

225

PATNA UNIVERSITY

ORDINANCE

The 2 yr (Four Semesters) Post Graduate Degree course

M.Sc. Bio-Chemistry in the faculty of Science

Under

CHOICE BASED CREDIT SYSTEM (CBCS)

PREAMBLE:

The CBCS provides an opportunity for the students to choose courses from the prescribed list of courses comprising core, elective and ability enhancement courses. The courses can be evaluated following the grading system, which is considered to be better than the conventional marks system. Therefore, it is necessary to introduce uniform grading system in the entire higher education in India. This will benefit the students of universities of Bihar to move across institutions within India to begin with and across countries. The uniform grading system will also enable potential employers in assessing the performance of the candidates. The Universities shall follow the guidelines formulated by the UGC in order to bring uniformity in evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on student's performance in examinations.

The Postgraduate degree of self financing course, under Faculty of Science shall be of four semesters spread over two years duration. The course shall be named as the 'Master of Science' course and shall be abbreviated as M.Sc.

1. General

- 1.1 The ORDINANCE and the REGULATIONS shall be called the 'Admission Ordinance and Regulations of Examination for Post-Graduate degree courses to be applicable in the Patna University.
- 1.2 These ordinance and regulations shall be effective from the academic session 2018-19.
- 1.3 The M.Sc. Course shall consist of 20 papers spread over four semesters consisting of Core Courses (CC), Elective Courses (EC), Discipline Specific Elective Courses (DSE), Ability Enhancing Courses (AEC) and Ability Enhancing Compulsory Courses (AECC) as described in Table. 2. There shall be five courses/ papers in first semester, six courses/papers in second semester, six courses/papers in third semester and three courses/papers in fourth semester; each course carrying 100 marks The entire curriculum shall be of 2000 marks taken together. However, the CGPA/class shall be awarded on the performance of the candidate on 16 papers which includes the 14 CC papers and two EC papers having an aggregate of 1600 marks.

Signature
21-12-18

2. The subject:

Sl.No.	Name of the subject	Programme code	Study Centre
1	Biochemistry	M.Sc. (MSBCH)	

3. OUTLINE OF THE CHOICE BASED CREDIT SYSTEM (CBCS) for PG degree courses:

It consists of a number of courses i.e. Core Course (CC), Elective Course (EC), Discipline Specific Elective Course (DSE), Ability Enhancement Courses (AEC), and Ability Enhancement Compulsory Courses (AECC). The nature of these courses is defined below.

3.1.1 Core Course (CC):

A course which should compulsorily be studied by a candidate as a core requirement on the basis of subject of M.Sc. studies and is termed as a Core course.

3.1.2. Elective Course (EC):

Generally a course which can be chosen from a pool of courses (Basket) and which may be very specific or specialized or advanced or supportive to the subject/ discipline of study or which provides an extended scope or which enables an exposure to some other subject/discipline/domain or nurtures the candidate's proficiency/skill is called an Elective Course.

3.1.3 Discipline Specific Elective Course (DSE):

Elective courses may be offered by the main discipline/subject of study is referred to as **Discipline Specific Elective**. The University/Institute may also offer discipline related Elective courses of interdisciplinary nature (to be offered by main discipline/subject of study).

3.1.4 Generic Elective (GE) Course:

An elective course chosen generally from an unrelated discipline/subject, with an intention to seek exposure is called a Generic Elective. **P.S.:** A core course offered in a discipline/subject may be treated as an elective by other discipline/subject and vice versa and such electives may also be referred to as Generic Elective.

3.1.5 Ability Enhancement Courses (AEC):

The Ability Enhancement Courses (AEC) / Skill Enhancement Courses (SEC). "AEC" courses are the courses based upon the content that leads to life skill enhancement.

3.1.6 Ability Enhancement Compulsory Courses (AECC):

(Qualifying and Non-CGPA course):

University will run a number of **Ability Enhancement Compulsory Courses (AECC)** which is qualifying in nature and student from all faculties have to qualify in all courses.

Signature
21.12.19

3.1.7 Dissertation/Project/ Internship/ Industrial Training:

An elective course designed to acquire special/advanced knowledge, such as supplement study/support study to a project work, and a candidate studies such a course on his own with an advisory support by a teacher/faculty member is called dissertation/project.

3.2 CREDIT

The total minimum credits, required for completing a PG program is 100.

The details of credits for individual components and individual courses are given in Table.2.

Table 2: Structure of the 2 Yrs (Four Semesters) Post Graduate Degree course under CBCS:

Semester	No of COURSE/ Papers	Credit per COURSE/ paper	Total credit	Minimum No of Learning Hours#	No of CORE COURSE/ PAPER	No of ELECTIVE Course/ PAPER	Code & Nature of Elective Course/paper
I	05	05	25	250	4	1	AECC-1
SEMESTER BREAK							
II	06	05	30	300	5	1	AEC-1
SEMESTER BREAK							
III	06	05	30	300	5	1	AECC-2
SEMESTER BREAK							
IV	03	05	15	150	0	3	EC-1* EC-2* DSE-1 or GE-1
Total	20		100	1000	14	6	

#For Tutorial (T)/ Practical (P)/ Field Work (FW)/ Internship etc. extra working hour to be added as per requirement and will be decided by the BOCS of the respective subject.

* The two **Elective Courses (EC)** to be studied in semester IV may be **Both theory papers /One Theory paper and One Practical paper /One Theory paper and One Project work / One Theory paper and One Field work / Both Project work/ Internship**

IMP: It is desirable that all students of all courses be given adequate exposure over and above the class room teaching to enhance the scope of employability.

3.2.1. The distribution of the six elective papers shall be - two EC, one DSE or one GE, two AECC, one AEC. Students may opt for any elective course out of a list of elective papers (Basket) offered by the department or any other department/s as per his/her

Richard
21.12.18

222

choice with the prior permission of the parent department. The list of elective papers, syllabus and prerequisite of the elective course will be as decided by the Board of Courses of Studies (BOCS) of the concerned subject/ department.

3.2.2. The final CGPA class will be decided on the performance of the student in the 16 courses.

14 Core Courses (CC) and two EC

3.2.3 The one DSE or one GE, two AECC, one AEC papers will be qualifying in nature and a student has to score at least 45% marks in these papers. Grade will be awarded separately for these courses, however, performance in these elective courses/ papers will not be considered for awarding the final CGPA/class.

3.2.4 Ability Enhancement Compulsory Courses (AECC):

University will run two Ability Enhancement Compulsory Courses (AECC) which are qualifying in nature and a student has to qualify in both these courses. The courses are:

AECC-1: Environmental Sustainability (3 Credit)
& Swachchha Bharat Abhiyan Activities (2 Credit)
AECC-2: Human Values & Professional Ethics (3 Credit)
& Gender Sensitization (2 Credit)

Students will do assignments/project work related to institutional social responsibilities including Swachchha Bharat Abhiyan Activities during SEMESTER BREAK.

3.2.5 University will run a number of Ability Enhancement Courses (AEC) and Skill Enhancement Courses; a student can choose one from these. For example:

Basket Ability Enhancement Courses (AEC)

- Computers and IT Skill
- Web Designing
- Financial Risk Management/
- Solid waste Management/
- Mushroom Culture /
- Bio-fertilizer production/
- Environmental Law/
- Tourism & Hospitality Management/
- Life skill & skill development /
- Yoga Studies /etc

3.2.6 Disciple

In each subject the CC/ paper - 5 being taught in the second semester will be open to be selected as a DSE paper. In the first phase a student will be allowed to choose a paper from any subject other than his/her Core Course (CC) from the same faculty in the same university.

3.2.7 Generic Elective (GE) Course:

University will run a number of Generic Elective Courses (GE); a student can choose one from these. For example:

Basket of GE courses: - * Music * Dramatics

4. Admission to M.Sc.Biochemistry (MSCHE) Part-I (First Semester)

4.1 Admission to M.Sc. Biochemistry CBCS System is open to candidates who have passed B.Sc. (Honours) or M.B.B.S. or B.D.S. or equivalent Examinations conducted by a University established or incorporated by law are eligible to apply for admission.

4.3 For Patna University eighty (80%) of the total sanctioned seats of the subject concerned shall be reserved for the candidates having graduation degree from Patna University and the remaining 20% seats shall be open. The decision has been taken in view of the following observations:

“The academic calendar in Patna University is strictly followed and the session for both UG and PG courses are exactly on schedule, whereas in all other state universities in Bihar, the sessions for both U.G. and P.G. courses are late by two to three years. Therefore, it is reasonable to give opportunity to students graduated from Patna University to take admission in P.G. course in Patna University, otherwise the Patna University graduates have to wait for 2/3 years to continue their P.G. studies and suffer a break in the continuity of their academic carrier. This will lead to injustice to the students graduating from Patna University. Therefore, it is proposed that 80% seats be reserved for the students passing out from Patna University.”

4.4 Admission to M.Sc. First Semester, shall be made in order of merit. The merit list shall be prepared on the basis of marks obtained by the applicant in the through Entrance test.

The Entrance Test will be organised by the Department to be named as ‘Patna University’ - Postgraduate Entrance Test in the Faculty of Science abbreviated as: PET/S. The merit list shall be prepared on the basis of marks obtained by the applicant in the PET/S to be organised by the Department.

5. Eligibility Criteria

5.1. The eligibility criterion for applying for admission in M.Sc. Biochemistry is as follows:

- (i) Passed the Bachelor degree (B.Sc.) with 45% marks in respective Honours subject/major subject/ core course
- (ii) Passed the Bachelor degree with 55% marks in Subsidiary/Pass course/ Allied subject.

5.2 Admission to M.Sc. course will be taken on the basis of performance in PET/S.

5.3 Structure of the entrance test:

Questions shall be of multiple choice types with four options with a single correct answer. The entrance test shall be held on OMR sheet. The duration of the test shall be of 2:30 hour. The total marks will be 200 marks. There shall be no negative marking. There shall be two parts in the question paper as mentioned in Table.3.

5.4 The subject questions will be from 1.Physics, 2.Chemistry, 3.Botany, 4.Zoology and 5. Biotechnology.

Table.3. Details of entrance test

Part A	General Aptitude Test	50 marks	50 question	1 mark for each question
Part B	Subject test	150 marks	75 questions	2 marks for each question

Recd by
21.12.19

5.5 The application fee for applying for entrance test to M.Sc. courses will be Rs.500/- only. This will include the fee for entrance test on the recommendation of the Academic Council and with the approval of the statutory bodies of university. Application fee may be revised whenever required.

6. Number of seats of the course shall be 32(Thirty Two) in each semester.

7. Reservation of Seats

- i. The reservation of seats shall be as per reservation rules of the Government of Bihar.
- ii. Reservation for Persons with Disabilities (PwD) candidates will be followed as per orders of the Government of Bihar issued from time to time.
- iii. A maximum of two seats shall be filled by applicants who have distinguished themselves in sports. Under this category only those applicants shall be considered who have represented their University/State in different disciplines at state/national level events.
- iv. A maximum of two seats shall be filled by applicants who have distinguished themselves in Fine Arts. Under this category only those applicants shall be considered who have represented their University/State in different disciplines at state/national level events.
- v. Two seats shall be reserved for NCC – C Certificate holders. This reservation will also be over and above the normal sanctioned strength of the subject.
- vi. Two seats shall be reserved for NSS Certificate holders representing University/ State. This reservation will also be over and above the normal sanctioned strength of the subject.
- vii. Reservation for sons/daughters/ spouse of Military personnel/Defense Personnel will be followed as per provisions of the General Ordinance for Admission to Various Courses received from the Governor's Secretariat, Bihar, Patna vide its letter no.PU18/99-3944/GS(I) dated 28.8.1999. This reservation will also be over and above the normal sanctioned strength of the subject.
- viii. Reservation for sons/daughters of the Patna University teachers will be followed as per provisions of the General Ordinance for Admission to Various Courses received from the Governor's Secretariat, Bihar, Patna vide its letter no.PU18/99-3944/GS(I) dated 28.8.1999. This reservation will also be over and above the normal sanctioned strength of the subject.
- ix. Reservation for sons/daughters of the Patna university non-teaching staff will be followed as per provisions of the General Ordinance for Admission to Various Courses received from the Governor's Secretariat, Bihar, Patna vide its letter no.PU18/99-3944/GS(I) dated 28.8.1999. This reservation will also be over and above the normal sanctioned strength of the subject.
- x. 2% seats of the sanctioned strength in may be filled with NRI/Foreign students. These seats will be treated as over and above the normal sanctioned strength. NRI candidates under this category shall submit their applications duly recommended by M.E.A. (Ministry of External Affairs) alongwith the copies of the documents showing NRI status.
- xi. A candidate seeking admission against under various reserved category i.e. SC/ST/EBC/OBC/WBC etc. has to mention about the category at the time of submitting the main

per hand
21.12.18

admission application form and attach the supporting document to substantiate his/her claim. Applications received separately later on shall not be entertained.

- xii. A candidate seeking admission against seats under special quota as mentioned above [7.ii to 7.x] shall have to submit special quota application along with main admission application form and attach the supporting document to substantiate their claim. Applications received separately later on shall not be entertained.
- xiii. No student shall be provided two weightage for the purpose of admission under special quota from 7.ii to 7.x.
8. No applicant shall be admitted to the course who has not applied for admission within the notified time period.
9. The admitted students will have to register themselves with the Patna University to be able to appear in the Patna University examination within the stipulated period /at the time of admission.
10. No such applicant shall be admitted who, in the opinion of the Head of the Department and endorsed by the Vice Chancellor, should not be admitted in the best interest of the University
11. During the tenure of the course, if it is found that any document/documents or submission made by a student in support of his/her admission to M.Sc. course is/are forged or fake, his/her admissions shall automatically stand cancelled. The concerned candidate shall be solely responsible for the cancellation of his/her admission and other punitive action/actions.
12. The Vice Chancellor of the University has the absolute right to reject /deny admission to any candidate without assigning any reason if he/she judges that this is in the best interest of the University.
13. No candidate shall be allowed to register for any other degree course in the same University or any other university during the same academic session of his/her study of M.Sc. under the subjects of the Faculty of Science.
14. **Medium of Instruction/Teaching**
Medium of instruction for teaching-learning and examination will be English.
15. **Fee Structure**
The Fee Structure for the M.Sc. Biochemistry shall be as mentioned in Table 4.
16. If need arises, the University with the approval of relevant Statutory bodies and the Governor's Secretariat may modify / add or delete any provision of this ordinance.

List of Allied subjects:

Main Subjects	Allied Subjects
Bio-Chemistry (MSBCH)	Botany, Zoology & Chemistry

P. Chandra
21.12.18

Tabl.4: FEE STRUCTURE PER SEMESTER

Sl.No.	Head/Item	Fee Rupees.
I.	Admission Fee (Per semester)	150
II	Registration fee (one time applicable)	200
III.	Caution Money (one time applicable)	500
IV.	Tuition fee (per semester)	7000
V.	Laboratory Fee (per semester)	6500
VI.	Contingency (per semester)	1000
VII.	Development Fee (per semester)	1000
VII	Total	16350
VIII.	Miscellaneous (Per semester)	
	Central library	100
	Electricity fee	300
	Identity card fee	50
	NSS fee	50
	Parking	50
	Internal Examination fee	300
	Library Maintenance Fund	100
	Building Maintenance Fund	100
	Medical fee	100
	Athletic Fund (for Department)	100
	Athletic Fund (for University)	100
	Common room fund	50
	Extra-curricular Fee (Cultural)	50
	Environmental Protection Fee	20
	Student's Welfare Fee	10
	Poor student's fund	10
	Student's Union Fund	100
	Society Subscription	50
	Magazine Fund	50
	Hand Book/Directory	50
	Eklavya & Tarang	10
IX.	Total	1750
X.	Grand Total	18100
XI.	Total amount 1 st Semester	18100/-
XII.	Total amount in 2nd & 4th semesters(excluding caution money & Registration charges)	17400/-
XII.	Total amount in 3rd semesters (Supervisor fee Rupees 1000/- will be added in semester III only)	18400/-

Every candidate shall have to pay Rs.300/= (Rupees three hundred only) per semester as University Examination fee.

Vu han
21.12.10

Vivekanand Mishra
(Vivekanand Mishra)
Dept of Bio-Chemistry
Punjab University

217

Regulations for Examination of M.Sc. Bio-Chemistry (Semester System) in the Faculty of Science, Patna University

1. General

- 1.1 These regulations shall be called the "Regulations of Examination" for M.Sc. Bio-Chemistry (Science).
- 1.2 These regulations shall come into force from the academic year 2018-2019.

2. Programme of Study

- 2.1 The University shall offer M.Sc. Bio-Chemistry in Faculty of Science.
- 2.2 The durations of M.Sc. (Semester System) course shall be of four semesters spread over two academic years. Each semester shall be of ninety teaching days.
- 2.3 Each academic session shall consist of two semesters - I and III: from July to December and II and IV: from January to June.
- 2.4 The M.Sc. Course shall consist of 20 papers spread over four semesters. There shall be five papers in first semester, six papers in second semester, six papers in third semester and three papers in fourth semester carrying 100 marks in each paper. The entire curriculum shall be of 2000 marks taken together. However, the class shall be awarded on the performance of the candidate on 16 papers including 14 CC and two EC papers having an aggregate of 1600 marks.
- 2.5 In each semester each elective paper shall carry 100 marks. The four elective papers - one AEC, two AECC and one DSE or one GE will be qualifying in nature. A student shall not be considered pass and eligible for award of the final degree unless he/she obtains minimum qualifying marks in these four papers. A complete description of papers is given in table 1.
- 2.6 The distribution of papers like theory, practical, field work, project, internship, dissertation etc. with number of credits is specified in the course structure.
- 2.7 The term 'credit' means weightage given to a course in relation with the instructional hours assigned to it. One credit will generally consist of ten hours of instruction. The M.Sc. Science course shall be of one hundred credits divided as 25credits in first semester, 30 credits in second semester, 30 credits in third semester and 15credits in fourth semester.

puh...
21-12-18

Table 1. Description of papers for M.Sc. degree in the faculty of Science under CBCS

Semester	Course/ Paper Code	Nature of Course/ Paper	Marks	Marks of CIA	Marks of ESE	Passing criterion	Qualifying Criterion
SEMESTER-I	CC-1	Subject related Compulsory	100	30	70	45% in CIA 45% in ESE	Marks decide class/CGPA
	CC-2	Subject related Compulsory	100	30	70	45% in CIA 45% in ESE	Marks decide class/CGPA
	CC-3	Subject related Compulsory	100	30	70	45% in CIA 45% in ESE	Marks decide class/CGPA
	CC-4	Subject related Compulsory	100	30	70	45% in CIA 45% in ESE	Marks decide class/CGPA
	AECC-1	Ability Enhancing Compulsory Elective	100	50	50	45% in CIA 45% in ESE	Qualifying
SEMESTER-II	CC-5	Subject related Compulsory	100	30	70	45% in CIA 45% in ESE	Marks decide class/CGPA
	CC-6	Subject related Compulsory	100	30	70	45% in CIA 45% in ESE	Marks decide class/CGPA
	CC-7	Subject related Compulsory	100	30	70	45% in CIA 45% in ESE	Marks decide class/CGPA
	CC-8	Subject related Compulsory	100	30	70	45% in CIA 45% in ESE	Marks decide class/CGPA
	CC-9	Subject related Compulsory	100	30	70	45% in CIA 45% in ESE	Marks decide class/CGPA
	AEC-1	Ability Enhancing elective paper	100	50	50	45% in CIA 45% in ESE	Qualifying
SEMESTER-III	CC-10	Subject related Compulsory	100	30	70	45% in CIA 45% in ESE	Marks decide class/CGPA
	CC-11	Subject related Compulsory	100	30	70	45% in CIA 45% in ESE	Marks decide class/CGPA
	CC-12	Subject related Compulsory	100	30	70	45% in CIA 45% in ESE	Marks decide class/CGPA
	CC-13	Subject related Compulsory	100	30	70	45% in CIA 45% in ESE	Marks decide class/CGPA
	CC-14	Subject related Compulsory	100	30	70	45% in CIA 45% in ESE	Marks decide class/CGPA
	AEC-2	Discipline Specific Elective	100	50	50	45% in CIA 45% in ESE	Qualifying
SEMESTER-IV	EC-1	Subject specific elective	100	Will be decided by the BOCS	Will be decided by the BOCS	45% in CIA 45% in ESE	Marks decide class/CGPA
	EC-2	Ability Enhancing Compulsory Elective	100	Will be decided by the BOS	Will be decided by the BOS	45% in CIA 45% in ESE	Qualifying
	DSE-1	Ability Enhancing Compulsory Elective	100	30	70	45% in CIA 45% in ESE	Qualifying
	OR GE-1	Generic Elective-may be unrelated to subject/ across the faculty	100	30	70	45% in CIA 45% in ESE	Qualifying

Pichan
21.12.19

3. Evaluation of Performance Under Semester System

- 3.1 The performance of a student in each paper will be assessed on the basis of a Continuous Internal Assessment (CIA) of 30 marks and the End of Semester Examination (ESE) consisting of 70 marks.
- 3.2 The components of C.I.A. are follows :
- | | |
|--|-------------------|
| (i) Two mid-semester written tests of one hour duration each | = 15 Marks |
| (ii) Seminar/Quiz/PPT | = 05 Marks |
| (iii) Assignment | = 05 Marks |
| (iv) Punctuality and conduct | = 05 Marks |
| Total | = 30 Marks |
- 3.3 The performance of a student in the elective papers AEC and AECC in each semester addressing the issues of **i. Skill Development, ii. Human Values and Professional Ethics and Gender Sensitization iii. Environment and Sustainability and Swachchha Bharat Abhiyan Activities** shall be assessed on the basis of a continuous Internal Assessment (CIA) of 50 marks and the End Semester Examination (ESE) consisting of 50 marks.
- 3.4 The components of C.I.A. in these papers shall be as follows:
- | | |
|--|-------------------|
| (i) One mid-semester written tests of one hour duration each | = 10 Marks |
| (ii) Seminar/Quiz | = 10 Marks |
| (iii) Assignment | = 15 Marks |
| (iv) Discharge of Institutional Social Responsibility /Community Services (report to be submitted) | = 15 Marks |
| Total | = 50 Marks |
- 3.5 The concerned teacher of the course/paper shall be responsible for conducting the mid-semester tests and other components of the CIA.
- 3.6 The ESE will be written examination/examinations of 3-hours duration conducted by the University.
- 3.7 The evaluation of laboratory paper and field work, wherever applicable will also be based on CIA and an end-semester practical examination.
- 3.8 All such examination shall be as per the provisions of examination board and moderation board of the Patna University.
- 3.9 **Only those students who secured minimum qualifying marks in of 45% in the CIA shall be allowed to fill up the End Semester Examination form.**
- 3.10 **The marks of CIA in each paper be submitted by the Department along with the End semester Examination form failing which the student may not be issued admit card for the examination.**

4. Examinations:

- 4.1 The End-Semester-Examination will be conducted by the University. The Mid Semester examinations and other components of CIA shall be conducted and evaluated by the department. The practical examinations shall be conducted at the department. The Head of the department will appoint external examiner(s) for practical End Semester Examination with the approval of the University. The answer scripts of the mid-semester tests shall be shown to students by the concerned teacher.

Rehman
21-12-10

4.2 The End of Semester Examination (ESE) shall be named as follows:

- (a) M.Sc. Part (I)-Semester I Examination and Semester II Examination respectively.
- (b) M.Sc. Part (II) - Semester III Examination and Semester IV Examination respectively.
- (c) Syllabus for each paper shall be divided into at least 5 units. Based on this, the question paper pattern for the End Semester Examination shall have divided into three parts A, B, C comprising of objective type questions with multiple choice, short answer type questions and long answer type questions respectively as mentioned below:

Part	Nature of questions	Number of questions to be asked	Number of questions to be answered	Marks of each question	Total Marks
Part-A	Objective type questions with multiple choice	10	10	02	20
Part-B	Short answer type questions	05	04	05	20
Part-C	Long answer type questions	05	03	10	30
Total Marks					70

Part-A

Ten objective type Questions-All questions to be answered (Questions shall be picked up from the whole syllabus preferably two questions from each unit)

$$10 \times 2 = 20 \text{ marks}$$

Part-B

Five short Answer Questions -Four questions to be answered

(Questions shall be picked up from the whole syllabus preferably one question from each unit)

$$4 \times 5 = 20 \text{ marks}$$

Part-C

Five long answer Questions-Three questions to be answered.

(Questions shall be picked up from the whole syllabus preferably one question from each unit)

$$3 \times 10 = 30 \text{ marks}$$

4.2 The examination of I and III semesters, shall be generally held in the month of November-December and that of II and IV semester shall be held in the month of May-June.

4.3 Department will decide subject based 14 CC, 2 EC and 4 Elective Courses.

pechawar
21.12.18

- 4.4 Paper Setting: For ESE, 50% examiners will be engaged from outside the university by the parent University as per the provisions of the examination board.
- 4.5 Practical/Project/Field Study/Internship/Dissertation etc. generally not more than 4-5 credits should be allowed for such papers in each semester. The distribution of marks for CIA and ESE for such papers shall be decided by the Board of Courses and Study (BOCS) of the respective subject with the approval of the University and details mentioned the syllabus for which 50 marks will be for CIA and 50 marks for ESE.
- 4.6 All practical papers shall be evaluated by two external examiners. The distribution of CIA marks in practical papers shall be as per the course structure.

5. Passing of Examinations and Promotions Rules

Promotion Rules

- 5.1 There shall be no supplementary examination in any of the papers in any semester. (I, II, III and IV).
- 5.2 The candidates who have been admitted to the First Semester of a two year Postgraduate Programme in a session can be placed in the following categories on the basis of their attendance in the Semester.
- (i) Those who have cleared the CIA and attended the required minimum percentage (75%) of attendance of lectures/practical classes separately.
 - (ii) Those who have not attended the required minimum percentage of attendance (75%) both in Theory and Practical shall in no case be permitted to appear in the End Semester Examinations.
- 5.3 After appearing at the Semester Examination, the candidates can be placed in following categories in the context of declaration of the results of the Semester Examination (ESE):
- (i) To be declared passed in End Semester Examination in any subject, a candidate must secure at least 45% marks in each paper separately in CIA, theory and practical, wherever applicable.
 - (ii) If a candidate secures 45% marks in at least three papers in his/her First/Second/Third End Semester Examination he/she shall be promoted to next higher semester.
 - (iii) Candidates shall have to clear their backlog paper(s) in the next end semester examination of that semester whenever it is available.
 - (iv) Even if a student is promoted to Fourth Semester, his/her final result will only be declared when he/she has cleared all their backlog papers.
 - (v) Final result of M.Sc. Course shall be published on the basis of candidate's performance in the 16 papers spread over four semesters provided he/she has passed with minimum qualifying marks of 45% in the elective papers of each semester.
 - (vi) The Final result will be published only after he/she has cleared all the 20 papers securing minimum qualifying marks.
 - (vii) Since it is a continuous evaluation programme, student shall be awarded Grade Point (GP) at the End of each Semester Examination and cumulative Grade

Perham
21/12/10

PATNA UNIVERSITY

Proposed Amended Ordinance for Admission of Students to Post Graduate Degree Course in Biochemistry (Semester System).

1. Admission to M.Sc. Biochemistry course (Semester System) is open to candidates who have passed B.Sc. (Hons.) or M.B.B.S. examination or equivalent conducted by a University established or incorporated by law and are eligible to apply for admission.
2. Admission to the Post Graduate Course in Biochemistry shall be made on the basis of the marks obtained at the Aptitude/Entrance Test conducted by the Department.
3. Number of seats of the course shall be 32.
4. The reservation of seats for the course shall be as per rules of the Patna University.
5. The fee structure of the course per semester applicable from session 2012 will be as follows:

6.	SN	Head	Merit	Paid	Sponsored	
	1.	Admission Fee	-	1000.00	2000.00	5000.00
	2.	Tuition Fee	-	4000.00	8000.00	15000.00
	3.	Miscellaneous Fee	-	10000.00	15000.00	30000.00
	4.	Exam. Fee	-	1100.00	1100.00	1100.00
	5.	Refundable Lab, Caution Money (one time at admission in semester-1)-	1000.00	1000.00	1000.00	
	6.	Refundable Lab, Caution Money (one time at admission in semester-1)-	1000.00	1000.00	1000.00	
	7.	Supervisor Fee (one time at admission in semester-3)-	1000.00	1000.00	1000.00	
	Total (M.Sc. Semester –1 and 2) -		18100.00	28100.00	53100.00	
	M.Sc. Semester – 3 -		17100.00	27100.00	52100.00	
	M.Sc. Semester – 4 -		16100.00	26100.00	51100.00	

The full course fee shall be payable at the time of admission in each semester.

7. Every candidate shall have to pay Rs.500/-only (Rupees Five hundred only) as examination fee payable every year.
8. The fee structures may be reviewed every three years by the Vice-Chancellor in consultation with the Head of the Department.
9. The Post Graduate Degree in Biochemistry Course shall be place in the Faculty of Science.

R.P. Mishra
6.12.13

Dr. B. S. Singh
6-12-13

16/12/2013

(13)
Amendment-18
16/7/13
204

PROPOSED AMENDMENT IN REGULATIONS FOR M.Sc. BIOCHEMISTRY COURSE

Amendment No. 1:-

The entire existing provision in clause 1 be replaced by the following:-

Every student shall undergo a certified study extending to two years comprising 4 semesters, each semester of 6 months duration. Every year the academic session of semester I & III will run from July to December whereas of semester II & IV will run from January to June.

Amendment No. 2:-

The existing provision in clause 5 be replaced as follow:

The M.Sc. Examination in Biochemistry(semester system) shall be conducted as per regulations approved by the Chancellor of Universities of Bihar and communicated by the Governor's Secretariat, Bihar vide letter No. P.U.-12/2012-1417/GS (1) dated 05.10.2012 on the subject "Regarding approval of the proposed ordinances and regulation of M.A., M.Sc., M.Com and M.Ed courses (semester system)" together with amendments issued vide letter No P.U. (Regulations)-12/2012-1434/GS(1) dated 17.07.2013 on the subject "Regarding approval of the proposed amendments in existing regulation of M.A., M.Sc. and M.Com Courses of Patna University, Patna under semester system."

Amendment No. 3:-

The existing provision in clause 6 be replaced as follows:

a) In Biochemistry subject there shall be four semesters. The course of study in Biochemistry shall be as follows:

Semester I:	Paper BCH 101:	Organic and Biophysical Chemistry
	Paper BCH 102:	Cell and Molecular Biology
	Paper BCH 103:	Tool & Techniques, Biostatistics, Basic Computer Skill and Research Methodologies
	Paper BCH 104:	Practical - Clinical Chemistry
Semester II:	Paper BCH 201:	Bioenergetics & Bio molecules
	Paper BCH 202:	Plant Biochemistry
	Paper BCH 203:	Human Physiology
	Paper BCH 204:	Practical - Hematology & Biochemistry
Semester III:	Paper BCH 301:	Dissertation / Mini Project
	Paper BCH 302:	Enzymology
	Paper BCH 303:	Immunology & Immunochemistry
	Paper BCH 304:	Practical - Analytical chemistry, Immunology & Enzymology
Semester IV:	Paper BCH 401:	Biotechnology & Bioinformatics
	Paper BCH 402:	Elective I Microbial Biochemistry
	Paper BCH 403:	Elective II Clinical Biochemistry
	Paper BCH 404:	Practical - Both Elective papers

Hegde Yadav
26/08/13
Kumar Prady
26/08/13
26/08/13

26.8.13
26/8/13

Shree Ravi Padmadas
26/8/13
A.R. Mishra
26/8/13
26-12-13

:2:

(13)
168/93
203

- b) Each paper shall carry 100 marks. The examination of theoretical core papers shall be of three hours duration and the practical paper of six hours duration. The paper on dissertation/Mini Project shall also carry 100 marks (based on evaluation of the project report and viva-voce)

Amendment No. 4:- Insertion of a new clause No. 9:-

A) Notwithstanding with the academic activities of the department and in order to provide a professional experience to students of this department, a diagnostic laboratory be established in the department equipped with sophisticated equipments meant for all latest types of Biochemical, Microbiological and Pathological tests for the diagnosis and evaluation of diseases of the samples received from patients of the University /Different Hospitals/Nursing Homes and Private Clinics on the terms and conditions mentioned below:-

- Approved charges will be collected in the department for the tests from the patients.
- Approved subsidized charges will be applicable for P.U. personnel and their dependents.
- Test Report will be given under the name "P.U. Diagnostics" located in the Department of Biochemistry, Patna University, Biology Block 2, Patna Science College Campus, Patna -800005.
- Tests will be carried out by the Research students of this department under the supervision of duly approved Registered Specialists.
- 40% amount received from the patients will be distributed among the Registered Specialist, Medical Laboratory Technicians and Research Scholars in the following manner- Registered Specialist - 10%, Medical Laboratory Technicians - 10% and Research student performing the test - 20%.
- 20% amount received from the patients will be the share of the University.
- 40% amount received from the patients will be kept in the department towards the cost of the chemicals, glassware's and maintenance of the equipments.
- All the rules framed by the Govt. towards providing privileges to poor sections of the Society will be applicable.

B) The staff meant for performing Biochemical, Haematological and Microbiological tests in the Central Dispensary, Patna University should be transferred / deputed in the Department of Biochemistry for performing the same work.

me peehay
21.12.13

26/08/13

26/08/13

26/08/13

26.8.13

26/8/13

S.R. Padmadeo
(S.R. Padmadeo)
Head of the department

6.12.13

6.12.13

6-12-13