## ORDINANCE No. 14

## for

## B. Pharm.

## Under Choice Based Credit System

Governing the Bachelor of Pharmacy (B. Pharm.) Degree Programme
(Ordinance prepared as per the provisions given in Statute 28(1) (b) of The Central Universities Act, 2009)

## 1. SHORT TITLE AND COMMENCEMENT

1.1. The Ordinance shall be called as Ordinance for Bachelor of Pharmacy (B. Pharm.) Degree Program for four years (Eight Semesters).
1.2. This ordinance will come into force from the Academic Session commencing after the date of notification issued by the university and shall replace the existing ordinance.

## 2. DEFINITION \& KEY WORDS:

2.1. "Vishwavidyalaya" or "University" means Guru Ghasidas Vishwavidyalaya (A Central University established by the Central Universities Act, 2009 No. 25 of 2009) located at Koni,Bilaspur, Chhattisgarh;
2.2. "Student" means one who has been admitted in the three years UG programme of this University through Vishwavidyalaya Entrance Test (VET) or by any other procedure notified by the University from time to time;
2.3. "Academic Year" means two consecutive (one odd and one even) semesters;
2.4. "Choice Based Credit System (CBCS)" means a program that provides choice for students to select from the prescribed courses (Core, Elective, Ability Enhancement courses, etc.) as per the guidelines issued by UGC/regulatory bodies where ever applicable and as approved by the appropriate bodies of the University;
2.5. "Course" means "papers" through different modes of delivery and is a component of a programme as detailed out in the respective program structure;
2.6. "Credit Point" means the product of grade point and number of credits for a course;
2.7. "Credit" means a unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture, seminar or tutorial) per week or two hours of practical
work/field work/project etc. per week. The number of credits for each course shall be defined in the respective examination scheme;
2.8. "Cumulative Grade Point Average (CGPA)" means a measure of overall cumulative performance of a student in all semesters. The CGPA is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all semesters. It is expressed up to two decimal places;
2.9. "Grade Point" means a numerical weight allotted to each letter grade on a 10 point scale or as prescribed by the UGC/University from time to time;
2.10. "Letter Grade" means an index of the performance of students in a course. Grades are denoted by letters $\mathrm{O}, \mathrm{A}+, \mathrm{A}, \mathrm{B}+, \mathrm{B}, \mathrm{C}, \mathrm{P}$, and F ;
2.11. "Semester Grade Point Average (SGPA)" means a measure of performance of a student in a semester. It is the ratio of total credit points secured by a student in various courses registered in a semester and the total creditsof all coursesduring the semester. It shall be expressed up to two decimal places;
2.12. "Semester" means an academic session spread over 15-18 weeks of teaching work with minimum 90 teaching days. The odd semester may normally be scheduled from July to December and even semester from January to June;
2.13. "Grade Card" means a certificate based on the grades earned. Grade certificate shall be issued to all registered students after every semester. The grade certificate will contain the course details (code, title, number of credits, grade secured) along with SGPA of the semester and CGPA earned till that semester. The final semester grade certificate shall also reflect the cumulative total of marks obtained by the student in all semesters out of maximum marks allocated for which the grades of the program were evaluated. However, the final result will be based on the grades/CGPA;
2.14. "Transcript" means a certificate issued to all enrolled students in a program after successful completion of the program. It contains the SGPA of all semesters and the CGPA;

## 3. MINIMUM QUALIFICATION FOR ADMISSION

### 3.1 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. Admission to the B. Pharm. programme shall be made through the VET conducted by the Vishwavidyalaya or any other procedure as notified by the university from time to time.

### 3.2. 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.

## 4. 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 followed as prescribed from time to time by Pharmacy Council of India, New Delhi.

## 5. MEDIUM OF INSTRUCTION AND EXAMINATIONS

Medium of instruction and examination shall be in English.

## 6. WORKING DAYS IN EACH SEMESTER

Each semester shall 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.

## 7. 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.

## 8. 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/extra-curricular activities is dependent upon the quantum of work expected to be put in for each of these activities per week.

### 8.1. Credit assignment

### 8.1.1. 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 .

### 8.2. 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.

## 9. ACADEMIC WORK

A regular record of attendance both in Theory and Practical shall be maintained by the teaching staff of respective courses.

## 10. 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.

## 11. PROGRAM COMMITTEE

1. The B. Pharm. program shall have a Program Committee constituted by the Head of the institution in consultation with all the Heads of the departments.
2. The composition of the Program Committee shall be as follows:

A senior teacher shall be the Chairperson; One Teacher from each department handling B.Pharm courses; and four student representatives of the program (one from each academic year), nominated by the Head of the institution.

## 3. Duties of the Program Committee:

i. Periodically reviewing the progress of the classes.
ii. Discussing the problems concerning curriculum, syllabus and the conduct of classes.
iii. Discussing with the course teachers on the nature and scope of assessment for the course and the same shall be announced to the students at the beginning of respective semesters.
iv. Communicating its recommendation to the Head of the institution on academic matters.
v. The Program Committee shall meet at least thrice in a semester preferably at the end of each Sessional exam (Internal Assessment) and before the end semester exam.

## 12. EXAMINATIONS/ASSESSMENTS

The scheme for internal assessment and end semester examinations is given in Table -X .

### 12.1. End semester examinations

The End Semester Examinations for each theory and practical course through semesters I to VIII shall be conducted by the university except for the subjects with asterix symbol $(*)$ in table I and II for which examinations shall be conducted by the subject experts at college level and the marks/grades shall be submitted to the university.

### 12.2. Internal assessment: Continuous mode

The marks allocated for Continuous mode of Internal Assessment shall be awarded as per the scheme given below.

## Table-XI: Scheme for awarding internal assessment: Continuous mode Theory

## Criteria Maximum

## Marks

Attendance (Refer Table - XII) 4
Academic activities (Average of any 3 activities e.g. quiz, assignment, open book test, field

| work, group discussion and seminar) | 3 | 1.5 |
| :--- | :--- | :--- |
| Student - Teacher interaction | 3 | 1.5 |
| Total | $\mathbf{1 0}$ | $\mathbf{5}$ |

## Practical

Attendance (Refer Table - XII) 2
Based on Practical Records, Regular viva voce, etc. 3
Total 5

## Table- XII: Guidelines for the allotment of marks for attendance

## Percentage of Attendance Theory Practical

| $95-100$ | 4 | 2 |
| :--- | :--- | :--- |
| $90-94$ | 3 | 1.5 |
| $85-89$ | 2 | 1 |
| $80-84$ | 1 | 0.5 |
| Less than 80 | 0 | 0 |

### 12.2.1. Sessional Exams

Two Sessional exams shall be conducted for each theory / practical course as per the schedule fixed by the college(s). The scheme of question paper for theory and practical Sessional examinations is given below. The average marks of two Sessional exams shall be computed for internal assessment as per the requirements given in tables - X .
Sessional exam shall be conducted for 30 marks for theory and shall be computed for 15 marks. Similarly Sessional exam for practical shall be conducted for 40 marks and shall be computed for 10 marks.

## Question paper pattern for theory Sessional examinations

## For subjects having University examination

I. Multiple Choice Questions (MCQs) $=10 \times 1=10$

OR
Objective Type Questions ( $5 \times 2$ ) $=05 \times 2=10$
(Answer all the questions)
I. Long Answers (Answer 1 out of 2$)=1 \times 10=10$
II. Short Answers $($ Answer 2 out of 3$)=2 \times 5=10$

Total $=30$ marks

## For subjects having Non University Examination

I. Long Answers (Answer 1 out of 2 ) $=1 \times 10=10$
II. Short Answers $($ Answer 4 out of 6$)=4 \times 5=20$

Total $=30$ marks

## Question paper pattern for practical sessional examinations

I. Synopsis $=10$
II. Experiments $=25$
III. Viva voce $=05$

Total $=$

40 marks

## 13. PROMOTION AND AWARD OF GRADES

A student shall be declared PASS and eligible for getting grade in a course of B.Pharm. program if he/she secures at least $50 \%$ marks in that particular course including internal assessment. For example, to be declared as PASS and to get grade, the student has to secure a minimum of 50 marks for the total of 100 including continuous mode of assessment and end semester theory examination and has to secure a minimum of 25 marks for the total 50 including internal assessment and end semester practical examination.

## 14. CARRY FORWARD OF MARKS

In case a student fails to secure the minimum $50 \%$ in any Theory or Practical course as specified in 12 , then he/she shall reappear for the end semester examination of that course.

However his/her marks of the Internal Assessment shall be carried over and he/she shall be entitled for grade obtained by him/her on passing.

## 15. IMPROVEMENT OF INTERNAL ASSESSMENT

A student shall have the opportunity to improve his/her performance only once in the Sessional exam component of the internal assessment. The re-conduct of the Sessional exam shall be completed before the commencement of next end semester theory examinations.

## 16. RE-EXAMINATION OF END SEMESTER EXAMINATIONS

Reexamination of end semester examination shall be conducted as per the schedule given in table XIII. The exact dates of examinations shall be notified from time to time.

Table-XIII: Tentative schedule of end semester examinations

For Regular Candidates
November / December

## For Failed Candidates

May / June

## Question paper pattern for end semester theory examinations

For 75 marks paper
I. Multiple Choice Questions(MCQs) $=20 \times 1=20$

OR
Objective Type Questions $(10 \times 2)=10 \times 2=20$
(Answer all the questions)
II. Long Answers (Answer 2 out of 3 ) $=2 \times 10=20$
III. Short Answers (Answer 7 out of 9 ) $=7 \times 5=35$

Total $=75$ marks

## For 50 marks paper

I. Long Answers (Answer 2 out of 3 ) $=2 \times 10=20$
II. Short Answers (Answer 6 out of 8$)=6 \times 5=30$

Total $=50$ marks

## For 35 marks paper

I. Long Answers (Answer 1 out of 2 ) $=1 \times 10=10$
II. Short Answers (Answer 5 out of 7 ) $=5 \times 5=25$
------------------
Total $=35$ marks

Question paper pattern for end semester practical examinations
I. Synopsis $=5$
II. Experiments $=25$
III. Viva voce $=5$

Total $=35$ marks

## 17. ACADEMIC PROGRESSION:

No student shall be admitted to any examination unless he/she fulfills the norms given in 6 . Academic progression rules are applicable as follows:
A student shall be eligible to carry forward all the courses of I, II and III semesters till the IV semester examinations. However, he/she shall not be eligible to attend the courses of V semester until all the courses of I and II semesters are successfully completed.
A student shall be eligible to carry forward all the courses of III, IV and V semesters till the VI semester examinations. However, he/she shall not be eligible to attend the courses of VII semester until all the courses of I, II, III and IV semesters are successfully completed.
A student shall be eligible to carry forward all the courses of V, VI and VII semesters till the VIII semester examinations. However, he/she shall not be eligible to get the course completion certificate until all the courses of I, II, III, IV, V and VI semesters are successfully completed. A student shall be eligible to get his/her CGPA upon successful completion of the courses of I to VIII semesters within the stipulated time period as per the norms specified in 26. A lateral entry student shall be eligible to carry forward all the courses of III, IV and V semesters till the VI semester examinations. However, he/she shall not be eligible to attend the courses of VII semester until all the courses of III and IV semesters are successfully completed.
A lateral entry student shall be eligible to carry forward all the courses of V, VI and VII semesters till the VIII semester examinations. However, he/she shall not be eligible to get the course completion certificate until all the courses of III, IV, V and VI semesters are successfully completed.
A lateral entry student shall be eligible to get his/her CGPA upon successful completion of the courses of III to VIII semesters within the stipulated time period as per the norms specified in 26. Any student who hasgiven more than 4 chances for successful completion of I / III semester courses and more than 3 chances for successful completion of II / IV semester courses shall be permitted to attend V / VII semester classes ONLY during the subsequent academic year as the case may be. In simpler terms there shall NOT be any ODD BATCH for any semester.
Note: Grade AB should be considered as failed and treated as one head for deciding academic progression. Such rules are also applicable for those students who fail to register for examination(s) of any course in any semester.

## 18. GRADING OF PERFORMANCES

### 18.1. Letter grades and grade points allocations:

Based on the performances, each student shall be awarded a final letter grade at the end of the semester for each course. The letter grades and their corresponding grade points are given in Table - XII.

## Table - XII: Letter grades and grade points equivalent to

Percentage of marks and performances
Percentage of

| Marks Obtained | Letter Grade | Grade Point | Performance |
| :--- | :--- | :--- | :--- |
| $90.00-100$ | O | 10 | Outstanding |
| $80.00-89.99$ | A | 9 | Excellent |
| $70.00-79.99$ | B | 8 | Good |
| $60.00-69.99$ | C | 7 | Fair |
| $50.00-59.99$ | D | 6 | Average |
| Less than 50 | F | 0 | Fail |
| Absent | AB | 0 | Fail |

A learner who remains absent for any end semester examination shall be assigned a letter grade of AB and a corresponding grade point of zero. He/she should reappear for the said evaluation/examination in due course.

## 19. THE SEMESTER GRADE POINT AVERAGE (SGPA)

The performance of a student in a semester is indicated by a number called 'Semester Grade Point Average' (SGPA). The SGPA is the weighted average of the grade points obtained in all the courses by the student during the semester. For example, if a student takes five courses(Theory/Practical) in a semester with credits C1, C2, C3, C4 and C5 and the student's grade points in these courses are G1, G2, G3, G4 and G5, respectively, and then students' SGPA is equal to:

$$
\begin{aligned}
& \text { SGPA }=\text { C1G1 + C2G2 + C3G3 + C4G4+ C5G5 } \\
& \mathrm{C} 1+\mathrm{C} 2+\mathrm{C} 3+\mathrm{C} 4+\mathrm{C} 5
\end{aligned}
$$

The SGPA is calculated to two decimal points. It should be noted that, the SGPA for any semester shall take into consideration the F and ABS grade awarded in that semester. For example if a learner has a F or ABS grade in course 4, the SGPA shall then be computed as:

## C1G1 + C2G2 + C3G3 + C4* ZERO + C5G5 <br> SGPA = <br> $$
\mathrm{C} 1+\mathrm{C} 2+\mathrm{C} 3+\mathrm{C} 4+\mathrm{C} 5
$$

## 20. CUMULATIVE GRADE POINT AVERAGE (CGPA)

The CGPA is calculated with the SGPA of all the VIII semesters to two decimal points and is indicated in final grade report card/final transcript showing the grades of all VIII semesters and their courses. The CGPA shall reflect the failed statusin case of F grade(s),till the course(s) is/are passed. When the course(s)is/are passedby obtaining a pass grade on subsequent examination(s) theCGPA shall only reflect the new grade and not the fail grades earned earlier.The CGPA is calculated as:

$$
\begin{aligned}
& \text { CGPA = } \\
& \mathrm{C} 1 \mathrm{~S} 1+\mathrm{C} 2 \mathrm{~S} 2+\mathrm{C} 3 \mathrm{~S} 3+\mathrm{C} 4 \mathrm{~S} 4+\mathrm{C} 5 \mathrm{~S} 5+\mathrm{C} 6 \mathrm{~S} 6+\mathrm{C} 7 \mathrm{~S} 7+\mathrm{C} 8 \mathrm{~S} 8 \\
& \mathrm{C} 1+\mathrm{C} 2+\mathrm{C} 3+\mathrm{C} 4+\mathrm{C} 5+\mathrm{C} 6+\mathrm{C} 7+\mathrm{C} 8
\end{aligned}
$$

where $\mathrm{C} 1, \mathrm{C} 2, \mathrm{C} 3, \ldots$. is the total number of credits for semester I,II,III, ... and $\mathrm{S} 1, \mathrm{~S} 2, \mathrm{~S} 3, \ldots$ is the SGPA of semester I,II,III,.... .

## 21. DECLARATION OF CLASS

The class shall be awarded on the basis of CGPA as follows:
First Class with Distinction $=$ CGPA of. 7.50 and above
First Class $=$ CGPA of 6.00 to 7.49
Second Class $=$ CGPA of 5.00 to 5.99

## 22. PROJECT WORK

All the students shall undertake a project under the supervision of a teacher and submit a report. The area of the project shall directly relate any one of the elective subject opted by the student in semester VIII. The project shall be carried out in group not exceeding 5 in number. The project report shall be submitted in triplicate (typed \& bound copy not less than 25 pages).
The internal and external examiner appointed by the University shall evaluate the project at the time of the Practical examinations of other semester(s). Students shall be evaluated in groups for four hours (i.e., about half an hour for a group of five students). The projects shall be evaluated as per the criteria given below.

## Evaluation of Dissertation Book:

Objective(s) of the work done 15 Marks
Methodology adopted 20 Marks
Results and Discussions 20 Marks
Conclusions and Outcomes 20 Marks

## Total 75 Marks

## Evaluation of Presentation:

Presentation of work 25 Marks
Communication skills 20 Marks
Question and answer skills 30 Marks

## Total 75 Marks

Explanation: The 75 marks assigned to the dissertation book shall be same for all the students in a group. However, the 75 marks assigned for presentation shall be awarded based on the performance of individual students in the given criteria.

## 23. INDUSTRIAL TRAINING (DESIRABLE)

Every candidate shall be required to work for at least 150 hours spread over four weeks in a Pharmaceutical Industry/Hospital. It includes Production unit, Quality Control department, Quality Assurance department, Analytical laboratory, Chemical manufacturing unit, Pharmaceutical R\&D, Hospital (Clinical Pharmacy), Clinical Research Organization, Community Pharmacy, etc. After the Semester - VI and before the commencement of Semester - VII, and shall submit satisfactory report of such work and certificate duly signed by the authority of training organization to the head of the institute.

## 24. PRACTICE SCHOOL

In the VII semester, every candidate shall undergo practice school for a period of 150 hours evenly distributed throughout the semester. The student shall opt any one of the domains for practice school declared by the program committee from time to time.
At the end of the practice school, every student shall submit a printed report (in triplicate) on the practice school he/she attended (not more than 25 pages). Along with the exams of semester VII, the report submitted by the student, knowledge and skills acquired by the student through practice school shall be evaluated by the subject experts at college level and grade point shall be awarded.

## 25. AWARD OF RANKS

Ranks and Medals shall be awarded on the basis of final CGPA. However, candidates who fail in one or more courses during the B.Pharm program shall not be eligible for award of ranks. Moreover, the candidates should have completed the B. Pharm program in minimum prescribed number of years, (four years) for the award of Ranks.

## 26. AWARD OF DEGREE

Candidates who fulfill the requirements mentioned above shall be eligible for award of degree during the ensuing convocation.

## 27. DURATION FOR COMPLETION OF THE PROGRAM OF STUDY

The duration for the completion of the program shall be fixed as double the actual duration of the program and the students have to pass within the said period, otherwise they have to get fresh Registration.

## 28. RE-ADMISSION AFTER BREAK OF STUDY

Candidate who seeks re-admission to the program after break of study has to get the approval from the university by paying a condonation fee.

No condonation is allowed for the candidate who has more than 2 years of break up period and he/she has to rejoin the program by paying the required fees.

Table-I: Course of study for semester I

| Course code | Name of the course | No. of hours | $\begin{gathered} \hline \text { Tuto } \\ \text { rial } \\ \hline \end{gathered}$ | Credit points |
| :---: | :---: | :---: | :---: | :---: |
| BP101T | Human Anatomy and Phystology 1Theory | 3 | 1 | 4 |
| BP102T | Phanmaceutical Analysis 1- Theory | 3 | 1 | 4 |
| BP103T | Pharmaceuties 1-Theory | 3 | 1 | 4 |
| BP104T | Pharmaceutical Inorganic ChemistryTheory | 3 | 1 | 4 |
| BP105T | Communication stills - Theory* | 2 | - | 2 |
| BPI06RBT <br> BPI06RMT | Remedial Biolozy <br> Remedial Mathematies - Theory ${ }^{*}$ | 2 | - | 2 |
| BP107P | Human Anatomy and PhysiologyPrastical | 4 | - | 2 |
| BP108P | Pharmaceutical Analysis 1- Practical | 4 | * | 2 |
| BP109P | Pharmaceutics 1-Practical | 4 | - | 2 |
| BP110P | Pharmaceutical horganic ChemistryPractical | 4 | - | 2 |
| BP111P | Communication skills - Practical ${ }^{\text {P }}$ | 2 | - | 1 |
| BPI12RBP | Remedial Biology - Practical* | 2 | - | 1 |
|  | Total | $32 / 34^{5 / 36}$ | 4 | $27 / 29^{1 / 30}{ }^{4}$ |

Apphcable ONLY for the stadeat who have stodend Mathematics / Phovacs / Chemustry at HSC and appearing for Remedial Biology (RB)course.
${ }^{1}$ Applicable ONLY Sor the studrats who have inidied Phyies / Chemistry/ Botany / Zoologry at HSC and
appearing for Remedal Mathematics (RM)courve.
*Non Univertity Examanation (NUE)

Table-II: Course of study for semester II

| Course Code | Name of the course | $\begin{array}{\|l\|} \hline \text { No. of } \\ \text { hours } \end{array}$ | Tutorial | Credit points |
| :---: | :---: | :---: | :---: | :---: |
| BP201T | Human Anstomy and Plysiology If - Theory | 3 | 1 | 4 |
| BP202T | Pharmaceutical Organic Chemistry 1- Theory | 3 | 1 | 4 |
| BP203T | Biochemistry - Theory | 3 | 1 | 4 |
| BP204T | Pathophysiology - Theory | 3 | 1 | 4 |
| BP205T | Computer Applications in Plarmacy - Theory * | 3 | - | 3 |
| BP206T | Envirommental seiences - Theory * | 3 | - | 3 |
| BP207P | Human Anstomy and Playsiology If -Practical | 4 | $\cdot$ | 2 |
| BP208P | Pharmaceutical Organic Chenistry 1- Practical | 4 | * | 2 |
| BP209P | Biochemistry - Practical | 4 | . | 2 |
| BP210P | Computer Applications in Phammacy - Prastical* ${ }^{\text {* }}$ | 2 | - | 1 |
| Total |  | 32 | 4 | 29 |

Table-III: Course of study for semester III

| Course code | Name of the course | No. of hours | Tutorial | Credit points |
| :---: | :---: | :---: | :---: | :---: |
| BP301T | Pharmaceutical Organic Chemistry II - Theory | 3 | 1 | 4 |
| BP302T | Physical Pharmaceuties I - Theory | 3 | 1 | 4 |
| BP303T | Pharmaceutical Microbiology - Theory | 3 | 1 | 4 |
| BP304T | Pharmaceutical Engineering - Theory | 3 | 1 | 4 |
| BP305P | Pharmaceutical Organic Chemistry II- Practical | 4 | - | 2 |
| BP306P | Physical Pharmaceuties 1-Practical | 4 | - | 2 |
| BP307P | Pharmaceutical Microbiology - Practical | 4 | - | 2 |
| BP 308P | Pharmacestical Enginesring - Practical | 4 | - | 2 |
| Tetal |  | 28 | 4 | 24 |

Table-IV: Course of study for semester IV

| Course <br> code | Name of the course | No. of <br> hours | Tutorial | Credit <br> poiats |
| :---: | :--- | :---: | :---: | :---: |
| BP401T | Pharmaceutical Organic Chemistry III- Theory | 3 | 1 | 4 |
| BP402T | Medicinal Chemistry I - Theory | 3 | 1 | 4 |
| BP403T | Physical Pharmaceutics II - Theory | 3 | 1 | 4 |
| BP404T | Pharmacology I - Theory | 3 | 1 | 4 |
| BP405T | Pharmacognosy and Phytochemistry I- Theory | 3 | 1 | 4 |
| BP406P | Medicinal Chemistry I - Practical | 4 | - | 2 |
| BP407P | Physical Pharmaceutics II - Practical | 4 |  | 2 |
| BP408P | Phamasology I - Practical | 4 | - | 2 |
| BP409P | Pharmacognosy and Phytochemistry I - Practical | 4 | - | 2 |
| Total | $\mathbf{3 1}$ | $\mathbf{5}$ | 28 |  |

Table-V: Course of study for semester V

| Course <br> code | Name of the course | No. of <br> hours | Tutorial | Credit <br> points |
| :---: | :--- | :---: | :---: | :---: |
| BP501T | Medicinal Chemastry II - Theory | 3 | 1 | 4 |
| BP502T | Industrial Pharmacyl- Theory | 3 | 1 | 4 |
| BP503T | Pharmacology II - Theory | 3 | 1 | 4 |
| BP504T | Pharmacognosy and Phytochemistry II- Theory | 3 | 1 | 4 |
| BP505T | Pharmaceutical Jurisprudence - Theory | 3 | 1 | 4 |
| BP506P | Industrial Pharmacyl - Practical | 4 | - | 2 |
| BP507P | Pharmacology II - Practical | 4 | - | 2 |
| BP508P | Pharmacognosy and Phytochemistry II - <br> Practical | 4 | - | 2 |

Table-VI: Course of study for semester VI

| Course <br> code | Name of the course | No. of <br> hours | Tutorial | Credit <br> points |
| :---: | :--- | :---: | :---: | :---: |
| BP601T | Medicinal Chemistry III - Theory | 3 | 1 | 4 |
| BP602T | Pharmacology III - Theory | 3 | 1 | 4 |
| BP603T | Herbal Drug Technology - Theory | 3 | 1 | 4 |
| BP604T | Biopharmaceutics and Pharnacokineties - <br> Theory | 3 | 1 | 4 |
| BP605T | Pharmaceutical Biotechnology - Theory | 3 | 1 | 4 |
| BP606T | Quality Assarance -Theory | 3 | 1 | 4 |
| BP607P | Medicinal chemistry III - Practical | 4 | - | 2 |
| BP605P | Phamacology III - Practical | 4 | - | 2 |
| BP609P | Herbal Drug Technology - Practical | 4 | - | 2 |

Table-VII: Course of study for semester VII

| Course <br> code | Name of the conrse | No. of <br> hours | Tutorial | Credit <br> points |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BP701T | Instrumental Metbods of Analysis - Theory | 3 | 1 | 4 |  |  |  |  |
| BP702T | Industrial Pharmacyll - Theory | 3 | 1 | 4 |  |  |  |  |
| BP703T | Pharmacy Practice - Theory | 3 | 1 | 4 |  |  |  |  |
| BP704T | Novel Drag Delivery System - Theory | 3 | 1 | 4 |  |  |  |  |
| BP705P | Instrumental Metbods of Analysis - Practical | 4 | - | 2 |  |  |  |  |
| BP706PS | Practice School | -12 | - | 6 |  |  |  |  |
| Total |  |  |  |  |  | $\mathbf{2 8}$ | $\mathbf{5}$ | 24 |

* Non Universiry Examination (NTE)

| $\begin{aligned} & \text { Coune } \\ & \text { code } \end{aligned}$ | Naise of the ceerse | $\begin{aligned} & \text { Mo. } 4 \\ & \text { boun } \end{aligned}$ | Tatorial | $\begin{aligned} & \text { Crevit } \\ & \text { peints } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Brsoit | Buoutwibes and Reserich Mehodelopy | 3 | 1 | 4 |
| BFSMIT | Social and Freventrve Phannacy | 3 | 1 | 4 |
| Eapsoter | Parmu Mrituic Mmageneral | $\begin{gathered} 3-3= \\ 6 \end{gathered}$ | $1-1-2$ | $\begin{gathered} 4+4= \\ 8 \end{gathered}$ |
| EFPodet | Phamacencal Repiatory Scimice |  |  |  |
| EFabet | Paimaceriplince |  |  |  |
| BPadeet | Qualiry Control and Sundedizatien of Metols |  |  |  |
| EPPOTET | Comprier Auses Drap Desip |  |  |  |
| Grosit | Cell xal Mateoda Mrotogy |  |  |  |
| EPanet | Coumbic Somse |  |  |  |
| EpaNET | Eyerimetal Pumuscolory |  |  |  |
| krillet | Atraoced huruentaton fectajpe |  |  |  |
| Brotzet | Detay sepplawent xad Nutucethicals |  |  |  |
| Brst3P\% | Proyect Watk | 12 | * | 6 |
|  | Total | 24 | 4 | 22 |

Table-IX: Semester wite credits diutifuriea

| Serseoter | Credit Poish |
| :---: | :---: |
| 1 | $27 / 29^{1 / 39}$ |
| II | 3 |
| III | 26 |
| N | 8 |
| V | 28 |
| V1 | 28 |
| VIII | 3 |
| Vit | 22 |
| Emincunate Cocumiotor actioties | $01^{2}$ |
| Total credir peists for ibr progras | 36\%211/21: |
|  <br>  <br>  |  |
|  <br>  | / Zowleng a HSC med apenne |

## Tables-X: Schemes for internal assessments and end semester examinations semester wise

Semester I

| Course code | Name of the course | Internal Assessment |  |  |  | End Semester Exams |  | Tetal <br> Marks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Contiveses Mode | Sextonal Exams |  | Total | Marks | Daration |  |
|  |  |  | Marks | Duration |  |  |  |  |
| BP101T | Hamas Anstomy and Physiology I- Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 160 |
| BP102T | Phareaceubical Acalyas I Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP103T | Pharmaceutics I - Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP104T | Parmaceutical loorganc Clemistry - Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP105T | $\begin{aligned} & \text { Commanicatioe shills - } \\ & \text { Theory* } \end{aligned}$ | 5 | 10 | 1 Mr | 15 | 15 | 1.5 Hrs | 50 |
| BP100RBT BP108RMT | Remedal Biology Mathemanies - Theory* | 5 | 10 | 1 Hr | 15 | 35 | 1.5 Hs | 50 |
| BP107P | Himas Anatomy and Plywiology- Practical | 5 | 10 | 4 Hrs | 15 | 35 | 4 Hes | 50 |
| BP105 | Pharmaceutical Amalysas I Practical | 5 | 10 | 4 Hrs | 15 | 35 | 4 Hrs | 50 |
| BP109? | Plarmaceutics I - Practecal | 5 | 10 | 4 Hfs | 15 | 35 | 4 Hes | 50 |
| BP110P | Pharmacrutical loorganic Chemistry-Practical | 5 | 10 | 4 Hrs | 15 | 35 | 4 Hrs | 50 |
| BP111P | $\begin{aligned} & \text { Commanicatioe shalls - } \\ & \text { Practical } \\ & \hline \end{aligned}$ | 5 | 5 | 2 Hrs | 10 | 15 | 2 Hrs | 25 |
| BP112RBP | $\begin{aligned} & \text { Remedial Buology- } \\ & \text { Practical" } \\ & \hline \end{aligned}$ | 5 | 5 | 2 Hrs | 10 | 15 | 2 Hrs | 25 |
| Total |  | $70.75^{5 / 30}$ | 115/125 ${ }^{1} 130^{7}$ | $\begin{gathered} 23 / 24^{1 / 26^{2}} \\ \mathrm{Hrs} \\ \hline \end{gathered}$ | 135/200 $/ 210^{7}$ | $\begin{gathered} 490.525^{1} \\ 540^{7} \end{gathered}$ | $\begin{aligned} & 315 / 33^{5} \\ & 35^{4} \mathrm{Hrs} \end{aligned}$ | $\begin{gathered} 675 / 725^{9} \\ 750^{7} \end{gathered}$ |

"Applicable ONLY for the stadents stadied Mathematics/ Plysics/Cbemisty at HSC and appearing for Remedial Biology (RB)course.
${ }^{1}$ Applicable ONLY for the stadents studied Physics/Chemistry/ Botany/Zoology at HSC and appearing for Remedial Mathematics (RMOcourve.
*Non University Examaexion (NUE)

## Semester II

| Course code | Name of the course | Internal Assessment |  |  |  | End Srmester Exams |  | Total Marks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Continuons Mode | Sessional Exams |  | Total | Marks | Duration |  |
|  |  |  | Marks | Duration |  |  |  |  |
| BP201T | Human Anatomy and Physiology II-Theory | 10 | 15 | 1 Hr | 25 | 73 | 3 Hrs | 100 |
| BP202T | Pharmaceutical Orgmac Chemistry I-Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP203T | Biochemistry - Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP204T | Pathophysiology - Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP205T | Computer Applications in Pharmacy- Theory ${ }^{\text {A }}$ | 10 | 15 | 1 Hr | 25 | 50 | 2 Hrs | 75 |
| BP206T | Environmental sciences - Theory ${ }^{\text {a }}$ | 10 | 15 | 1 Hr | 25 | 50 | 2 Hrs | 75 |
| BP207P | Human Anatomy and Physiology II-Practical | 5 | 10 | 4 Hrs | 15 | 35 | 4 Hrs | 50 |
| BP208P | Pharmaceutical Organic Chemistry I- Practical | 5 | 10 | 4 Hrs | 15 | 35 | 4 Hrs | 50 |
| BP209P | Biochemistry- Prastical | 3 | 10 | 4 Hrs | 15 | 35 | 4 Hrs | 50 |
| BP210P | Computer Applications in Pharmacy - Practical ${ }^{*}$ | 5 | 5 | 2 Hrs | 10 | 15 | 2 Hrs | 25 |
| Total |  | 80 | 125 | 20 Hrs | 205 | 520 | 30 Hrs | 725 |

*The subject experts at college level shall conduct examinations

Semester III

| Course code | Name of the course | Internal Assessment |  |  |  | End Semester Exams |  | Total Marks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Continuous Mode | Sessional Exams |  | Total | Marks | Duration |  |
|  |  |  | Marks | Duration |  |  |  |  |
| BP301T | Pharmaceutical Organic Chemistry II - Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP302T | PhysicalPharmaceuticsl-Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP303T | Pharmaceutical Microbiology Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP304T | Pharmaceutical Enginecring Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP305P | Pharmaceutical Organic Chemistry II - Practical | 5 | 10 | 4 Hr | 15 | 35 | 4 Hrs | 50 |
| BP306P | Physical Pharmaceutics I Practical | 5 | 10 | 4 Hr | 15 | 35 | 4 Hrs | 50 |
| BP307P | Pharmaccutical MicrobiologyPractical | 5 | 10 | 4 Hr | 15 | 35 | 4 Hrs | 50 |
| BP308P | Pharmaceutical Enginesring Practical | 5 | 10 | 4 Hr | 15 | 35 | 4 His | 50 |
|  | Total | 60 | 100 | 20 | 160 | 440 | 28Hrs | 600 |

Semester IV

| Course code | Name of the course | Internal Assessment |  |  |  | End Semester Exams |  | Total Marks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Continuous Mode | Sessional Exams |  | Total | Marks | Duration |  |
|  |  |  | Marks | Duration |  |  |  |  |
| BP401T | Pharmaceutical Organic Chemistry III- Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP402T | Medisinal Chemistry 1- Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP403T | Physical Pharmaceutics IITheory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP404T | Pharmacology 1- Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP405T | Pharmacognosy I- Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 His | 100 |
| BP406P | Medicinal Chemistry 1- Practical | 5 | 10 | 4 Hr | 15 | 35 | 4 Hrs | 50 |
| BP407P | Physical Pharmaceuties IIPractical | 5 | 10 | 4 Hrs | 15 | 35 | 4 Hrs | 50 |
| BP408P | Pharmacology I - Practical | 5 | 10 | 4 Hirs | 15 | 35 | 4 Hirs | 50 |
| BP409P | Pharmacognosy I - Practical | 5 | 10 | 4 Hrs | 15 | 35 | 4 His | 50 |
|  | Total | 70 | 115 | 21 Hrs | 185 | 515 | 31 Hrs | 700 |

## Semester V

| Course code | Name of the course | Internal Assessment |  |  |  | End Semester Exams |  | Total Marks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Continuous } \\ \text { Mode } \\ \hline \end{gathered}$ | Sessional Exams |  | Total | Marks | Duration |  |
|  |  |  | Marks | Duration |  |  |  |  |
| BP501T | Medicinal Chemistry II - Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP502T | Indastrial PharmacyI- Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 His | 100 |
| BP503T | Pharmacology II - Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP504T | Pharmacognosy II - Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP505T | Pharmaceutical Jurisprudence - Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP506P | Industrial Pharmacyl- Practical | 5 | 10 | 4 Hr | 15 | 35 | 4 Hrs | 50 |
| BP507P | Pharmacology II - Practical | 5 | 10 | 4 Hr | 15 | 35 | 4 Hirs | 50 |
| BP508P | Pharmacognosy II - Practical | 5 | 10 | 4 Hr | 15 | 35 | 4 Hrs | 50 |
|  | Total | 65 | 105 | 17 Hr | 170 | 480 | 27 Hrs | 650 |

Semester VI

| Course code | Name of the course | Internal Assessment |  |  |  | End Semester Exams |  | Total <br> Marks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Continuous Mode | Sessional Exams |  | Total | Marks | Duration |  |
|  |  |  | Marks | Duration |  |  |  |  |
| BP601T | Medicinal Chemistry III - Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP602T | Pharmacology III - Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 His | 100 |
| BP603T | Herbal Drug Technology Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP604T | Biopharmaceutics and Pharmacokineties - Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP605T | Pharmaceutical BiotechnologyTheory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP606T | Quality Assurance- Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP607P | Medicinal chemistry III Practical | 5 | 10 | 4 Hrs | 15 | 35 | 4 Hrs | 50 |
| BP608P | Pharmacology III - Practical | 5 | 10 | 4 Hrs | 15 | 35 | 4 Hrs | 50 |
| BP609P | Herbal Drug Technology Practical | 5 | 10 | 4 Hrs | 15 | 35 | 4 Firs | 50 |
|  | Total | 75 | 120 | 18 Hrs | 195 | 555 | 30 Hrs | 750 |

Semester VII

| Course code | Name of the course | Internal Assessment |  |  |  | End Semester Exams |  | Total Marks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Continuous Mode | Sessional Exams |  | Total | Marks | Duration |  |
|  |  |  | Marks | Duration |  |  |  |  |
| BP701T | Instrumental Methods of Analysis - Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP702T | Industrial Pharmacy - Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP703T | Pharmasy Practice - Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hirs | 100 |
| BP704T | Novel Drug Delivery System Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP705 P | Instrumental Methods of Analysis - Practical | 5 | 10 | 4 Hirs | 15 | 35 | 4 Hrs | 50 |
| BP706 PS | Practice School ${ }^{*}$ | 25 | - | - | 25 | 125 | 5 Hrs | 150 |
| Total |  | 70 | 70 | SHrs | 140 | 460 | 21 Hrs | 600 |

*The subject experts at college level shall conduct examinations

## Semester VIII

| Course code | Name of the course | Internal Assessment |  |  |  | End Semester Exams |  | Total Marks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Continuous Mode | Sessional Exams |  | Total | Marks | Duration |  |
|  |  |  | Marks | Duration |  |  |  |  |
| BPS01T | Biostatistics and Revearch Methodology - Theory | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BP802T | $\begin{aligned} & \text { Social and Preventive Pharmacy } \\ & \text { - Theory } \end{aligned}$ | 10 | 15 | 1 Hr | 25 | 75 | 3 Hrs | 100 |
| BPs03ET | Pharmaceutical MarketingTheory | $\begin{gathered} 10+10 \\ =20 \end{gathered}$ | $\begin{gathered} 15+15= \\ 30 \end{gathered}$ | $\begin{gathered} 1+1= \\ 2 \mathrm{Hrs} \end{gathered}$ | $\begin{gathered} 25+25= \\ 50 \end{gathered}$ | $\begin{gathered} 75+75 \\ =150 \end{gathered}$ | $\begin{gathered} 3+3=6 \\ \text { Hrs } \end{gathered}$ | $\begin{gathered} 100+ \\ 100= \\ 200 \end{gathered}$ |
| BP504ET | Pharmaceutical Regulatory Science - Theory |  |  |  |  |  |  |  |
| BPs05ET | Pharmacovigilance - Theory |  |  |  |  |  |  |  |
| BP906ET | Quality Control and Standerdization of Herbals Theory |  |  |  |  |  |  |  |
| BPS07ET | Computer Aided Drug Design Theory |  |  |  |  |  |  |  |
| BPS08ET | Cell and Molecular Biology Theory |  |  |  |  |  |  |  |
| BP809ET | Cosmetic Science - Theory |  |  |  |  |  |  |  |
| BP810ET | Experimental Pharmacology- Theory |  |  |  |  |  |  |  |
| BP811ET | Advanced linstrumentation Techniques - Theory |  |  |  |  |  |  |  |
| BP812PW | Project Work | - | - | * | - | 150 | 4 Hiss | 150 |
|  |  |  |  |  |  |  |  |  |
|  | Total | 40 | 60 | 4 Hrs | 100 | 450 | 16 Hrs | 550 |

Table-XI:Scheme for awarding internal assessment: Continuous mode

| Theory |  |  |
| :---: | :---: | :---: |
| Criteria | Maximum Marks |  |
| Attendance (Refer Table - XII) | 4 | 2 |
| Academic activities (Average of any 3 activities e.g. quiz, assignme open book test, field work, group discussion and seminar) | 3 | 1.5 |
| Student - Teacher interaction | 3 | 1.5 |
| Total | 10 | 5 |
| Practical |  |  |
| Attendance (Refer Table - XII) | 2 |  |
| Based on Practical Records. Regular viva vose. etc. | 3 |  |
| Total | 5 |  |

Table- XII: Guidelines for the allotment of marks for attendance

| Table- XIf: Guidelines for the allotment of marks for attendance |  |  |  |
| :---: | :---: | :---: | :---: |
| Percentage of Attendance | Theory | Practical |  |
| $95-100$ | 4 | 2 |  |
| $90-94$ | 3 | 1.5 |  |
| $85-89$ | 2 | 1 |  |
| $80-84$ | 1 | 0.5 |  |
| Less than 80 | 0 | 0 |  |

Table-XIII: Tentative schedule of end semester examinations

| Semester | For Regular Candidates | For Failed Candidates |
| :---: | :---: | :---: |
| I. III. V and VII | November / December | May/June |
| II. IV. VI and VIII | May/June | November / December |

