 60% marks or above in aggregate in all subjects in a single attempt at B. Pharm shall be declared to have passed in the First Class. Students securing 75% marks or above in any subject or subjects shall be declared to have passed with distinction in the subject or those subjects provided he / she passes in all the subjects in a single attempt.

#### **12. Scholarship:**

A candidate while appearing in the re-appear examination shall not be eligible for a scholarship, a prize or a medal.

#### **13. Declaration of Results:**

Six weeks after the termination of the examination or as soon as possible, the controller of examination shall declare the result. B. Pharm shall consist of a certificate, having passed the course of study and examination, for the purpose of registration as a pharmacist to practice the profession under the Pharmacy Act, 1948.

**Certificate of passing examination:** Every student who has passed the examinations for the B. Pharm. shall be granted a certificate by the examining authority.

#### **14. Improvement Case:**

There will be no improvement case in Bachelor of Pharmacy.

#### **15. Attendance:**

**15.1** No candidate shall be considered to have pursued a regular paper of the study unless she has attended not less than 75% of the classes in each paper. A deficiency up to 10% may be condoned by the Chairperson of the department. In some special cases the Hon'ble Vice-Chancellor may condone a further 5%.

**15.2** If a student is absent from the Department for more than four weeks without intimating to the Chairperson/Paper coordinator of the department, her name will be struck off from the department rolls with information to the Academic Branch.

**15.3** In case the student name is struck off due to nonpayment of fee and is re-admitted later, her attendance shall not be counted for that period.

#### **16. General Guidelines:**

**16.1** Where this document is silent about any rule, the University Policy/Regulations from time to time will be applicable.



**16.2** Admission, teaching schedule, preparatory holidays, examination, winter, summer vacation, shall be followed as specified in academic calendar of the university.

**16.3** A student is deemed to have completed the requirements for the degree and is eligible for the award of degree if:

**16.3.1** She has satisfied all the academic requirements as per the regulations; and

**16.3.2** She has pay all fees due from her; and

**16.3.3** There is no case of indiscipline pending against her.

**16.3.4** Satisfied the minimum academic and residence requirements;

**16.3.5** Satisfactorily completed the requirements for the sort duration across-curricular paper, industry internship and NCC/NSS as may be prescribed by the Academic council;

**16.3.6** A student who has completed the entire graduation requirement listed above shall be eligible for award of degree / certificate. However, under extremely exceptional circumstances, where gross violation of the graduation requirements is detected at any later stage, the Academic Council may recommend to withdraw the degree/PG diploma already awarded.

**16.4** The gap of one/two semesters missed by the student(s), as the case may be, will count towards the total duration of the programme permissible under the regulations.

**16.5** Absence of registered students from classes during a semester shall be discouraged. However, for bonafied reasons such as illness, maternity, a student may grant leave of absence as per provision of leave rules for students framed by the Academic Council.

**16.5** All academic problems of the students other than those affecting the University rules and regulations framed from time to time may be looked into by a committee constituted by the Dean Academic Affairs.

Paper Code: BPL-101 PHARMACEUTICS-I (Dispensing and Hospital Pharmacy)

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Total Credits: 04  
Total Marks: 100

External Marks: 75  
Internal Marks: 25

**Paper Objectives:**

**Pharmaceutical dispensing, practice and pharmacy:** It is essential for a pharmacist to know while working in a pharmacy as how to prepare and supply medicines. This requires the knowledge of stability of medicines and their ingredients, principle of compounding, dosage, chemical, physical and therapeutic incompatibility, packaging methods, labeling procedures, legal requirements affecting drug storage, supply and records, containers and labeling of substances and misuse of drugs.

**UNIT I**

- Definitions and General Dispensing Procedures.
- Sources of information required for Pharmacists and History of Pharmacopoeias (I.P., B.P., and U.S.P.).
- Sources of error and care required in dispensing prescriptions.
- Pharmaceutical Latin-Latin Terms used in prescriptions and their English equivalents.
- Types of Dispensed products.
- Containers, closures and labelling for dispensed products.
- Colours, Flavours, Sweeteners and other additives used in prescriptions.

**UNIT II**

- Principles involved and procedures adopted in dispensing of typical preparations like mixtures, emulsion, creams, ointments, powders, pastes, jellies, suppositories, ophthalmics, pastilles, lozenges, pills, lotions, liniments, inhalations, paints, sprays etc.
- Incompatibilities: Physical and chemical, occurrence and methods adopted in corrections.

**UNIT III: Pharmaceutical Calculations**

- Percentage solutions, enlarging and reducing recipes, calculation of doses, alligation, alcohol dilutions, proof spirit, isotonic solutions, milli-equivalents, displacement value etc.

**UNIT IV: Hospital and its organisation:**

- Pharmacy, organisation and personnel
- Hospital formulary
- Purchasing and inventory control
- Drug distribution
- Dispensing to inpatients
- Dispensing to outpatients

- Drug charges
- Pre-packaging
- Central sterile supply
- Drug information centre
- Maintenance of records
- Safe use of medicines

**Note: Instruction for Examiner:**

The Semester examination in each theory subject shall be of 75 marks. The examiner will set nine questions. Student will attempt five questions. First question would be of short answer type question covering all four Units & it would be compulsory. Two questions will be set from each unit & out of which candidate will attempt one question. Each Question shall be of 15 marks.

**Suggested Readings (Latest Editions)**

1. Cooper and Gunn's, "Dispensing for Pharmaceutical Students", Delhi: CBS Publishers.
2. R. M. Mehta, "Dispensing Pharmacy", New Delhi: Vallabh Prakashan.
3. B.M. Mithal, "A Text book of Pharmaceutical Formulations", Delhi: Vallabh Prakashan.
4. John E. Hoover, "Dispensing of Medication", Easton: Mack Publishing Co.
5. William E. Hassan, "Hospital Pharmacy", Philadelphia: Lea & Febiger.
6. M. J. Stoklosa, "Pharmaceutical Calculation", Philadelphia: Lea & Febiger.
7. Joel L. Zatz, "Pharmaceutical Calculations", New York: John Wiley and Sons.
8. M. C. Attwood and J. T. Fell, "Text Book of Hospital Pharmacy", Oxford: Blackwell Scientific Publications.
9. Mitchell J. Stklosa & Howard C. Ansel, "Pharmaceutical Calculations", Philadelphia: Lippincott Williams & Wilkins publisher.

