

**MAR ATHANASIUS COLLEGE (AUTONOMOUS)
KOTHAMANGALAM, KERALA - 686666**

*College with Potential for Excellence
NAAC Accredited and Reaccredited 'A+ Grade' Institution*

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**Integrated M.Sc. Programme
in
Basic Sciences - BIOLOGY**

**PROGRAMME STRUCTURE AND CREDITS
(2020 Admission onwards)**

1. SHORT TITLE

These Regulations shall be called Mar Athanasius College Regulations (2020) governing Integrated Post Graduate Programme in Biology, under Credit Semester System (MGU).

These Regulations shall come into force from the Academic Year 2020-2021 onwards

2. DEFINITIONS

'Academic Committee' means the Committee constituted by the Vice Chancellor under this regulation to monitor the running of the Integrated Post- Graduate Programmes under the Credit Semester System (MGU IPG CSS2020)

'Academic Week' is a unit of five working days in which distribution of work is organized from day one to day five, with five contact hours of one hour duration each day. A sequence of minimum 18 such academic weeks constitute a semester.

'Audit Course' is a course for which no credits are awarded.

'CE' means Continuous Evaluation (Internal Evaluation)

'College Co-ordinator' means a teacher from the college nominated by the College Council to look into the matters relating to MGU IPG for Programmes conducted in the College.

'Comprehensive viva-voce' means the oral examinations conducted by the examiners appointed for the purpose and shall cover all courses of study undergone by a student of the Programme.

'Common Course' is a core course which is included in more than one programme with the same course code.

'Complementary Course' is a course which is generally related to the core course.

'Core Course' means a course which cannot be substituted by any other course.

'Course' means a segment of subject matter to be covered in a semester. Each Course is to be designed variously under Lectures / Tutorials / Laboratory or Fieldwork / Seminar / Project / Practical Training / Assignments / Viva - voce etc., to meet the effective teaching and learning needs.

'Course Code' means a unique alpha numeric code assigned to each course of a program.

'Course Credit' One credit of the course is defined as a minimum of one hour lecture / minimum 2 hours lab / field work per week for 18 weeks in a semester. The course will be considered as completed only by conducting the final examination.

'Course Teacher' means the teacher of the institution in charge of the course offered in the Programme.

'Credit' of a course is a numerical value which depicts the measure of the weekly unit of work assigned for that course in a semester.

'Credit Point (CP)' of a course is the value obtained by multiplying the grade point (GP) by the Credit (Cr) of the course **$CP = GP \times Cr$**

'Cumulative Credit Point Average (CCPA)' is the value obtained by dividing the sum of credit points of all the courses taken by the student for the entire programme by the total number of credits and shall be rounded off to two decimal places. CCPA determines the overall performance of a student at the end of a programme.

[CCPA = Total CP obtained / Total Credits of the Programme]

'Department' means any teaching Department in the affiliated college / Institution offering a programme of study approved as per the relevant provisions of the Act / Statutes of the University.

'Department Council' means the body of all teachers of a Department in a college.

'Dissertation' means a long document on a particular subject in connection with the project / research / field work, etc.

'Duration of Programme' means the period of time required for the conduct of the programme. The duration of Integrated Post Graduate Programme shall be 10 semesters spread over 5 academic years.

'Elective Course' means a course, which can be substituted, by an equivalent course from the same subject.

'Elective Group' means a group consisting of elective courses for the programme.

'ESE' means End Semester Evaluation [External Evaluation]

'Evaluation' is the process by which the knowledge acquired by the student is quantified as per the criteria detailed in these regulations.

'External Examiner' is the teacher appointed from other colleges for the valuation of courses of study undergone by the students in a college. The external examiner shall be appointed by the University.

'Faculty Advisor' is a teacher nominated by the Department Council to coordinate the continuous evaluation and other academic activities undertaken in the Department of the affiliated College / Institution.

'Grade Point *GP+' - Each letter grade is assigned a 'Grade Point' *GP+ which is an integer indicating the numerical equivalent of the broad level of performance of a student in a course.

'Grade Point Average *GPA+' is an index of the performance of a student in a semester. It is obtained by dividing the sum of the weighted grade points obtained in the semester by the sum of the weights of the course ($GPA = \frac{\sum WGP}{\sum W}$).

'Improvement Course' is a course registered by a student for improving his/her performance in that particular course, along with the subsequent batch. No improvement will be allowed for VI and X Semesters.

'Internal Examiner' is a teacher nominated by the department concerned to conduct Internal Evaluation.

'Letter Grade' or 'Grade' for a course is a letter symbol [A+, A, B+, B, C, D] which indicates the broad level of performance of a student for a course.

'Parent Department' means the department which offers a particular Integrated Post Graduate programme.

3.33. **'Plagiarism'** is the unreferenced use of other authors' material in dissertations and assignments and is a serious academic offence.

'Programme' means the entire course of study and examinations. 3.37 **'Project'** is a core course in a programme. ~~It means a regular project work with stated credits on which the student undergo a project under the supervision of a teacher in the parent department / any appropriate research center in order to~~

submit a dissertation on the project work as specified. It allows students to work more autonomously to construct their own learning and culminates in realistic, student-generated products or findings.

'Repeat Course' is a course that is repeated by a student for having failed in that course in an earlier registration.

'Semester' means a term consisting of minimum 90 working days, inclusive of examinations, distributed over a minimum of 18 weeks of 5 working days each.

'Seminar' means a lecture given by a student on a selected topic and is expected to train the student in self-study, collection of relevant matter from various resources, editing, document writing and presentation.

'Semester Credit Point Average' *SCPA+ is the value obtained by dividing the sum of credit points [CP] obtained by a student in the various courses taken in a semester by the total number of credits for the course in that semester. The SCPA shall be rounded off to two decimal places. SCPA determines the overall performance of a student at the end of a semester

[SCPA = Total CP obtained in the semester / Total Credits for the Semester].

'Tutorial' Tutorial means a class to provide an opportunity to interact with students at their individual level to identify the strength and weakness of individual students.

'University' means Mahatma Gandhi University Kottayam, Kerala.

'Weight' is a numeric measure assigned to the assessment units of various components of a course of study.

'Weighted Grade Point' *WGP+ is the grade point multiplied by weight. **[WGP=GPxW]**

'Weighted Grade Point Average *WGPA+' is an index of the performance of a student in a course. It is obtained by dividing the sum of the weighted grade points by the sum of the weights. WGPA shall be obtained for CE (Continuous Evaluation) and ESE (End Semester Evaluation) separately and then the combined WGPA shall be obtained for each course.

Words and Expressions used and not defined in this regulation but defined in the Mahatma Gandhi University Act and Statutes shall have the meaning assigned to them in the Act and Statutes.

3. PROGRAMME STRUCTURE

Students shall be admitted to Integrated Post Graduate Programme under the various faculties. Medium of instruction shall be **English**, except for programmes under Faculty of Language and Literature. The programme shall include four types of courses - Core Courses, Complementary Courses, Elective Courses, and Common Courses. There shall be a project / dissertation and comprehensive viva voce in the VI and X Semester as part of core courses for all programmes. The programme shall also include Assignments / Seminars / Practicals / Internships.

Core Courses

Core courses are included in all semesters (except semester X) of the programme as theory, practical, projects and comprehensive viva courses. Semester X is exclusively for doing Major Project. External examination for Comprehensive Viva shall also be conducted in semester X.

Complementary Courses

There shall be one or two complementary/Vocational courses in the programme. The number of such

courses, their credits and teaching hours shall in a par with the corresponding UG programme stream (model I/II/III). Such courses **shall not** have more credits and teaching hours than the corresponding UG Programme. If the UG programme has no such complementary courses, then the corresponding credits may be given to the core courses.

Elective Courses and Bunches

The student/college shall select **three** (unless otherwise specified) elective courses for each programme as per the interest of the student, availability of faculty and academic infrastructure of the institution. There shall be three (unless otherwise specified) elective bunches **A, B and C** each of which consists of a **minimum** of two elective courses. All the elective courses have equal credits of 4 (unless otherwise specified). The student/college shall select **one** elective course each from bunch A, B and C as the elective courses for semesters **6, 8 and 9** respectively. The hours/week of courses in different bunches may vary. However, the hours/week of all courses in a particular bunch **should be the same**.

In the case of subjects which have their conventional UG programmes in Model II/III structure only (Eg.: Computer Science), the pattern of electives mentioned in 5.3.1 may change. For such integrated programmes, the number of electives, and thus the number of elective bunches, may vary. The details of the elective course distribution shall be given in the concerned curriculum.

The elective courses selected by the College shall be intimated to the Controller of Examinations within two weeks of commencement of the semester in which the elective courses are offered. The elective course selected by the college, on behalf of the students admitted in a particular academic year shall not be changed.

Project Work

Project work shall be completed in accordance with the guidelines given in the curriculum.

There shall be **two Projects** (one **Minor** project and one **Major** project), unless otherwise specified, in a programme. Evaluation of the Minor Project will be done in the **sixth** semester and that of Major Project will be done in the **tenth** Semester. **Minor Project** work shall be carried out under the supervision of a teacher of the department concerned.

The final semester (semester X) is dedicated for **Major Project**. Major project can be based on a three to four month Internship/industrial training/laboratory engagements at reputed institutions or research organisations etc.

The college shall provide a list of institutions to the students. The students may choose their project place from the list as per their aptitude/interest. However, if a student wants to do his/her project in an institution which is not enlisted, the college may include that institution also in the list.

The college should ensure the quality of the institutions by considering the following points. Availability of experts as guides/supervisors, well-equipped laboratories/industries/firms, other technical supports, possibility of higher studies/employment and any other relevant factors.

After completing the initial formalities, the student needs to join the organisation within one week of the commencement of last semester. He/she may be given a relieving letter to produce before the new organisation and shall send a copy of the joining letter to the parent institution.

The student is required to re-join the parent institution before two weeks of the ending of 7th semester. At

the time of re-joining, the student needs to submit the following items to the Head of the parent institution/Head of the Department.

- a) Relieving letter from the Head of the Organisation/Department where the student did his/her internship.
- b) Internal evaluation form duly signed by the Head of the organisation and Supervisor/Guide where he/she has undergone internship.
- c) A brief report of his/her work duly signed by the supervisor/guide (one or two pages).
- d) Dissertation/Thesis duly signed by the Head of the organisation/department and Supervisor/Guide where he/she has undergone internship.

The parent institution holds the right to bring the student back at any stage of the internship.

Details regarding the structure and conduct of Major Projects of an Integrated Programme shall be explained in the corresponding curriculum.

There shall be an internal assessment and external assessment for both the Project Works. The Project Works shall be evaluated based on the presentation of the project work done by the student, the dissertation submitted and the viva-voce of the project.

The external evaluation of the Project Works shall be conducted by one External examiner from a different college and an internal examiner from the college concerned.

Assignments: Every student shall submit **at least** one assignment as an internal component for each course.

Seminar Lecture: Every College Going student shall deliver one seminar lecture as an internal component for every course. The seminar lecture is expected to train the student in selfstudy, collection of materials relevant to the subject of study from various resources, editing, document writing, and presentation.

Test Papers (Internal): Every student shall undergo **at least** one class test as an internal component for each course.

No courses (Except Major Project) shall have **more than 5** credits unless otherwise specified.

Comprehensive Viva-voce

Comprehensive viva-voce shall cover questions from all core and elective courses of the programme. There shall be an internal and an external assessment for the comprehensive viva-voce.

Total Credits Required

a	Programme Duration	10 semesters
b	Total credits required for successful completion of the programme	200
c	Total Credits required from semester 1 to 6	120
d	Total Credits required from semester 7 to 10	80
e	Credits required from Common Course 1 (Semester 1 & 4 only)	8
f	Credits required from Common Course 2 (Semester 2 only)	4
g	Credits required from Core (including Electives & Minor Project) and Complementary / Vocational Courses - from Semester 1 to 6	108

Credits Distribution

Sl No.	Courses	Semester	Total Credits
1	Core (excluding Project)+ Complementary/ Vocational Courses	1 to 6	102
2	Core (excluding Project & Viva)	7 to 9	52
3	Elective	6, 8 & 9 (Unless otherwise specified)	12 (4 each) (Unless otherwise specified)
4	Complementary 1	1 & 2	Same as UG credits
	Complementary 1 (for Science Subjects)	1 to 4	Same as UG credits
5	Complementary 2	3 & 4	Same as UG credits
	Complementary 2/ Vocational Course (for Science Subjects)	1 to 4	Same as UG credits
6	Common Course 1	1 & 4	8
7	Common Course 2	2	4
8	Minor Project	6	2
9	Major Project	10	16
10	Comprehensive Viva	10	4
	Total		200

5.11 Audit Course: Audit courses are courses with no credits, but have teaching hours. Different programmes may consist of different audit courses according to the nature of the subjects. Such courses shall be internally evaluated and the result will be either a 'Pass' or a 'Fail'. There is no supplementary evaluation process for audit courses. The result shall be mentioned in the grade card.

4. ATTENDANCE

The minimum requirement of aggregate attendance during a semester for appearing at the end semester-examination shall be **75%**. Condonation of shortage of attendance to a maximum of 15 days in a semester, subject to a maximum of two times during the whole period of the programme may be granted by the University.

If a student represents his / her institution, University, State or Nation in Sports, NCC, or Cultural or any other officially sponsored activities such as College Union, University Union, etc, he / she shall be eligible to claim the attendance for the actual number of days participated, subject to the attendance certificate from concerned authorities and based on the specific recommendations of the Head of the Department or teacher concerned.

Those who could not register for the examination of the particular semester due to shortage of attendance may repeat the semester along with junior batches, without considering sanctioned strength, subject to the existing University Rules and Clause 7.2 of this regulation.

5. REGISTRATION / DURATION

A student shall be permitted to register for the programme at the time of the admission.

A student who has registered for the programme shall complete the Programme within a period of Seven years from the date of commencement of the programme.

6. ADMISSION

The admission to all regular IPG programmes shall be through Centralized Allotment Process (CAP) of the Mahatma Gandhi University, unless otherwise specified.

The eligibility criteria for admission to IPG Programmes shall be published by the University along with the notification for admission.

There shall be provision for inter-collegiate transfer, from second semester onwards to the corresponding semester of the same IPG programme, if seats are available, within a period of four weeks from the date of commencement of the semester.

There shall be provision of Credit Transfer, subject to the conditions stipulated by the Board of Studies / Expert Committee concerned.

7. ADMISSION REQUIREMENTS

Students admitted to these Programmes are governed by the eligibility requirements specified by Mahatma Gandhi University Regulations in force.

8. PROMOTION

A student who registers for a particular semester examination shall be promoted to the next semester. However, a student who registers for the IX Semester should have completed all the courses successfully up to VI Semester.

A student having 75% attendance for the semester and fails to register for end of semester examination of that particular semester shall be allowed to register notionally and is promoted to the next semester, provided application for notional registration shall be submitted before the University within 15 days from the commencement of the next semester.

9. EXAMINATIONS

There shall be University examinations at the end of every semester.

Practical examinations shall be conducted by the University at the end of even semesters as prescribed in the syllabus of the particular programme. The number of examiners for the practical examinations shall be prescribed by the Board of Practical Examinations of the Programme. The odd semester's practical examination shall be conducted internally or externally as prescribed by the university.

End-Semester Examinations: The examinations shall normally be conducted at the end of each semester using Question Bank developed by MG University.

- I. 4 There shall be one end-semester examination of 3-hours duration for each lecture/ practical course.
- II. 5 A question paper may contain short answer type/annotation, short essay type questions/problems and long essay type questions. Different types of questions shall have different weightage.

10. EVALUATION AND GRADING

Evaluation: The evaluation scheme for each course shall contain two parts:

(a) End Semester Evaluation [ESE] [External Evaluation] and (b) Continuous Evaluation [CE][Internal Evaluation]. 25% weightage shall be given to the internal evaluation and the remaining 75% to external evaluation and the ratio and weightage between internal and external is 1:3. Both End Semester Evaluation [ESE] and Continuous Evaluation [CE] shall be carried out using Direct Grading system.

Direct Grading: The direct grading for CE [Internal] and ESE [External Evaluation] shall be based on 6 letter grades [A+, A, B, C, D and E] with numerical values of 5, 4, 3, 2, 1 and 0 respectively.

Grade Point Average [GPA]: Internal and External components are separately graded and the combined grade point with weightage 1 for internal and 3 for external shall be applied to calculate the Grade Point Average [GPA] for each course. Letter grade shall be assigned to each course based on the categorization provided in 12.17

Internal Evaluation for Programme: The Internal Evaluation shall be based on predetermined transparent system involving periodic written tests, assignments, seminars, seminar lectures, lab skills, records, viva-voce, etc.

Components for Internal [CE] and External Evaluation [ESE]: Grades shall be given to the evaluation of theory / practical / project / comprehensive viva voce and all internal evaluations are based on the Direct Grading System. Proper guidelines shall be prepared by the Board of Studies / Expert Committee for evaluating the assignment, seminar, practical, project and comprehensive viva-voce within the framework of the regulation.

12. 6 There shall be no separate minimum grade point for internal evaluation.

The models of the components and its weightages for Continuous Evaluation [CE] and End Semester Evaluation [ESE] are shown below:

a) For Theory (CE) [Internal]

No.	Components	Weightage
I	Assignment	2
II	Seminar	4
III	Test Paper 1	2
IV	Test Paper 2	2
	Total	10

b) For Theory (ESE) (External)

Evaluation is based on the pattern of question specified in 12.15

c) For Practical (CE) (Internal)

No.	Components	Weightage
I	Lab Test	2
II	Lab involvement & Record	2
III	Viva	1
	Total	5

(The components and its weightage of the Practical (Internal) can be modified by the concerned BOS without changing the total weightage 5)

d) For Practical (ESE) (External)

No.	Components	Weightage
I	Principle/Procedure/ flowchart/Programme etc.	6
II	Observation/ Calculation/ Graph/ Programme debugging & execution etc.	6
III	Result/ analysis/ error calculation etc.	3
	Total	15

(The components and its weightage of the Practical (External) can be modified by the concerned BOS without changing the total weightage 15)

e) For Project - Minor (CE) (Internal)

No.	Components	Weightage
I	Project Involvement & Data collection.	2
II	Project Analysis & Presentation	2
III	Project Viva	1
	Total	5

(The components and its weightage of the Project - Minor (Internal) can be modified by the concerned BOS without changing the total weightage 5.)

f) For Project - Minor (ESE) (External)

No.	Components	Weightage
I	Relevance of the topic & Analysis	6
II	Project content, Presentation & Report.	6
III	Project Viva	3
	Total	15

(The components and its weightage of the Project - Minor (External) can be modified by the concerned BOS without changing the total weightage 15)

g) For Project - Major (CE) (Internal)

This has to be obtained from the institution where the student is doing the major project.

No.	Components	Weightage
I	Project Involvement	1
II	Data collection	1
III	Project Analysis	1
IV	Result	1
V	Project Viva	1
	Total	5

(The components and its weightage of the Project - Major (Internal) can be modified by the concerned BOS without changing the total weightage 5.)

h) For Project - Major (ESE) (External)

No.	Components	Weightage
I	Relevance of the topic & Data Collection.	3
II	Project Analysis	3
III	Project content & Result	3
IV	Presentation & Dissertation	3
V	Project Viva	3
	Total	15

(The components and its weightage of the Project - Major (External) can be modified by the concerned BOS without changing the total weightage 15)

i) Comprehensive viva-voce (CE) (Internal)

No.	Components	Weightage
I	Communication/ Presentation	1
II	Topics from all semesters	2
III	Topic of Interest	2
	Total	5

(The components and the weightage of the components of the Comprehensive Viva (Internal) can be modified by the concerned BOS without changing the total weightage 5)

j) Comprehensive viva-voce (ESE) (External)

No.	Components	Weightage
I	Communication/ Presentation	3
II	Topics from all semesters	6
III	Topic of Interest	6
	Total	15

(Weightage of the components of the Comprehensive viva-voce (external) **shall not** be modified)

All grade point averages shall be rounded to two decimal points.

To ensure transparency of the evaluation process, the internal assessment grade awarded to the students in each course in a semester shall be published on the notice board at least one week before the commencement of external examination.

There shall **not** be any chance for improvement for internal grade. However, the students can redo the same.

The **course teacher** and the **faculty advisor** shall maintain the academic record of each student registered for the course which shall be forwarded to the University through the Principal and a copy should be kept in the college for verification for at least two years after the student completes the programme.

External Evaluation. The external examination in theory courses is to be conducted by the University at the end of the every semester. The answers may be written in **English** or in **Malayalam** except those for the

Faculty of Languages. The evaluation of the answer scripts shall be done by examiners based on a well-defined scheme of valuation. The external evaluation shall be done immediately after the examination preferably through Centralized Valuation.

12.13. Photocopies of the answer scripts of the external examination shall be made available to the students on request as per the rules prevailing in the University.

The question paper should be strictly on the basis of model question paper set and directions prescribed by the BOS / Expert Committee.

Pattern of Questions for Theory examination

Questions shall be set to assess knowledge acquired, standard, and application of knowledge, application of knowledge in new situations, critical evaluation of knowledge and the ability to synthesize knowledge. Due weightage shall be given to each module based on content/teaching hours allotted to each module.

The question setter shall ensure that questions covering all skills are set.

A question paper shall be a judicious mix of short answer type, short essay type/problem solving type and long essay type questions.

The question shall be prepared in such a way that the answers can be awarded A+.

A, B, C, D, E grades.

Total Weight is **30**. Different types of questions shall be given different weights to quantify their range as follows:

Sl. No.	Type of Questions	Weightage	No. of questions to be answered
1	Short Answer type questions.	1	8 out of 10
2	Short Essay/Problem solving type questions	2	6 out of 8
3	Long Essay type questions	5	2 out of 4

Pattern of question for Practical Examination

The pattern of questions for external evaluation of practical shall be prescribed by the **concerned Board of Studies**.

Direct Grading System

Direct Grading System based on a **6-point** scale is used to evaluate the Internal and External examinations taken by the students for various courses of study.

Grade	Grade Point	Range
A+	5	4.50 to 5.00
A	4	4.00 to 4.49
B	3	3.00 to 3.99
C	2	2.00 to 2.99
D	1	0.01 to 1.99
E	0	0.00

Performance Grading

Students are graded based on their performance (GPA/SGPA/CGPA) at the examination on a **7-point** scale as detailed below.

Range	Grade	Indicator
4.50 to 5.00	A+	Outstanding
4.00 to 4.49	A	Excellent
3.50 to 3.99	B+	Very Good
3.00 to 3.49	B	Good (Average)
2.50 to 2.99	C+	Fair
2.00 to 2.49	C	Marginal (Pass)
Up to 1.99	D	Deficient (Fail)

No Separate minimum is required for internal evaluation for a pass, but a **minimum** C grade is required for a pass in an external evaluation. However, a **minimum** C grade is required for pass in a course.

A Student who fails to secure a minimum grade for a pass in a course will be permitted to write the examination along with the next batch.

Improvement of Course- The candidates who wish to improve the grade/grade point of the external examination of course/courses he/she has passed can do the same by appearing in the external examination of the semester concerned along with the immediate junior batch.

One Time Betterment Programme- A candidate will be permitted to improve the **CGPA** of the programme within a continuous period of four semesters immediately following the completion of the programme allowing only once for a particular semester. The **CGPA** for the betterment appearance will be computed based on the **SGPA** secured in the original or betterment appearance of each semester whichever is higher. If a candidate opts for the betterment of **CGPA** of a programme, he/she has to appear for the external examination of the entire semester(s) excluding practicals/project/comprehensive viva-voce. One time betterment programme is restricted to students who have passed in all courses of the programme at the regular (First) appearance.

Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) Calculations.

The **SGPA** is the ratio of sum of the credit points of all courses taken by a student in the semester to the total credit for that semester. After the successful completion of a semester, **Semester Grade Point Average (SGPA)** of a student in that semester is calculated using the formula given below.

$$\text{Semester Grade Point Average} = \text{SGPA (Sj)} = \frac{\sum \text{£ (Ci x Gi)}}{\sum \text{£ Ci}}$$

Total Grade Points awarded in a semester

$$\text{ie, SGPA} = \frac{\text{Total Credits of the semester}}{\text{Total Credits of the semester}}$$

where 'Sj' is the **jth** semester, **Gi** is the grade point scored by the student in the **ith** course **Ci** is the credit of the **ith** course.

Cumulative Grade Point Average (CGPA) of a Programme is calculated using the formula:-

$\text{Cumulative Grade Point Average} = \text{CGPA} = \frac{\sum (C_i \times S_i)}{\sum C_i}$
<p>ie, CGPA = $\frac{\text{Total Grade Points awarded in all semesters}}{\text{Total Credits of the programme}}$</p>

where 'Ci' is the credits for the **ith** semester, **Si** is the **SGPA** for the **ith** semester. The SGPA and CGPA shall be rounded off to 2 decimal points.

For the successful completion of a semester, a student shall pass all courses and score a minimum **SGPA** of 2.00. However, a student is permitted to move to the next semester irrespective of her/his **SGPA**.

13. GRADE CARD

The university under its seal shall issue to the students, a consolidated grade card on completion of the programme, which shall contain the following information.

- a. Name of the University
- b. Name of College
- c. Title of the Integrated PG Programme
- d. Name of the Semesters
- e. Name and Register Number of the student
- f. Code, Title, Credits and Max GPA (Internal, External & Total) of each course (Theory & Practical), Projects, viva etc. in each semester.
- g. Internal, external and total grade, Grade Point (G), Letter Grade and Credit Point (P) in each course opted in the semester.
- h. The total credits and total credit points in each semester.
- i. Semester Grade Point Average (SGPA) and corresponding Grade in each semester
- j. Cumulative Grade Point Average (CGPA), Grade for the entire programme.
- k. A one line statement as '**This First Degree Programme is recognised as equivalent to <name of the conventional degree & Subject> Degree Programme of Mahatma Gandhi University, Kottayam, Kerala**' (for First degree Grade Card) **OR**,
A one line statement as '**This Integrated Degree Programme is separately recognised as equivalent to the corresponding conventional <name of the conventional degree & Subject> degree and <name of the conventional PG degree & Subject> Degree Programme of Mahatma Gandhi University, Kottayam, Kerala**' (for Final Degree Grade Card).
For a student who got **lateral entry** in the 7th semester and completed the programme successfully: A one line statement as '**This Final Degree Programme is recognised as equivalent to <name of the conventional PG degree & Subject> Degree Programme of Mahatma Gandhi University, Kottayam, Kerala**' (for Final degree Grade Card only).
- l. Separate Grade card will be issued at the request of candidates and based on University Guidelines issued from time to time.
- m. Details of description of evaluation process-Grade and Grade Point as well as indicators, calculation

methodology of SGPA and CGPA as well as conversion scale shall be shown on the reverse side of the grade card.

14. INTERIM EXIT OR LATERAL ENTRY FACILITY

The Integrated Programme consists of an Under Graduate (UG) programme (up to semester VI) as the first degree and a Post Graduate (PG) programme (from semester VII to semester X) as the final degree. Thus, all the Programmes would carry the nomenclature of “**Integrated <name of the first degree> - <name of the final degree>**”. Therefore, the Integrated Programme intends to offer two separate degrees with an option for Interim Exit or Lateral Entry. The student shall avail the interim exit facility only after the completion of semester VI. If the student completes up to semester VI **successfully**, he/she shall be awarded a ‘First Degree Programme in <Subject> (Degree)’ Degree *Ex: First Degree Programme in Physics (B.Sc)], which is recognized as equivalent to the corresponding conventional degree (First Degree). The total credits required for such a degree is 120 (see 5.10.1).

On successful completion of the whole Programme, the student shall be awarded an ‘Integrated <name of the first degree> - <name of the final degree> (Specialisation, if required)’ degree [Ex. Integrated BA-MA English, Integrated B.Sc-M.Sc Physics (Electronics)]. Here the first degree (semester I to VI) and final degree (semester VII to X) are individually and separately recognized as equivalent to corresponding conventional degrees.

Eligible students may avail ‘Lateral entry’ facility for admission to VIIth semester of the programme, provided sufficient seats are available. Applicants who have a **UG degree** or **equivalent** in the concerned subject, with a required credit of 120, can apply for lateral entry. The eligibility and other criteria are the same as that for the corresponding PG admission. The lateral admission is **strictly** based on merit and university norms which exist at the time of admission. The details of selection process shall be announced by the university at the time of lateral entry.

15. AWARD OF DEGREE (Graduate/ Post Graduate)

The successful completion of all the courses with ‘C’ grade within the stipulated period shall be the minimum requirement for the award of the degree.

16. MONITORING COMMITTEE

There shall be a Monitoring Committee constituted by the Vice-Chancellor to monitor the internal evaluations conducted by institutions.

17. POSITION CERTIFICATE

The University shall publish the list of top 10 candidates for each programme after the publication of the programme results. Position certificates shall be issued to candidates who secure positions from 1st to 3rd in the list. Position certificate shall be issued to candidates on their request.

Candidates shall be ranked in the order of merit based on the CGPA secured by them. Grace grade points awarded to the students shall not be counted for fixing the rank/position. Rank certificate and position certificate shall be signed by the Controller of Examinations.

18. GRIEVANCE REDRESSAL COMMITTEE

Department Level: The College shall form a Grievance Redressal Committee in each Department comprising of the course teacher and one senior teacher as members and the Head of the Department as Chairperson.

The Committee shall address all grievances relating to the internal assessment grades of the students.

College Level: There shall be a College level Grievance Redressal Committee comprising of faculty advisor, college coordinator, one senior teacher and one staff council member, and the Principal as Chairperson.

University Level: The University shall form a Grievance Redressal Committee as per the existing norms.

19. TRANSITORY PROVISION

Notwithstanding anything contained in these regulations, the Vice-Chancellor shall, for a period of three year from the date of coming into force of these regulations, have the power to provide by order that these regulations shall be applied to any programme with such modifications as may be necessary.

20. REPEAL

The Regulations now in force in so far as they are applicable to programmes offered by the University and to the extent they are inconsistent with these regulations are hereby repealed. In the case of any inconsistency between the existing regulations and these regulations relating to the Credit Semester System in their application to any course offered in a College, the latter shall prevail.

21. CREDITS ALOTTED FOR PROGRAMMES AND COURSES

Total credit for each programme shall be 200 Semester-wise total credit can vary from 16-25

21.3. The Minimum credit of a course (excluding Major Project) is 1 and maximum credit is 5, unless otherwise specified.

22. COMMON COURSE

If a course is included as a common course in more than one programme, its credits shall be same for all programmes

23. COURSE CODES

The course codes assigned for all courses (core course, elective courses, common courses

etc.) shall be unique.

24. **Models** of distribution of courses, course codes, type of the course, credits, teaching hours for a programme are given in the following tables.

EXAMPLE 1

PROGRAMME STRUCTURE (WITHOUT PRACTICAL)

SEMESTER	Sl. No.	CODE	TITLE	HOURS/ WEEK	CREDITS	TOTAL HOURS
I	1	Code1	ENGLISH 1	5	4	90
	2	Code2	CORE1	4	3	72
	3	Code3	CORE2	4	3	72
	4	Code4	CORE3	4	3	72
	5	Code5	CORE4	4	3	72
	6	Code6	COMPLEMENTARY 1 - PAPER I	4	4	72
TOTAL				25	20	450
II	1	Code7	SECOND LANGUAGE	5	4	90
	2	Code8	CORE5	4	3	72
	3	Code9	CORE6	4	3	72
	4	Code10	CORE7	4	3	72
	5	Code11	CORE8	4	3	72
	6	Code12	COMPLEMENTARY 1 - PAPER II	4	4	72
TOTAL				25	20	450
III	1	Code13	CORE9	4	3	72
	2	Code14	CORE10	4	3	72
	3	Code15	CORE11	4	3	72
	4	Code16	CORE12	4	3	72
	5	Code17	CORE13	4	3	72
	6	Code18	COMPLEMENTARY 2 - PAPER 1	5	4	90
TOTAL				25	19	450
IV	1	Code19	ENGLISH 2	5	4	90
	2	Code20	CORE14	4	4	72
	3	Code21	CORE15	4	3	72
	4	Code22	CORE16	4	3	72
	5	Code23	CORE17	3	3	54

	6	Code24	COMPLEMENTARY 2 - PAPER 2	5	4	90
TOTAL				25	21	450
V	1	Code25	CORE18 - Environmental Studies & Human Rights	5	4	90
	2	Code26	CORE19	4	3	72
	3	Code27	CORE20	4	3	72
	4	Code28	CORE21	4	3	72
	5	Code29	CORE22	4	3	72
	6	Code30	CORE23	4	3	72
TOTAL				25	19	450
VI	1	Code31	CORE24	4	3	72
	2	Code32	CORE25	4	3	72
	3	Code33	CORE26	4	3	72
	4	Code34	CORE27	4	3	72
	5	Code35	CORE28	4	3	72
	6	Code36	ELECTIVE I (Bunch A)	5	4	90
	7	Code37	PROJECT - MINOR		2	0
TOTAL				25	21	450
VII	1	Code38	CORE29	5	4	90
	2	Code39	CORE30	5	4	90
	3	Code40	CORE31	5	4	90
	4	Code41	CORE32	5	4	90
	5	Code42	CORE33	5	4	90
TOTAL				25	20	450
VIII	1	Code43	CORE34	5	4	90
	2	Code44	CORE35	5	4	90
	3	Code45	CORE36	5	4	90
	4	Code46	CORE37	5	4	90
	5	Code47	ELECTIVE II (Bunch B)	5	4	90
TOTAL				25	20	450
IX	1	Code48	CORE38	5	4	90
	2	Code49	CORE39	5	4	90
	3	Code50	CORE40	5	4	90
	4	Code51	CORE41	5	4	90
	5	Code52	ELECTIVE III (Bunch C)	5	4	90
TOTAL				25	20	450
X	3	Code53	PROJECT - MAJOR		16	
	4	Code54	COMPREHENSIVE VIVA		4	
TOTAL					20	

EXAMPLE 2
PROGRAMME STRUCTURE (WITH PRACTICAL)

SEMESTER	Sl. No.	CODE	TITLE	HOURS/ WEEK	CREDITS	TOTAL HOURS
I	1	Code1	ENGLISH 1	5	4	90
	2	Code2	CORE1	4	3	72
	3	Code3	CORE2	4	3	72
	4	Code4	CORE3	2	2	36
	5	Code5	COMPLEMENTARY 1 - PAPER I	4	3	72
	6	Code6	COMPLEMENTARY 2 - PAPER I	2	2	36
	7	Code7	CORE PRACTICAL-1	2	2	36
	8	Code15	COMPLEMENTARY 2- PRACTICAL-1	2		36
TOTAL				25	19	450
II	1	Code8	SECOND LANGUAGE	5	4	90
	2	Code9	CORE4	4	3	72
	3	Code10	CORE5	4	3	72
	4	Code11	CORE6	2	2	36
	5	Code12	COMPLEMENTARY 1 - PAPER II	4	3	72
	6	Code13	COMPLEMENTARY 2 - PAPER II	2	2	36
	7	Code14	CORE PRACTICAL 2	2	2	36
	8	Code15	COMPLEMENTARY 2- PRACTICAL-1	2	2	36
TOTAL				25	21	450
III	1	Code16	CORE7	4	3	72
	2	Code17	CORE8	4	3	72
	3	Code18	CORE9	3	2	54
	4	Code19	COMPLEMENTARY 1 - PAPER 3	5	4	90
	5	Code20	COMPLEMENTARY 2 - PAPER 3	3	3	54
	6	Code21	CORE PRACTICAL 3	2	2	36
	7	Code22	CORE PRACTICAL 4	2	2	36
	8	Code30	COMPLEMENTARY 2- PRACTICAL-2	2		36
TOTAL				25	19	450
IV	1	Code23	ENGLISH 2	5	4	90
	2	Code24	CORE10	3	2	54
	3	Code25	CORE11	3	2	54

	4	Code26	COMPLEMENTARY 1 - PAPER 4	5	4	90
	5	Code27	COMPLEMENTARY 2 - PAPER 4	3	3	54
	6	Code28	CORE PRACTICAL 5	2	2	36
	7	Code29	CORE PRACTICAL 6	2	2	36
	8	Code30	COMPLEMENTARY 2- PRACTICAL-2	2	2	36
TOTAL				25	21	450
V	1	Code31	CORE12 - Environmental Studies & Human Rights	5	4	90
	2	Code32	CORE13	4	3	72
	3	Code33	CORE14	4	3	72
	4	Code34	CORE15	4	3	72
	5	Code35	CORE16	4	3	72
	6	Code36	CORE PRACTICAL 7	2	2	36
	7	Code37	CORE PRACTICAL 8	2	2	36
TOTAL				25	20	450
VI	1	Code38	CORE17	4	3	72
	2	Code39	CORE18	4	3	72
	3	Code40	CORE19	4	2	72
	4	Code41	CORE20	4	2	72
	5	Code42	ELECTIVE I (Bunch A)	5	4	90
	6	Code43	CORE PRACTICAL 9	2	2	36
	7	Code44	CORE PRACTICAL 10	2	2	36
	8	Code45	PROJECT - MINOR		2	0
TOTAL				25	20	450
VII	1	Code46	CORE21	4	4	72
	2	Code47	CORE22	4	3	72
	3	Code48	CORE23	3	3	54
	4	Code49	CORE24	3	3	54
	5	Code50	CORE25	3	3	54
	6	Code51	CORE PRACTICAL 11	4	2	72
	7	Code52	CORE PRACTICAL 12	4	2	72
TOTAL				25	20	450
VIII	1	Code53	CORE26	4	4	72
	2	Code54	CORE27	4	3	72
	3	Code55	CORE28	3	3	54
	4	Code56	CORE29	2	2	36
	5	Code57	ELECTIVE II (Bunch B)	4	4	72
	6	Code58	CORE PRACTICAL 13	4	2	72
	7	Code59	CORE PRACTICAL 14	4	2	72
TOTAL				25	20	450
IX	1	Code60	CORE30	4	4	72
	2	Code61	CORE31	3	3	54

	3	Code62	CORE32	3	3	54
	4	Code63	CORE33	2	2	36
	5	Code64	ELECTIVE III (Bunch C)	5	4	90
	6	Code65	CORE PRACTICAL 15	4	2	72
	7	Code66	CORE PRACTICAL 16	4	2	72
TOTAL				25	20	450
X	3	Code67	PROJECT - MAJOR		16	
	4	Code68	COMPREHENSIVE VIVA		4	
TOTAL					20	

* Complementary1 is a course without Practicals. Complementary2 is a course with Practicals.

EXAMPLE 3

PROGRAMME STRUCTURE (Computer Science)

SEMESTER	Sl. No.	COURSE CODE	COURSE TITLE	HOURS/ WEEK	CREDITS	TOTAL HOURS
I	1	Code1	ENGLISH 1	5	4	90
	2	Code2	Core 1	4	3	72
	3	Code3	Core 2	3	3	54
	4	Code4	Core 3	3	3	54
	5	Code5	Complementary 1 Paper 1	4	4	72
	6	Code6	Core Practical 1	6	4	108
TOTAL				25	21	450
II	1	Code7	SECOND LANGUAGE	5	4	90
	2	Code8	Core 4	3	3	54
	3	Code9	Core 5	3	3	54
	4	Code10	Core 6	4	4	72
	5	Code11	Complementary 1 Paper 2	4	4	72
	6	Code12	Core Practical 2	6	4	108
TOTAL				25	22	450
III	1	Code13	Core 7	4	4	72
	2	Code14	Core 8	3	3	54
	3	Code15	Core 9	4	3	72
	4	Code16	Core 10	4	4	72
	5	Code17	Complementary 2 Paper 1	4	4	72
	6	Code18	Core Practical 3	6	2	108
TOTAL				25	20	450
IV	1	Code19	ENGLISH II	5	4	90
	2	Code20	Complementary 2 Paper 2	4	3	72
	3	Code21	Core 11	4	4	72
	4	Code22	Core 12	4	3	72
	5	Code23	Core 13	4	3	72

	6	Code24	Complementary 2 Practical 2	2	2	36
	7	Code25	Core Practical 4	2	1	36
TOTAL				25	20	450
V	1	Code26	Core 14	3	4	54
	2	Code27	Core 15	4	3	72
	3	Code28	Core 16	4	3	72
	4	Code29	Core 17	3	4	54
	5	Code30	Project Minor - Phase I	3	0	54
	6	Code31	Core Practical 5	8	3	144
TOTAL				25	17	450
VI	1	Code32	Core 18	3	3	54
	2	Code33	Core 19	4	4	72
	3	Code34	Core 20	4	4	72
	4	Code35	Elective 1 (Bunch A)	3	3	54
	5	Code36	Project Minor Phase II	7	4	126
	6	Code37	Core Practical 6	4	2	72
TOTAL				25	20	450
VII	1	Code38	Core 21	4	4	72
	2	Code39	Core 22	4	4	72
	3	Code40	Core 23	4	4	72
	4	Code41	Core 24	4	3	72
	5	Code42	Core practical 7	5	3	90
	6	Code43	Core practical 8	4	2	72
TOTAL				25	20	450
VIII	1	Code44	Elective 2 (Bunch B)	4	4	72
	2	Code45	Core 25	4	4	72
	3	Code46	Core 26	4	4	72
	4	Code47	Elective 3 (Bunch C)	4	4	72
	5	Code48	Core practical 9	5	2	90
	6	Code49	Core practical 10	4	2	72
TOTAL				25	20	450
IX	1	Code50	Elective 4 (Bunch D)	4	4	72
	2	Code51	Core 27	4	3	72
	3	Code52	Core 28	4	4	72
	4	Code53	Elective 5 (Bunch E)	4	4	72
	5	Code54	Core practical 11	4	2	72
	6	Code55	Case Study and Minor Project	5	3	90
TOTAL				25	20	450
	1	Code56	Major Project		16	
	2	Code57	Comprehensive Viva		4	
TOTAL				25	20	450

APPENDIX

A. Evaluation first stage - Both Internal and External (to be done by the teacher)

Grade	Grade Point	Range
A+	5	4.50 to 5.00
A	4	4.00 to 4.49
B	3	3.00 to 3.99
C	2	2.00 to 2.99
D	1	0.01 to 1.99
E	0	0.00

The final Grade range for Courses, SGPA and CGPA

Range	Grade	Indicator
4.50 to 5.00	A+	Outstanding
4.00 to 4.49	A	Excellent
3.50 to 3.99	B+	Very Good
3.00 to 3.49	B	Good (Average)
2.50 to 2.99	C+	Fair
2.00 to 2.49	C	Marginal (Pass)
Up to 1.99	D	Deficient (Fail)

A. Theory - External - ESE

Maximum weight for external evaluation is 30. Therefore Maximum Weighted Grade Point (WGP) is 150.

Type of question	Qn. Nos.	Grade Awarded	Grade Point	Weight	Weighted Grade Point (WGP)
Short Answer	1	A+	5	1	5
	2	-	-	-	-
	3	A	4	1	4
	4	C	2	1	2
	5	A	4	1	4
	6	A	4	1	4
	7	B	3	1	3
	8	A	4	1	4
	9	B	3	1	3
	10	-	-	-	-
Short Essay	11	B	3	2	6
	12	A+	5	2	10
	13	A	4	2	8

	14	A+	5	2	10
	15	-	-	-	-
	16	-	-	-	-
	17	A	4	2	8
	18	B	3	2	6
Long Essay	19	A+	5	5	25
	20	-	-	-	-
	21	-	-	-	-
	22	B	3	5	15
			TOTAL	30	117

Calculation: Overall Grade of the Theory paper = Sum of weighted Grade Points / Total Weight = 117/30 = 3.90; Grade B+

B. Theory - Internal (CE)

Maximum weight for Internal evaluation is 10. Therefore Maximum Weighted Grade Point (WGP) is 50.

Components	Weight (W)	Grade Awarded	Grade Point (GP)	WGP = W*GP	Overall Grade of the Course
Assignment	2	A	4	8	WGP/Total Weight = 48/10 = 4.80 = A+
Seminar	4	A+	5	20	
Test Paper 1	2	A+	5	10	
Test Paper 2	2	A+	5	10	
Total	10			48	

C. Practical - External (ESE)

Maximum weight for External evaluation is 15. Therefore Maximum Weighted Grade Point (WGP) is 75.

Components	Weight (W)	Grade Awarded	Grade Point (GP)	WGP = W*GP	Overall Grade of the Course
Principle/Procedure/ Programme etc.	6	A	4	24	WGP/Total Weight = 69/15 = 4.60 = A+
Observation/ Graph/ Programme debugging & execution etc.	6	A+	5	30	
Result/ analysis/ error calculation etc.	3	A+	5	15	
Total	15			69	

D. Practical - Internal (CE)

Maximum weight for Internal evaluation is 5. Therefore Maximum Weighted Grade Point (WGP) is 25.

Components	Weight (W)	Grade Awarded	Grade Point (GP)	WGP = W*GP	Overall Grade of the Course
Lab Test	2	A	4	8	WGP/Total Weight = 20/5 = 4.00 = A
Lab involvement & Record	2	A+	5	10	
Viva	1	C	2	2	
Total	5			20	A

E. Project - Major (External)

Maximum weight for External evaluation is 15. Therefore Maximum Weighted Grade Point (WGP) is 75.

Components	Weight (W)	Grade Awarded	Grade Point (GP)	WGP = W*GP	Overall Grade of the Course
Relevance of the topic & Data Collection.	3	C	2	6	WGP/Total Weight = 51/15 = 3.40 = B
Project Analysis	3	A+	5	15	
Project content & Result	3	B	3	9	
Presentation & Dissertation	3	A	4	12	
Project Viva	3	B	3	9	
Total	15			51	B

F. Project - Major (Internal)

Maximum weight for Internal evaluation is 5. Therefore Maximum Weighted Grade Point (WGP) is 25.

Components	Weight (W)	Grade Awarded	Grade Point (GP)	WGP = W*GP	Overall Grade of the Course
Project Involvement	1	C	2	2	WGP/Total Weight = 18/5 = 3.60 = B+
Data collection	1	A+	5	5	
Project Analysis	1	B	3	3	
Result	1	A	4	4	
Project Viva	1	A	4	4	
Total	5			18	B+

G. Project - Minor (External)

Maximum weight for External evaluation is 15. Therefore Maximum Weighted Grade Point (WGP) is 75.

Components	Weight (W)	Grade Awarded	Grade Point (GP)	WGP = W*GP	Overall Grade of the Course
Relevance of the topic & Analysis	6	C	2	12	WGP/Total Weight = $51/15 = 3.40 = \mathbf{B}$
Project content, Presentation & Report.	6	A+	5	30	
Project Viva	3	B	3	9	
Total	15			51	B

H. Project - Minor (Internal)

Maximum weight for Internal evaluation is 5. Therefore Maximum Weighted Grade Point (WGP) is 25.

Components	Weight (W)	Grade Awarded	Grade Point (GP)	WGP = W*GP	Overall Grade of the Course
Project Involvement & Data collection.	2	C	2	4	WGP/Total Weight = $17/5 = 3.40 = \mathbf{B}$
Project Analysis & Presentation	2	A+	5	10	
Project Viva	1	B	3	3	
Total	5			17	B

I. Comprehensive Viva (External)

Maximum weight for External evaluation is 15. Therefore Maximum Weighted Grade Point (WGP) is 75.

Components	Weight (W)	Grade Awarded	Grade Point (GP)	WGP = W*GP	Overall Grade of the Course
Communication/ Presentation	3	C	2	6	WGP/Total Weight = $54/15 = 3.60 = \mathbf{B+}$
Topics from all semesters	6	A+	5	30	
Topic of Interest	6	B	3	18	
Total	15			54	B+

J. Comprehensive Viva (Internal)

Maximum weight for Internal evaluation is 5. Therefore Maximum Weighted Grade Point (WGP) is 25.

Components	Weight (W)	Grade Awarded	Grade Point (GP)	WGP = W*GP	Overall Grade of the Course
Communication/Presentation	1	C	2	2	WGP/Total Weight = $18/5 = 3.60 = \text{B+}$
Topics from all semesters	2	A+	5	10	
Topic of Interest	2	B	3	6	
Total	5			18	B+

B. Evaluation second stage (To be done by the University)

Consolidation of the Grade (GPA) of a Course PC-1

The End Semester Evaluation (ESE) (External Evaluation) grade awarded for the course PC-1 is A (Grade point awarded is 4.20) and its continuous Evaluation (CE) (Internal Evaluation) grade is A (Grade point awarded is 4.40). The consolidated grade for the course PC-1 is calculated as follows.

Evaluation	Weight (W)	Grade awarded	Grade Points awarded (G)	Weighted Grade Point (W*G)
External	3	A	4.20	12.60
Internal	1	A	4.40	4.40
Total	4			17
Grade of a course	GPA of the Course = Total weighted grade points/ Total Weight = $17/4 = 4.25$; Grade 'A'			

C. Evaluation Third Stage (To be done by the University)

Semester Grade Point Average (SGPA)

Course Code	Title of the Course	Credits (C)	Grade awarded	Grade Points awarded (G)	Grade Points (GP=C*G)
01	PC1	5	A	4.25	21.25
02	PC2	5	A	4.00	20.00
03	PC3	5	B+	3.80	19.00

04	PC4	2	A	4.40	8.80
05	PC5	3	A	4.00	12.00
Total		20			81.05
SGPA	Total Grade points/ Total Credits = 81.05/20 = 4.05; Grade 'A'				

D. Evaluation- Fourth Stage (To be done by the University)

Cumulative Grade Point Average (CGPA)

If a candidate is awarded **three** A+ grades, **two** A grades, **one** B+ grade, **two** B grades, **one** C+ grade and **one** C grade as the **SGPA** of various semesters of the programme as given below, then the CGPA is calculated as follows.

Semester	Credit of the Semester (C)	Grade Awarded	Grade Point Average (SGPA)	Credit Points (C*SGPA)
I	19	A+	4.50	85.50
II	21	A+	4.60	96.60
III	19	B	3.00	57
IV	21	A+	4.50	94.5
V	20	A	4.00	80
VI	20	A	4.10	82
VII	20	C	2.20	44
VIII	20	B+	3.60	72
IX	20	B	3.40	68
X	20	C+	2.80	56
TOTAL	200			735.6
CGPA	Total Grade points awarded / Total Credit of all semesters = 735.6/200 = 3.68, which is in the range 3.50 to 3.99 in 7-point scale. Therefore, the overall grade awarded in the Program is 'B+'.			

Conversion of CGPA into percentage of marks

Percentage of marks = (CGPA x 20)%

Eg. CGPA of 3.68 = (3.68x20) % = 73.60 %

COURSE STRUCTURE

Semester I

COURSE CODE	COURSE TITLE	COURSE TYPE	HRS / WEEK	TOTAL CREDITS
IBT101	Systematics and diversity of lower life forms and non vascular plants	Theory	2	2
BT102	Systematics and diversity of Invertebrates	Theory	2	2
IBT103	Bio-physical Chemistry	Theory	2	2
IBT104	Basic English grammar and communication	Theory	5	4
IBP101	Systematics and diversity of lower life forms and non vascular plants	Practical	2	0
IBP102	Systematics and diversity of Invertebrates	Practical	2	0
IBP103	Bio-physical Chemistry	Practical	2	0
IBT105 IBT106	Second language- <i>Sahityapatanam</i> (Malayalam) Second language- <i>Prose and One -Act plays</i> (Hindi)	Theory	5	4
IBT107	Fundamentals in Mathematics	Theory	3	3
Total			25	17

Semester II

COURSE CODE	COURSE TITLE	COURSE TYPE	HRS / WEEK	TOTAL CREDITS
IBT201	Systematics and diversity of Vascular Plants	Theory	2	2
IBT202	Systematics and diversity of Vertebrates	Theory	2	2
IBT203	Organic Chemistry	Theory	2	2
IBP201	Systematics and diversity of Vascular Plants	Practical	2	2
IBP202	Systematics and diversity of Vertebrates	Practical	2	2
IBP203	Organic Chemistry	Practical	2	2
IBT204	Mathematical Biology	Theory	5	4
IBT205	Basics in computing	Theory	2	2
IBP205	Basics in computing	Practical	2	1
IBT206	Introductory Physics	Theory	2	2
IBP206	Introductory Physics	Practical	2	2
Total			25	23

Semester III

COURSE CODE	COURSE TITLE	COURSE TYPE	HRS / WEEK	TOTAL CREDITS
IBT301	Plant anatomy & physiology	Theory	3	3
IBT302	Animal anatomy & physiology	Theory	3	3
IBT303	Computer Science	Theory	3	3
IBP303	Computer Science	Practical	2	1

IBP301	Plant anatomy & physiology	Practical	2	0
IBP302	Animal anatomy & physiology	Practical	2	0
IBP304	Inorganic Chemistry	Theory	3	3
IBP304	Inorganic Chemistry	Practical	2	0
IBP305	Science Education	Theory	5	4
Total			25	17

Semester IV

COURSE CODE	COURSE TITLE	COURSE TYPE	HRS / WEEK	TOTAL CREDITS
IBT401	Cell biology	Theory	3	3
IBT402	Biophysics	Theory	3	3
IBT403	Bio- organic and Green Chemistry	Theory	3	3
IBP401	Cell biology	Practical	2	2
IBP402	Biophysics	Practical	2	2
IBP403	Bio- organic and Green Chemistry	Practical	2	2
IBT404	Listening, Speaking, Reading, Writing and Understanding Literature	Theory	5	4
IBT405	Bioinstrumentation	Theory	3	3
IBP405	Bioinstrumentation	Practical	2	1
Total			25	23

Semester V

COURSE CODE	COURSE TITLE	COURSE TYPE	HRS / WEEK	TOTAL CREDITS
IBT501	Genetics	Theory	3	3
IBT502	Evolutionary Biology & Ethology	Theory	3	3
IBT503	Biostatistics	Theory	3	3

IBT504	Soft skill development	Theory	3	3
IBP501	Genetics	Practical	2	0
IBP502	Evolutionary Biology & Ethology	Practical	2	0
IBP503	Biostatistics	Practical	2	0
IBT505	Environmental Biology and Human Rights	Theory	3	3
IBP505	Environmental Biology and Human Rights	Practical	2	0
IBIP501	Mini Project		2	0
Total			25	15

Semester VI

COURSE CODE	COURSE TITLE	COURSE TYPE	HRS / WEEK	TOTAL CREDITS
IBT601	Plant reproduction & breeding	Theory	3	3
IBT602	Animal reproduction & breeding	Theory	3	3
IBT603	Molecular Biology	Theory	3	3
IBT604	Research Methodology	Theory	2	1
IBP601	Plant reproduction & breeding	Practical	2	2
IBP602	Animal reproduction & breeding	Practical	2	2
IBP603	Molecular Biology	Practical	2	2
IBIP601	Mini project		3	4
IBT605	Occupational Biology	Theory	3	3
IBP605	Occupational Biology	Practical	2	2
Total			25	25

Semester VII

COURSE CODE	COURSE TITLE	COURSE TYPE	HRS / WEEK	TOTAL CREDITS
IBT701	Pathology	Theory	5	4
IBT702	Biomedical Sciences	Theory	5	4
IBT703	Microbiology and Immunology	Theory	5	4
IBT704	Systems Biology	Theory	4	3
IBP701	Pathology	Practical	2	2
IBP703	Microbiology and Immunology	Practical	2	2
IBP702	Biomedical Sciences and Systems Biology	Practical	2	1
Total			25	20

Semester VIII

COURSE CODE	COURSE TITLE	COURSE TYPE	HRS / WEEK	TOTAL CREDITS
IBT801	Genomics & Proteomics	Theory	5	4
IBT802	Animal Molecular Physiology	Theory	5	4
IBT803	Plant Molecular Physiology	Theory	5	4
IBT804	Genetic Engineering	Theory	4	3
IBP801	Genomics & Proteomics	Practical	2	2
IBP802	Animal Molecular Physiology and Plant Molecular Physiology	Practical	2	2
IBP803	Genetic engineering	Practical	2	1
Total			25	20

Semester IX

COURSE CODE	COURSE TITLE	COURSE TYPE	HRS / WEEK	TOTAL CREDITS
IBT901	Plant and Animal Biotechnology	Theory	5	4
IBT902	Elective 1- Nano Biotechnology	Theory	5	4
IBT903	Elective 2- Advanced Bioinformatics	Theory	5	4
IBT904	Elective 3- Green Biotechnology	Theory	4	3
IBT905	Elective 4-Bioprocess Technology			
IBT906	Elective 5- Biosafety, Bioethics and IPR			
IBT907	Elective 6- Medical Microbiology			
IBP901	Biotechnology	Practical	2	2
IBP902	Elective 1	Practical	2	1
IBP903	Elective 2 and Elective 3	Practical	2	2
Total			25	20

Semester X

COURSE CODE	COURSE TITLE	COURSE TYPE	HRS / WEEK	TOTAL CREDITS
IBIP110	Dissertation	Practical		20
IBVVP111	Comprehensive Viva	Practical		
Total				20