Regulations for Choice Based Credit System B.Sc. (Honours) under the Framework of Honours School System (Semester System) at Panjab University Campus

Implemented from the Academic Session 2017-18
Regulations for Choice Based Credit System B.Sc. (Honours) under the Framework of Honours School System (Semester System)

Implemented from the Academic Session 2016-17

1. Bachelor of Science (Honours) under the Framework of Honours School System shall be of three academic years comprising six semesters. Panjab University will award the degree of B.Sc. (Hons.) under the Framework of Honours School System in the subjects of Botany, Microbiology, Zoology, Anthropology, Chemistry, Geology, Physics, Physics (Specialization in Electronics), Biochemistry, Biotechnology, Biophysics, Mathematics and any other subject as decided by the Syndicate from time to time.

2. BOARD OF CONTROL (BOC)

A Board of Control shall be constituted in January every year as per University Regulations mentioned in Chapter VII (B), P.U. Calendar Volume I.

(i) Subject to the approval of the Dean of University Instruction, the Board of Control shall be the authority to admit students and to remove students from the M.Sc. Course in accordance with the rules laid down by the Academic Council.

(ii) It shall make recommendations to the Syndicate in all matters concerning the Honours School courses including the syllabi and the appointment of examiners/paper-setters.

(iii) An Undergraduate Academic Programme Monitoring and Execution Committee (UGAPMEC) shall be appointed by the Board of Control for monitoring and execution of the academic programme as per the approved regulations. BOC will also take decisions on various recommendations made by UGAPMEC from time to time.

3. BACHELOR OF SCIENCE (HONOURS) UNDER THE FRAMEWORK OF HONOURS SCHOOL SYSTEM - Syllabi and courses of reading

3.1 The duration of the course shall be three academic years comprising six semesters. The syllabi and courses of reading for the B.Sc. (Honours) shall be as approved by the Senate from time to time.

(i) The medium of instruction and examination shall be English.

(ii) The Board of Control shall make recommendations to the Syndicate in all matters concerning the Honours School courses including the syllabi and the appointment of examiners.
(iii) Recommendations concerning syllabi shall be routed through the Faculty and the Academic Council.

3.2 The B.Sc. (Honours) programme of study shall consist of 152 credits (Annexure-I for template). Further details of teaching hours, marks and credits allocated to each course (Theory and Practicals) are given in the respective Syllabi.

The structure of a Semester of B.Sc. Course w.e.f. admission of 2017 shall be as under:-

A. Core Courses: A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course. There will be 14 core courses. Each core course will be of 6 credits.
   Total credits of core courses for B.Sc. (Hons.) will thus be 14 × 6 = 84

B. Discipline Specific Elective (DSE) Courses: Elective courses offered under the main discipline/subject of study is referred to as Discipline Specific Elective.
   There will be total 4 courses (5th and 6th semester) of 6 credits each.
   Total credits of DSE Courses will be 4 × 6 = 24 credits

C. Generic Elective (GE) Courses: Generic Elective courses offered under the unrelated discipline/subject to seek exposure beyond discipline of choice is referred to as generic Elective.
   There will be total 6 courses (I-IV semester) of 6 credits each.
   Total credits of GE Courses will be 6 × 6 = 36 credits

D. Ability Enhancement Courses (AEC): The Ability Enhancement Courses (AEC) are of two kinds: Ability Enhancement Compulsory Courses (AECC) and Skill Enhancement Courses (SEC).
   (a) Ability Enhancement Compulsory Courses (AECC):
       “AECC” are the courses based upon the content that leads to Knowledge enhancement; SEC courses are value-based and/or skill-based are aimed at providing hands-on-training, competencies, skills etc.
       (i) English : 2 credits 50 marks in each semester I or II
       (ii) Environmental Science : 2 credits 50 marks in each semester I or II
       AEC to be allotted by the department to the students distributed in the First semester and the Second semester
   (b) Skill Enhancement Courses (SEC):
       These courses may be chosen from a pool of courses designed to provide value-based and/or skill-based knowledge and should contain both theory and lab/hands on/training/field work.
       There will be 2 courses of 2 credits (50 marks) each, i.e., total credits 2×2 = 4
3.3 Each Board of Control will decide the number and type of Generic Elective Courses (subjects) subject to the approval of Faculty of Science/Academic Council.

3.4 The candidate has to abide by the choice of DSE, GE and SEC courses offered by the department as per the syllabi recommended by the Board of Control and duly approved by the Faculty of Science.

Note: Obtaining 24 credits in a Generic Elective Course (subject) in the full B. Sc (Hons.) Course shall also be deemed sufficient to satisfy a requirement for admission to the M.Sc. course in that subject.

4. ADMISSION TO B. Sc. (HONS.) I\textsuperscript{ST} YEAR UNDER THE FRAMEWORK OF HONOURS SCHOOL SYSTEM

4.1 A person, who has passed +2 examination under 10+2+3 system of education of recognized University/Board/Council or any other examination recognized by the university as equivalent, will be eligible for admission to B.Sc. (Hons.) I\textsuperscript{st} year.

The following are the eligibility criterion for joining B. Sc. (Hons.) Courses in various subjects:

<table>
<thead>
<tr>
<th>Course</th>
<th>Eligibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.Sc. (Hons.) Botany</td>
<td>Should have passed 10+2 examination with at least 50% marks (45% marks in case of SC/ST) with Physics, Chemistry, Biology and English</td>
</tr>
<tr>
<td>B.Sc. (Hons.) Zoology</td>
<td></td>
</tr>
<tr>
<td>B.Sc. (Hons.) Anthropology</td>
<td>Should have passed 10+2 examination with at least 50% marks (45% marks in case of SC/ST) with English, Physics, Chemistry, Math./Biology</td>
</tr>
<tr>
<td>B.Sc. (Hons.) Chemistry</td>
<td></td>
</tr>
<tr>
<td>B.Sc. (Hons.) Geology</td>
<td></td>
</tr>
<tr>
<td>B.Sc. (Hons.) Physics</td>
<td>Should have passed 10+2 examination with at least 50% marks (45% marks in case of SC/ST) with English, Physics, Chemistry, Math./Biology</td>
</tr>
<tr>
<td>B.Sc. (Hons.) Physics (Specialization in Electronics)</td>
<td></td>
</tr>
<tr>
<td>B.Sc. (Hons.) Biophysics</td>
<td>Should have passed 10+2 examination with at least 50% marks (45% marks in case of SC/ST) with English, Physics, Chemistry, Math./Biology</td>
</tr>
<tr>
<td>B.Sc. (Hons.) Biochemistry</td>
<td></td>
</tr>
<tr>
<td>B.Sc. (Hons.) Microbiology</td>
<td></td>
</tr>
<tr>
<td>B.Sc. (Hons.) Biotechnology</td>
<td>Should have passed 10+2 examination with at least 50% marks (45% marks in case of SC/ST) with Mathematics as one of the subjects.</td>
</tr>
<tr>
<td>B.Sc. (Hons.) Mathematics</td>
<td></td>
</tr>
<tr>
<td>B.Sc. (Hons.) Biotechnology</td>
<td>Should have passed 10+2 examination with at least 50% marks (45% marks in case of SC/ST) with English, Physics, Chemistry, Math./Biology</td>
</tr>
</tbody>
</table>
Admission of the eligible students shall be based on the criteria laid down by the Syndicate. The detailed eligibility criterion for joining the B.Sc. Courses along with the number of available seats in various subjects as laid down by the Syndicate are published in Handbook of Information published by Panjab University every year.

4.2 Every student admitted to the B.Sc. (Honours) shall be on the rolls of the University Department, duly approved by the appropriate body of the University for such teaching in the subject concerned, and pay such fees to the University as prescribed by the Syndicate from time to time. The Dean of University Instruction may exempt any student from payment of tuition fees on the recommendation of the Chairperson/Head of the Department within the prescribed period.

4.3 A Board of Control shall be constituted in January every year as per University Regulations mentioned in Chapter VII (B), P.U. Calendar Volume I. Subject to the approval of the Dean of University Instruction, the Board of Control shall be the authority to admit students and to remove students from the B.Sc. (Honours) in accordance with the rules laid down by the Academic Council.

5. EXAMINATIONS - B.Sc. (HONOURS) UNDER THE FRAMEWORK OF HONOURS SCHOOL SYSTEM

5.1. Undergraduate Academic Programme Monitoring and Execution Committee (UGAPMEC):
An Undergraduate Academic Programme Monitoring and Execution Committee (UGAPMEC) shall be appointed by the Board of Control for monitoring and execution of the academic programmes. The composition and functions of the UGAPMEC would be as under:

Composition:
(i) UGAPMEC would consist of 5-7 faculty members. It will have a Convener and a Secretary both to be appointed by the Board of Control. The UGAPMEC would work in close collaboration with the Department and the Chairperson.
(ii) The term of UGAPMEC shall be three years. After the initial period of three years, 3-4 members including the Convener would retire. A new Convener and Secretary would be appointed for two years by the Board of Control. After another year, the 2 remaining older members will retire making way for 2 new members, so that both replenishment and continuity are maintained. Each member would serve a two year term.
Functions:

(i) The UGAPMEC shall look after every aspect of the academic programme in order to ensure the smooth functioning and integrity of all aspects of the programme. It would meet preferably once a month.

(ii) The duties of UGAPMEC will include framing of academic calendar for the year, keeping track of attendance, schedule of in-stream tests and end-semester examinations and Reappear/Improvement examinations, assignment of project supervisors to the students, tabulation of marks after careful scrutiny, computerized storage of data, regular monitoring to ensure that the University rules and regulations are followed properly and any other duty assigned by the Chairperson/Board of Control.

For the re-appear end-semester examinations to be held in June/July/August and all other special re-appear chance examinations, the last dates by which examination forms and fees must reach the Controller of Examinations (COE) without and with late fee will be decided by the CBCS Co-ordinator in consultation with COE. CBCS Co-ordinator(s) will be faculty members the Departments offering Honours School Courses and appointed in the meeting of the Chairpersons of all such departments.

(iii) Admissions to the continuing/ongoing students shall be monitored by UGAPMEC and Board of Control.

(iv) The mode of evaluation for the project reports will be decided by UGAPMEC and Board of Control.

(v) UGAPMEC shall make recommendations regarding complaints and settle disputes, if any, against paper-setting and evaluation. UGAPMEC will recommend the cases of unfair means by a student in the examination to BOC for final decision.

(vi) All decisions taken by UGAPMEC shall be subject to approval by Board of Control.

5.2 Conduct of Examination and Evaluation

The assessment of the students will be completely internal. The teachers for a particular theory course will be the paper-setter(s) and the evaluator. However, the persons as mentioned in Rule 8, Chapter XXX ‘Conduct of Examinations’, P.U. Cal. Vol. III shall not be eligible for appointment on the supervisory staff. Evaluation of theory papers, laboratory courses and Project work/Thesis work alongwith the Internal Assessment shall be as mentioned in the Syllabi. The broad guidelines are given below:

5.2.1 Evaluation in theory papers

The evaluation in theory papers will consist of two components:
(a) Internal Assessment having weightage of 20% of the total marks and consisting of mid-term examination, surprise tests etc.
(b) End-Semester examination worth 80% marks and of 3 hours duration.

A. Mid-term examinations
(i) Tests for Internal Assessment will be conducted by the class teacher as per the pre-announced schedule given by UGAPMEC. In case of Generic Elective papers, the date-sheet for the end-semester examination will be the announced by B.Sc. (Honours) Coordinator.
(ii) The style of the question paper for the Internal Assessment examinations should be such that more emphasis is on problem solving.
(iii) Only in special cases, where the student misses the mid-term examination, retest for mid-term examinations will be held. However, there will not be any reappear in the mid-term test.
(iv) The evaluated answer scripts would be shown to the students. Answers would be discussed and the rationale of assessment explained to the students. Answer scripts would be retained by the concerned teacher for one year after the declaration of the End-semester result.
(v) The awards for the Midterm test should be submitted to the office before the commencement of end semester examinations. Their record will be kept in the office and further used in case a candidate takes this course as a reappear candidate.

B. End-semester examination:
The end-semester examination will also be held as per the date-sheet formulated by UGAPMEC. In case of Generic Elective papers, the date-sheet for the end-semester examination will be the announced by B.Sc. (Honours) Co-ordinator.
As far as possible, any change in date-sheet for the end-semester examination should be avoided. In case the change is unavoidable, then it should be done in consultation with the Convener, UGAPMEC.
(i) The question-paper format/distribution for the end-semester examination is mentioned in the relevant prescribed syllabus.
(ii) The evaluated answer scripts would be shown to the students, according to a schedule announced by the concerned department. Answers would be discussed and the rationale of assessment explained to the students. After discussing the answers with the students, the teacher would finally submit the award list to the UGAPMEC Convener along with undertaking from any of the affected student if he or she does not want the grace as per University rules to pass that paper.
Answer scripts would be retained by the concerned teacher for one year after the declaration of the result.

(iii) In case of any disagreement, the decision of the BOC shall be final.

5.2.2 Evaluation in a Laboratory course

The student will be expected to complete a specific number of experiments as per the syllabus. The evaluation in a Laboratory course will consist of two components:

The evaluation in theory papers will consist of two components:
(a) Internal Assessment having weightage of 20% of the total marks.
(b) End-Semester examination worth 80% of the total marks.

A. Internal assessment

In a Laboratory course, 20% of the total marks would be allotted to internal assessment component. It will be based on practical performance of the students in the laboratory, number of experiments performed, written report/record of the experiments and regularity (attendance) etc. in the class.

B. End-Semester examination

(i) The end-semester examination in the laboratory course will carry the remaining rounded off (80%) marks allotted to it. The examination will be conducted by an internal examiner and a neutral examiner.

(ii) The End-Semester examination will consist of different components, viz., Performance in experiment, written Viva-voce based on all experiments and/or Oral Viva-voce by the neutral examiner during End-semester examination, Viva-voce of each of the experiment by the concerned teacher during the semester (Continuous evaluation), and Seminar delivered/Report submitted, if any, by the student on allocated topic/Collection/field visit/Industrial visit, etc. as mentioned in the prescribed syllabus. Otherwise, **UGAPMEC of each department must formulate distribution of marks for various components and get it approved by the BOC.**

The awards for internal assessment of the students in the Laboratory Courses will be submitted to the office separately (along with the final awards). The records for other components of examination will be maintained and further used in case a candidate takes this course as a reappear candidate.

(iii) Examiners for Laboratory Courses shall be appointed by the Chairperson/BOC on the recommendation of the UGAPMEC.

5.2.3 Evaluation in a Project work/Thesis work
UGAPMEC of each department must formulate distribution of marks for various components of the evaluation in a Project work/Thesis work and get it approved by the BOC. The supervisor will be responsible for the internal assessment component of the student.

Examiners for Project work/Thesis work shall be appointed by the Chairperson/BOC on the recommendation of the UGAPMEC. For the Project work/Thesis work presentation evaluations, the examination board will consist of Concerned Supervisor, neutral examiner(s) from the Department and an external examiner from other relevant Department or outside the University.

6. EXAMINATION FORMS

6.1 Every candidate of the B.Sc. (Honours) examination shall send his/her application through the Chairperson of the Department, accompanied by the following certificates:
   (a) of having been on the rolls of the department preceding the examination;
   (b) of having good moral character; and
   (c) of having fulfilled the attendance requirements as prescribed in the Handbook of Information;

6.2 The last dates on which admission forms and fees must reach the Controller of Examinations (without and with late-fee) shall be fixed by the Syndicate from time to time.

For the re-appear end-semester examinations to be held in June/July/August and all other special re-appear chance examinations, the last dates by which examination forms and fees must reach the Controller of Examinations (COE) without and with late fee will be decided by the CBCS Co-ordinator in consultation with COE. BOC can recommend the cases to COE for remission of the Late fees for these re-appear end-semester examinations, in case it is due to delay on the part of the teacher in showing the evaluated answer books to the student.

6.3 The amount of the admission fee for each semester examination to be paid by a candidate shall be as prescribed by the Syndicate from time to time.

7. EXAMINATION SCHEDULE

7.1 Examination in the theory papers/practicals shall be held at the end of each semester according to the scheme of examination approved by the Academic Council.

7.2 The examinations of various semesters will be held on such dates as may be fixed by the Syndicate from time to time.
The examination shall be conducted at the end of each semester in only those courses which have been offered in that semester, i.e., First, Third & Fifth semesters in November/December and Second, Fourth & Sixth semesters in April/May, respectively, or as decided by the University. The scheme of examination shall be in accordance with the syllabi approved by the Faculty of Science and Academic Council.

7.3 Various end-semesters examinations will be held on such dates as may be fixed by the PGAPMEC/BOC from time to time keeping in view that requisite number of Lectures are delivered for the Course.

7.4 A student who has failed in any of the semester courses shall be eligible to clear the same in the forthcoming regular end-semester examinations and the additional examination in June/July/August, respectively, i.e., preferably before the admissions to the odd-semester. The dates of the additional examination may even be fixed outside these months subject to approval by the Syndicate. The reappear examination for the odd-semesters will preferably be scheduled first. The reappear examination for the recently held even-semester examination will preferably be scheduled later. UGAPMEC will play proactive role to prepare date-sheet keeping in view the dates on which the answer-books for the recently held even semester examinations are shown by the concerned teachers.

8. RESULTS & PASSING CRITERION

8.1 The sum total minimum marks (internal assessment and end-semester examinations) are required to pass the examination shall be 40% in each theory paper and laboratory paper separately.

8.2 The teachers involved in the evaluation of different theory/laboratory courses will submit the final awards to the dealing person in the office by a stipulated date. He/she will enter these awards in the register on the pages assigned to different students. This work will be supervised by the concerned member of the UGAPMEC.

8.3 Once the result is ready, it would be displayed on the Notice Board of the department as provisional result under the signature of the Chairman.

8.4 The student may submit written representation to the Chairperson or UGAPMEC convener/secretary within two days, if there are any discrepancies. These would then be passed on to the concerned teacher/dealing Clerk for re-dressal.
8.5 The final result consisting of detailed marks in Internal Assessment and the end-semester examinations and Grades will be sent to the Controller of Examinations within 2 weeks of the date of the last paper held. The Controller of Examinations of the University would declare the result within next 2 weeks.

8.6 Overall result of B.Sc. (Hons.) course shall be determined on the basis of the marks/credit obtained by the candidate in the examination concerned, which shall be converted into grades as per formula approved by Panjab University Syndicate. Grading system for Choice Based Credit System (CBCS) for B.Sc. (Hons.) Courses under the framework of Honours School System at Panjab University is given in Annexure I.

8.7 The Result-cum-Grade Card for each semester will be issued only once after the candidate clears all the Courses of that semester and previous semesters. The detailed Result-cum-Grade card of each Semester shall show (SGPA)\textsubscript{ES}, SGPA and (CGPA)\textsubscript{ES}. (SGPA)\textsubscript{ES} is the Grade result at the end of the regular end-semester examination and cannot be improved upon. SGPA is the Grade result of the Semester, when the candidate qualifies all the papers of the Semester. (CGPA)\textsubscript{ES} is Cumulative Grade of the current and previous semester examinations, when the candidate qualifies all the papers of the Semester. The degree shall indicate the CGPA, which is (CGPA)\textsubscript{ES} of the last semester and the corresponding Grade Letter (Annexure I) with which the candidate has passed the examination.

Merit positions for each year will be declared on the basis of (SGPA)\textsubscript{ES}. Merit positions for the overall degree will be declared on the basis of (CGPA)\textsubscript{ES} provided the candidate has qualified all the papers in regular examinations, i.e., (SGPA)\textsubscript{ES} matches with SGPA for all the semesters.

8.8 (i) A student who appears in an odd semester examinations or who was eligible to appear in the odd semester examinations, but remains absent in any or all the papers of the said semester, shall move on to the next even semester irrespective of his/her result in the said examination.

(ii) A student shall be promoted to successive next years, subject to the following conditions:

<table>
<thead>
<tr>
<th>Class</th>
<th>Credit requirements (rounded to lower even number of credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>For promotion to B.Sc. (Hons.) 2nd year</td>
<td>80% of the total credits in B.Sc. (Hons.) 1st year</td>
</tr>
<tr>
<td>For promotion to B.Sc. (Hons.) 3rd year</td>
<td>80% of the total credits in B.Sc. (Hons.) 2nd year</td>
</tr>
<tr>
<td>For promotion to M.Sc. (Hons.) 1st year</td>
<td>90% of the total credits of B.Sc. 1st, 2nd and 3rd years</td>
</tr>
</tbody>
</table>
For opting out of the Course by taking B.Sc (General) degree.

120 credits in the B.Sc. (Hons.) under the framework of Honours School System and having cleared all Generic Elective Courses [For details see 8.8 (v)]

(iii) Student who does not fulfill the promotion criteria mentioned above shall be declared fail in the promotion examination of the academic year concerned. However, he/she shall have the option to retain the marks in the papers of his/her choice.

(iv) If a student has secured an aggregate of minimum 40 % marks taking together all the papers in theory examination (including internal assessment/project, wherever applicable) and practical examination separately till the end of third year, i.e., upto the end of the VIth semester, then she/he shall be awarded the degree in which the student has been admitted.

(v) A candidate having obtained 120 credits in the B.Sc. (Hons.) under the framework of Honours School System and having cleared all Generic Elective Courses may seek the award of B.Sc. (General) in case he/she wishes to discontinue the Honours School System after completing three years of studies of the B.Sc. (Hons.). The grading in the case of such candidates shall be determined by the Regulations as for the Honours School students taking into account the best of 120 credits which he/she has obtained.

8.9 AWARD OF B.Sc. (Hons.) DEGREE

A student shall be awarded the B.Sc. (Hons. School) degree provided that he/she earns the requisite 152 credits.

However, if a student has backlog of some theory papers/laboratory course after completing the attendance requirement of all the six semesters, he/she may be allowed to take re-appear examinations as an ex-student as and when these are held, but within Five years of his/her admission to B.Sc. (Honours) course.

However-

(a) A candidate who does not clear all the courses within three years and fulfills the attendance requirements and is declared to have failed may be allowed to re-appear as a late student in a course for the purpose to clear the backlog. For this purpose he/she may be given not more than two consecutive chances.
(b) A candidate who clears 90% of the credits (fraction to be rounded off to the advantage of the candidate) may be given another consecutive chance on the recommendations of the Board of Control to clear the backlog.

(c) If he/she fails, he/she may be given another consecutive chance by the Vice-Chancellor on the recommendation of the Board of Control. Such a candidate will be required to appear in the backlog papers as per the current syllabus and he/she may be permitted to attend the classes. However, the internal assessment originally awarded would stay as such. The dates of entry and leaving the course shall be shown in degree.

8.10 If a student fails to get 40% marks in a theory paper/laboratory course or has missed the end-semester examination in any papers, he/she will be given a re-appear in that course as per University rules. The reappear student shall be eligible to clear the same in the forthcoming regular end-semester examination and the additional reappear examinations to be held in June/July/August, respectively.

8.11 Any unfair means case of a student in the examination have to be discussed in BOC on the recommendations of UGAPMEC.

9. CHARACTER CERTIFICATE

9.1 The dates of entry and leaving the course shall be shown on the Character Certificate issued by the Department.

9.2 The language of the Character Certificate issued by the department should be changed to incorporate information about the date of joining and completing the B.Sc. (Honours). It may also have information about participation of the students in extra-curricular activities.

9.3 The character certificate would be signed by the Chairperson when it has initial from the Secretary/Convener of UGAPMEC who will check the data from the record of the students, maintained in the register.

10. IMPROVEMENT - Re-appearance after passing the B.Sc. (Hons.) degree or opting for B.Sc. (General) degree:

10.1 A candidate who has passed the B.Sc. (Honours) semester system examination from the Panjab University may re-appear as a private candidate in a course, he/she wishes to, with a view to improving his/her performance. For this purpose, he may be given two chances within a period of 5 years from the date of his passing the said degree course. A candidate opting out for B.Sc. (General) can also avail this
opportunity for improvement by reappearing in the papers he has already passed (for details see 10.6).

10.2 Regarding the chances for improvement, a chance would mean appearing in the odd and even-semesters in one academic session and there would be no restriction on the number of papers he/she wants to appear in as per the date-sheet framed for the regular candidates.

In the first instance, the candidate shall be required to intimate all the courses in which he would like to improve his/her performance. He/she will then appear in the respective course/s at the main semester examination only, i.e., for the courses offered for First, Third & Fifth semesters in the November/December examination and for the Second, Fourth & Sixth Semesters in April/May examination.

If he/she does not improve his/her performance, in any course/s, he/she shall be eligible to do so in the following year in the semester examination concerned which would be treated as a second chance. The candidate shall be charged examination free as fixed by the Syndicate from time to time.

10.3 Re-appearance for Improvement in the Practical/Internal Assessment/Project Work shall not be allowed in any case.

10.4 The improvement examination will be held as per current syllabus and along with the regular end-semester examinations.

10.5 A student who wants to re-appear for improvement in marks in a paper prescribed for semester First/Third/Fifth may do so only in the end-semester examinations to be held in December. A student who wants to re-appear for improvement in a paper prescribed in semester Second/Fourth/Sixth may do so only in the end-examinations to be held in April/May.

10.6 A candidate of B.Sc. (Hons.) under the framework of Honours School System, who got pass B.Sc. (General) degree may re-appear as a private candidate in the course, he/she wishes to, with a view to improving his/her performance and he/she shall be allowed to appear in only those papers in which he/she has obtained the best 120 credits or more credits. For this purpose, he/she may be given two chances within a period of three years from the year of passing of B.Sc. pass course examination. The candidate shall appear in Annual/Semester examination along with regular students. No improvement shall be allowed in the Internal Assessment as well as practical examinations. The improvement examination shall be examined under the current syllabus.
# ANNEXURE – I

## COURSE STRUCTURE

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>SEMESTER II</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Total Credits: 26</td>
<td>Marks: 650)</td>
</tr>
<tr>
<td>C1</td>
<td>Credits : 06; Marks : 150</td>
</tr>
<tr>
<td>C2</td>
<td>Credits : 06; Marks : 150</td>
</tr>
<tr>
<td>AECC1</td>
<td>English - Credits : 02; Marks : 50 / Env. Science - Credits : 02; Marks : 50</td>
</tr>
<tr>
<td>GE1*</td>
<td>Credits : 06; Marks : 150</td>
</tr>
<tr>
<td>GE2*</td>
<td>Credits : 06; Marks : 150</td>
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<th>SEMESTER III</th>
<th>SEMESTER IV</th>
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<tbody>
<tr>
<td>(Total Credits: 26</td>
<td>Marks: 650)</td>
</tr>
<tr>
<td>C5</td>
<td>Credits : 06; Marks : 150</td>
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<tr>
<td>C6</td>
<td>Credits : 06; Marks : 150</td>
</tr>
<tr>
<td>C7</td>
<td>Credits : 06; Marks : 150</td>
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<tr>
<td>SEC1**</td>
<td>Credits : 02; Marks : 50</td>
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<tr>
<td>GE5*</td>
<td>Credits : 06; Marks : 150</td>
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</table>

<table>
<thead>
<tr>
<th>SEMESTER V</th>
<th>SEMESTER VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Total Credits: 24</td>
<td>Marks: 600)</td>
</tr>
<tr>
<td>C11</td>
<td>Credits : 06; Marks : 150</td>
</tr>
<tr>
<td>C12</td>
<td>Credits : 06; Marks : 150</td>
</tr>
<tr>
<td>DSE1#</td>
<td>Credits : 06; Marks : 150</td>
</tr>
<tr>
<td>DSE2#</td>
<td>Credits : 06; Marks : 150</td>
</tr>
</tbody>
</table>

C: Core Courses; GE: General Elective; AECC: Ability Enhancement Compulsory Courses; SEC: Skill Enhancement Courses; DSE: Discipline Specific Elective
*GE - General Elective courses are to be selected by the student from the pool of GE subjects - Mathematics, Chemistry, Economics and Computer Science offered by the other Departments of the University.

**SEC - SKILL Enhancement Courses are to be selected by the student from the courses offered by the Physics Department in semesters III and IV.

# DSE - DISCIPLINE SPECIFIC ELECTIVE COURSES are to be selected by the student from the courses offered by the Physics Department in semesters V and VI.

*SKILL ENHANCEMENT COURSES (any one per semester in semesters III and IV)

#DISCIPLINE SPECIFIC ELECTIVE COURSES

(Any two per semester in semesters V and VI. Course under these will be offered only if a minimum of 10 students opt for the same.)

**Credits and Maximum Marks:**

1. Core Courses (C1-C14)
   
   Credits = 06 (04 Theory + 02 Practicals) each
   
   Total marks 150 each

2. Discipline Specific Elective (DSE1-DSE4)
   
   Credits = 06 each
   
   Total marks = 150 each

3. Skill Enhancement Courses (SEC1-SEC2)
   
   Credits = 02 each
   
   Total marks = 50 each

4. Ability Enhancement (AECC1-AECC2)
   
   Credits = 02 each
   
   Total marks = 50 each

5. Generic Elective (GE1-GE6)
   
   Credits = 06 each
   
   Total marks = 150 each.
ANNEXURE-II

Calculation of the end-semester \((SGPA)_{ES}\), \((CGPA)_{ES}\) and final CGPA of a candidate for the B.Sc. (Honours) under the Framework of Honours School System (Semester System)

**Step 1:** The end-semester Semester Grade Point Average \((SGPA)_{ES}\) for a given semester will be calculated **only once** as per the declared result of the candidate at the end of each of the semesters I-VI:

\[
(SGPA)_{ES} = \frac{\sum_i C_i G_i}{\sum_i C_i}
\]

where, \(C_i\) represents credits allocated to \(i^{th}\) subject examination in a **given** semester and \(G_i\) represents the numerical grade obtained by the candidate in that paper. The value of \(G_i\) is taken from the percentage marks obtained by the candidate using Table-1.

**Table 1: Conversion of Percentage Marks into Numerical Grade for each paper.**

<table>
<thead>
<tr>
<th>Percentage Marks (PM)</th>
<th>Numerical Grade</th>
<th>Grade Letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>95 ≤ PM ≤ 100</td>
<td>10</td>
<td>O++</td>
</tr>
<tr>
<td>90 ≤ PM &lt; 95</td>
<td>9.4</td>
<td>O+</td>
</tr>
<tr>
<td>85 ≤ PM &lt; 90</td>
<td>8.9</td>
<td>O</td>
</tr>
<tr>
<td>80 ≤ PM &lt; 85</td>
<td>8.4</td>
<td>A+++</td>
</tr>
<tr>
<td>75 ≤ PM &lt; 80</td>
<td>7.9</td>
<td>A++</td>
</tr>
<tr>
<td>68 ≤ PM &lt; 75</td>
<td>7.4</td>
<td>A+</td>
</tr>
<tr>
<td>60 ≤ PM &lt; 68</td>
<td>6.7</td>
<td>A</td>
</tr>
<tr>
<td>55 ≤ PM &lt; 60</td>
<td>6.0</td>
<td>B+</td>
</tr>
<tr>
<td>50 ≤ PM &lt; 55</td>
<td>5.4</td>
<td>B</td>
</tr>
<tr>
<td>45 ≤ PM &lt; 50</td>
<td>4.9</td>
<td>P+</td>
</tr>
<tr>
<td>40 ≤ PM &lt; 45</td>
<td>4.4</td>
<td>P</td>
</tr>
<tr>
<td>PM &lt; 40</td>
<td>0</td>
<td>F</td>
</tr>
<tr>
<td>Absent</td>
<td>0</td>
<td>F</td>
</tr>
</tbody>
</table>
Step 2: The Cumulative Grade Point Average (CGPA)ES after the declaration of result at the end of each of the semesters I-VI is calculated by taking into account all the papers of the present and previous semesters:

\[
(CGPA)_{ES} = \frac{\sum_j \sum_i C_{ij} G_{ij}}{\sum_j \sum_i C_{ij}}
\]

where, \(C_{ij}\) represents credits allocated to \(i^{th}\) paper in \(j^{th}\) semester, \(G_{ij}\) represents the numerical grade obtained by the candidate in that paper as per Table1 (given in Step 1). The calculation of \((CGPA)_{ES}\) will be round off to first decimal place. The \((CGPA)_{ES}\) for Semester VI will be calculated only if a candidate clears all the papers of all semesters and then the final CGPA will be same as the \((CGPA)_{ES}\) of semester VI.

Step 3: The final CGPA after completion of the Course will be assigned a grade letter as per the following Table 2:

<table>
<thead>
<tr>
<th>Numerical Grade - SGPA/CGPA</th>
<th>Category</th>
<th>CGPA Grade Letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;8.5</td>
<td>Outstanding</td>
<td>O+</td>
</tr>
<tr>
<td>7.5 - 8.4</td>
<td>Excellent</td>
<td>O</td>
</tr>
<tr>
<td>7.0 - 7.4</td>
<td>Meritorious</td>
<td>A+</td>
</tr>
<tr>
<td>6.0 - 6.9</td>
<td>Very Good</td>
<td>A</td>
</tr>
<tr>
<td>5.5 - 5.9</td>
<td>Good</td>
<td>B+</td>
</tr>
<tr>
<td>5.0 - 5.4</td>
<td>Average</td>
<td>B</td>
</tr>
<tr>
<td>4.0 - 4.9</td>
<td>Pass</td>
<td>P</td>
</tr>
<tr>
<td>Below 4.0</td>
<td>Fail</td>
<td>F</td>
</tr>
<tr>
<td>Absent</td>
<td>Fail</td>
<td>F</td>
</tr>
</tbody>
</table>

Step 4:
(i) To calculate the percentage of marks obtained in the entire course, multiply final CGPA numerical grade with 10.
(ii) To calculate the percentage of marks obtained in any of the subjects, multiply numerical grade with 10.