

# KANNUR UNIVERSITY

## (Abstract)

Regulation for Integrated M.Sc . Computer Science (Artificial Intelligence & Machine Learning) - New Generation Course offered at NAS College, Kanhangad - Implemented w.e.f 2020 admission onwards- Orders issued

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### ACADEMIC C SECTION

Acad/C2/16586/2021

Dated: 31.05.2021

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Read:-1.GO (Ms) No. 389/2020/HEDN dated 05/11/2020

2. Minutes of the meeting of the Syndicate held on 17/11/2020 Vide Item No. 2020.550
3. U.O No. Acad/A3/389/NEW COURSE/2020-21 dated 23/12/2020
4. Minutes of the meeting of CSMC held on 20/11/2020
5. Regulation submitted by the Curriculum Syllabus Monitoring Committee on 15/04/2021
6. Letter No. Acad C2/16586/NGCI/2021 Dated 29.04.2021
7. Remarks from the Dean, Faculty of Technology Dtd. 28.05.2020
8. Order of the Vice-Chancellor dated 31.05.2021

### ORDER

1. As per paper read (1) above, sanction was accorded by the Government to start New Generation UG/PG courses in 15 Govt/Aided Colleges under Kannur University, during the academic year 2020-21.
2. Subsequently, the meeting of the Syndicate as per paper read (2) above resolved to start the newly sanctioned UG/PG Programmes in Govt/Aided Colleges under Kannur University, during the academic year 2020-21.
3. Accordingly provisional affiliation was granted for conducting New Generation Course Integrated M.Sc. Computer Science (Artificial Intelligence & Machine Learning) Programme at Nehru Arts & Science College, Kanhangad in the academic year as per paper read (3).
4. The Curriculum syllabus monitoring Committee was entrusted with preparing the draft regulation for the aforesaid programme as per paper read (4) above.
5. Accordingly, the Convener Curriculum Syllabus Monitoring Committee submitted the draft Regulation for Integrated M.Sc. Computer Science (Artificial Intelligence and Machine Learning) programme as per paper read (5).
6. Further, the Dean Faculty of Technology was requested vide paper read (6) to scrutinise the draft Regulation and he approved the same for implementation as per paper read (7).
7. The Vice-Chancellor, after considering the matter in detail and in exercise of the power of Academic Council conferred under section 11(1) Chapter III of Kannur University Act 1996, accorded sanction to implement the Regulation for Integrated M.Sc. Computer Science (Artificial Intelligence & Machine Learning) offered at Nehru Arts & Science College Kanhangad, with effect from 2020-21 admission, subject to reporting to the Academic

Council.

8. The Regulation for Integrated M.Sc. Computer Science (Artificial Intelligence & Machine Learning) is uploaded on the university website ([www.kannuruniversity.ac.in](http://www.kannuruniversity.ac.in))
9. Orders are issued accordingly.

Sd/-

**BALACHANDRAN V K**  
**DEPUTY REGISTRAR (ACAD)**  
For REGISTRAR

To: The Principal Nehru Arts & Science College, Kanhangad

Copy To: 1. The Examination Branch (through PA to CE)  
2. PS to VC/PA to PVC/ PA to Registrar  
3. DR/AR Academic  
4. The Computer Programmer (for uploading website)  
6. SF/DF/FC



Forwarded / By Order

  
SECTION OFFICER



**REGULATIONS FOR INTEGRATED M.Sc. PROGRAMME IN COMPUTER SCIENCE**  
**(ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING) FOR AFFILIATED**  
**COLLEGES, 2020**

**1. TITLE, APPLICATION & COMMENCEMENT**

- 1.1 These Regulations shall be called 'The Kannur University Regulations for **Integrated M.Sc. in Computer Science (Artificial Intelligence and Machine Learning)** programme under the Choice Based Credit and Semester System (CBCSS) in Affiliated Colleges
- 1.2 The Regulation provided herein shall apply for **Integrated M.Sc. programme in Computer Science (Artificial Intelligence and Machine Learning), coming under the Faculty of Technology**
- 1.3 These regulations shall come into force with effect from Academic Year 2020-2021

**2. DEFINITIONS**

**In this regulation, unless the context otherwise requires**

- 2.1 '**Academic Week**' – For the first 6 semesters this shall be a unit of five working days in which distribution of work is organized from day one to day five (normally, Monday to Friday), with five contact hours of one hour duration on each day. A sequence of 18 such academic weeks constitutes a semester. 7 to 10 semesters, shall consist of minimum 90 working days /semester, including examination days, distributed over a minimum of 18 weeks each for 5 working days in a week.
- 2.2 '**College Co-ordinator**' is a teacher nominated by the college council to co-ordinate the effective running of programme and the process of continuous evaluation undertaken by various departments within the college. She/ He shall be nominated to the College level Grievance Redressal Cell.
- 2.3 '**College Council**' means the body of all Heads of the Departments and elected members among teachers as per the Kannur University Statutes
- 2.4 '**Complementary Elective Course**' (CE/C) means a course which is generally related to the core course which supplements the core course, (traditionally referred to as complementary course)

- 2.5 **'Common course'** means a course that comes under the category of courses, including compulsory English Common Courses(ECC) and Additional Common Courses(ACC) and a set of General Awareness Courses(GAC) applicable for Language Reduced Pattern (LRP) programmes, a selection of which is compulsory for all students undergoing undergraduate programmes.
- 2.6 **'Core course'**(CC) means a compulsory course in a subject related to a particular programme which may include Discipline Specific Elective Course(s) (DSEC).
- 2.7 **'Course'** means a segment of subject matter to be covered in a semester.
- 2.8 **Course teacher(s):** Teacher(s) in charge of a particular course as decided by the department council.
- 2.9 **'Credit'** (C) is a unit of academic input measured in proportion to weekly contact hours /course contents assigned to a course.
- 2.10 **'Credit Point'** (CP) of a course is the value obtained by multiplying the grade point (GP) by the credit (C) of the course:  $CP = GP \times C$ .
- 2.11 **Credit Point (CP) of a semester** is the product of SGPA of that semester and the total credit load of that semester.
- CP=SGPA x Credit of the semester**
- 2.12 **Cumulative Grade Point Average'** (CGPA) is the value obtained by dividing the sum of credit points in all the courses taken by the student for the completed semesters by the total number of credits acquired so far and shall be rounded off as follows,  
If the student exits after 6<sup>th</sup> semester, credit shall be rounded off to three decimal places and if completes the 10<sup>th</sup> semester, rounded off to two decimal places.
- CGPA= Sum of the Credit Points secured in completed semesters/ Total Credit for the completed semesters**
- 2.13 **'Department'** means any teaching department in a College offering a programme/course of study approved by the university, as per the Statutes and Act of the university.
- 2.14 **'Department Co-ordinator'** is a teacher nominated by the Department Council to co-ordinate the continuous evaluation process undertaken in that department.
- 2.15 **'Department Council'** means the body of all teachers of a department in a college
- 2.16 **'Duration of programme'** means the time period required for the conduct of the programme. The duration of **Integrated M.Sc. programme in Computer Science (Artificial Intelligence and Machine Learning)** programmeshall be 10 semesters distributed in a period of 5 academic years.
- 2.17 **Faculty Adviser'** means a teacher from the parent department nominated by the Department council, who will advise the students in the academic matters and in the choice of Generic Elective course.



- 2.18 General Awareness Course'** means a course that comes under the category of those programmes in which English Common Course and Additional Common Course are limited to first and second semesters (compulsory for all students undergoing LRP /similar programmes).
- 2.19 Generic Elective course'** means a course which can be opted by a student in fifth semester of the programme at her/his choice from other disciplines apart from her/his Core subject (GEC) , (traditionally referred to as open course)
- 2.20 Grade Card** means the official record of student's performance, awarded to her/him. 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**" means point given to a grade on the scale as provided under clause 8.  
**Grade Point = (Total marks awarded / Total Maximum marks) x 10**
- 2.21 Improvement course'** is a course registered by a student for improving her/his performance in that particular course.
- 2.22 Letter Grade'** or simply 'Grade' in a course is a letter symbol (A+, A, B, C, D, E, and F).Grade means the prescribed alphabetical grade awarded to a student based on her/his performance in various examinations. The Letter grade that corresponds to a range of CGPA is given in clause 8
- 2.23 'Overall Grade Point Average'** (OGPA) is the value obtained by dividing the sum of credit points in all the semesters taken by the student for the entire programme by the total number of credits in the entire programme and shall be rounded off as follows, if the student exits after 6<sup>th</sup> semester, credit shall be rounded off to three decimal places and if complete the 10<sup>th</sup> semester, rounded off to two decimal places.
- 2.24 Parent Department'** means the Department which offers a particular degree programme.
- 2.25 'Programme'** means the entire course of study and examinations for the award of degree.
- 2.26 Repeat course'** is a course that is repeated by a student in a semester for want of sufficient attendance. She/he can repeat the course whenever it is offered again.
- 2.27 'Semester'** means a term consisting of 90 working days including examination days.
- 2.28 Semester Grade Point Average'** (SGPA) is the value obtained by dividing the sum of credit points obtained by a student in various courses taken in a semester by the total number of credits in that semester. SGPA shall be rounded off to three decimal places. SGPA determines the overall performance of a student at the end of a semester.  
**SGPA = Sum of the Credit Points of the courses for the semester/ Sum of the Credits for the Semester**
- 2.29 Strike off the roll':** means removing a student who is continuously absent for 14 days without sufficient reason and proper intimation to the Principal of the college from the roll after following the procedure prescribed.

- 2.30 Words and expressions used and not defined in these regulations, but defined in the Kannur University Act, Statutes and Ordinances shall have the meaning respectively assigned to them in the Act, the Statutes and the Ordinances.

### 3. PROGRAMME DURATION

- 3.1 The integrated M.Sc. programme in **Computer Science (Artificial Intelligence and Machine Learning)** is a five-year programme with an exit option after the completion of VI Semesters (if inevitable and only after getting permission from the university). Lateral entry into the M.Sc. programme will also be allowed. Candidates who successfully complete first six semesters may apply for exit option. Candidates on successful completion of first six semesters will be awarded B.Sc. Degree in **COMPUTER SCIENCE (Artificial Intelligence and Machine Learning)**. Candidates who successfully complete first six semesters and thereafter continue the programme and successfully complete the remaining four semesters, will be awarded Integrated M.Sc. Degree in **COMPUTER SCIENCE (Artificial Intelligence and Machine Learning)**. If the candidate gets admission through lateral entry, candidate who successfully complete the four semesters will be awarded M.Sc. Degree in **COMPUTER SCIENCE (Artificial Intelligence and Machine Learning)**.
- 3.2 Admission taken at the first year shall be admission to "Five Year Integrated programme and students will not be required to take re-admission at any stage of the course unless the student discontinues the course after 3<sup>rd</sup> year.
- 3.3 Eligible candidates who are registered for a semester examination alone will be promoted to the subsequent semesters. However only those candidates who pass first six semesters will be allowed to register for 10<sup>th</sup> semester examinations.
- 3.4 There shall be a provision for readmission of students already registered under Kannur University Regulations for **Integrated M.Sc. Computer Science (Artificial Intelligence and Machine Learning)** programme under the Choice Based Credit and Semester System (CBCSS) subject to the conditions that
- i) There should be a gap of at least one semester for readmission
  - ii) The Candidate seeking readmission to a particular semester should have registered for the previous semester should have registered for the previous semester examination
  - iii) There should not be any change in the scheme and syllabus. If there is change in the scheme and syllabus, readmission may be given in consultation with the Board of Studies concerned and Examination Branch.
  - iv) For readmission, the vacancy should be within the statutory limit.

- v) Re admission shall be made within 14 days of the commencement of classes

3.5 The course framework provides additional entry point for those students, who have discontinued his/her studies on obtaining B.Sc. degree from integrated programme and later intend to successfully complete the entire programme. Such candidates will be permitted to join 7<sup>th</sup> semester of the Programme along with subsequent batch to complete Master Degree if the scheme and syllabus remain same, subject to the availability of the vacancy.

#### 4. ELIGIBILITY, ADMISSION AND REGISTRATION

4.1 Eligibility for admissions and reservation of seats for **Integrated M.Sc.Computer Science (Artificial Intelligence and Machine Learning)** Programme shall be according to the rules framed by the University from time to time. No student shall be eligible for admission to the Programme unless she/ he have successfully completed the examination conducted by a Board/University at the +2 level of schooling or its equivalent, as recognized by the University. Relaxation of marks in qualifying examinations as per rules

for SC/.ST – pass minimum, SEBC - 5% relaxation in the qualifying examination from the prescribed minimum for admission.

4.2 Index Mark for Admission shall be the sum total of Marks for the Higher Secondary or equivalent and the subject marks secured for Computer Science. The Degree awarded to B.Sc. and **Integrated M.Sc. Computer Science (Artificial Intelligence and Machine Learning)** Programme shall be equivalent to the B.Sc. and M.Sc. degree in Computer Science for academic and professional purpose.

4.3 The maximum age limit for admission to the UG programme shall be 23 years as on 1<sup>st</sup> June of the academic year. For SC/ST candidates the age limit is 25 years as on 1<sup>st</sup> June of the academic year.

4.4 If any vacancy arises due to discontinuation or exit option after VI Semester, fresh admission shall be allowed to VII semester, for candidates with Degree in BSc Computer Science, BSc I.T or BCA, subject to University Admission regulations.

4.5 The maximum number of students to be admitted to the Programme shall be limited 24students.

4.6 Depending up on the academic and physical facilities available in the college and institution, the university may allow the college and institution to admit a certain number of students of all semesters except first semester, from other institutions by

college transfer or inter university transfer within a period of two weeks from the date of commencement of the semester. The institutions and the candidate have to make ensure that scheme, syllabus and total credits of the programme in the complete semesters shall be same in both institutions. Inter collegiate transfer will be permitted to the students who pursue her/his study in the same core course opted for the programme and fee shall be refunded/remitted as per the Government rules. If the number of applicants are more than available vacancies, rank list should be prepared by the college or institution based on their merit and the applications are to be forwarded to the Registrar along with the rank list recommending the most eligible candidate. If the Scheme, syllabus and credit of the course are not compatible, college transfer shall not be allowed.

- 4.7 The College/ University shall publish a Prospectus listing all the programmes indicating Core and Complementary Elective course offered in various Departments during a particular semester.
- 4.8 There shall be a uniform **Academic cum Examinations calendar** approved by the University for the registration, conduct and scheduling of examinations, and publication of results. The Academic cum Examinations Calendar shall be complied with by all colleges and offices, and the Vice Chancellor shall have all powers necessary for this purpose.
- 4.9 Each student shall register for the courses she/he proposes to take in a semester through 'online', in consultation with the Faculty Adviser

## **5. REQUIREMENT OF ATTENDANCE AND PROGRESS**

- 5.1 A student shall be permitted to appear for the semester examination, only if she/he secures not less than 75% attendance in all courses of a semester put together. Others have to repeat the semester along with the next batch, unless they make up the shortage of through condonation. Condonation of shortage of attendance for a maximum of 14 days in a semester subject to a maximum two times during the whole period for the first six semesters and 12 days of the working days in a semester subject to a maximum of two times during period for next four semesters.
- 5.2 Records of attendance shall be maintained by the concerned Department for a period of six years and the attendance register shall be made available for verification, as and when required by the University.
- 5.3 Only those students who are registered for the university examination with eligible attendance (including those under condonable limit) alone are eligible to be promoted to next semester. Students who have attendance in the prescribed limit but could not register for examination are eligible to move to the next semester after availing token



registration. The candidates shall apply for token registration within two weeks of the commencement of the next semester. Token registration is allowed only once during the entire programme. It shall be the duty of the Principal to ensure that only eligible candidates are promoted to the next semester. The Vice Chancellor shall be competent to cancel the ineligible promotion and impose penalty on the Principal.

## 6 PROGRAMME STRUCTURE

- 6.1 Each semester shall consist of 90 instructional days having 5 hours per day for lectures, seminars, debates, test papers and project instruction
- 6.2 **Courses:** The programme shall include four types of courses, viz., Common Courses (Code A), Core courses (Code B), Complementary elective courses (Code C) and Generic Elective course (Code D).
- 6.3 **Course code:** Each course shall have a unique alphanumeric code number, which includes abbreviation of the semester number (1 to 6) in which the course is offered, the code of the course (A to D), of the subject in three letters and the serial number of the course (01, 02, 03 etc.). Course code will be centrally generated by the Board of Studies of the university. For example, 2A03ENG represents a Common English course of serial number 03 offered in the second semester and 2B02PHY. The letter "I" is to be prefixed in addition to the normal computer Science code to distinguish the integrated course. Represents Core course of serial number 02 offered in the second semester in Physics programme. *A particular complementary elective course in a semester should have same code with same credit even though it is offered for different programmes.*
- 6.4 For the first six semesters, candidates have to undergo the prescribed course of study leading to the award of BSc degree with courses at Graduate level, and subsequent 4 semesters leading to Integrated MSc Degree in Computer Science (Artificial Intelligence and Machine Learning), prescribed by the University in , as follows:

### TOTAL CREDIT FOR FIRST SIX SEMESTERS = 120

COURSE	CREDITS
Common Course – English (Four courses in first two semesters)	14
Common Course – Additional Common Course ( Two courses in first two semesters)	08
General Awareness Course (Four courses in III and IV semesters)	12
Complementary Elective- I (Four courses in first four semesters)	12
Complementary Elective- II (Four courses in first four semesters)	12

semesters)	
General Elective Course ( One courses in fifth semester)	02
Core Course	60
<b>Total credit for first six semesters</b>	<b>120</b>

Number of courses and their respective credits can be decided by the respective Board of Studies (UG Board of Studies), subject to the existing workload.

**TOTAL CREDIT FOR THE LAST FOUR (VII to X) SEMESTERS = 80**

<b>COURSE</b>	<b>CREDITS</b>
Core Course(Courses in VII, VIII and IX semesters)	74
Elective Courses( Two Courses in X semester )	06
<b>Total credit for VII to X semesters</b>	<b>80</b>

Number of courses and their respective credits can be decided by the PG Board of Studies (Computer Science).

If the candidate is taking exit option the total credits for the programme (BSc) is 120. If the candidate gets admission through lateral entry, the total credits for the programme (MSc) is 80, otherwise the total credits for the programme ( Integrated MSc) is 200(120 + 80)

Grace Mark shall be awarded as per the existing UG regulation for the first six semesters and PG regulation for the remaining semesters.

## **7. EXAMINATION,EVALUATION AND GRADING**

- 7.1 There shall be University examinations at the end of each semester. A candidate who fails to register for University Examination shall not be permitted to move to next semester
- 7.2 **Practical** examinations shall be conducted by the University at the end of each semester. If necessary, it shall be conducted before the End Semester Evaluation.
- 7.3 **External Viva-voce**, if any, shall be conducted along with the practical examination/project evaluation.
- 7.4 **Evaluation** - The evaluation scheme for each course of all semesters shall contain two parts:
  - i) Continuous Evaluation (CE) , ii) End Semester Evaluation ( ESE)

20% weightage shall be given to the Continuous Evaluation (CE) and 80% weightage shall be for the End Semester Evaluation (ESE) for the first six semesters.



20% weightage shall be given to the Continuous Evaluation (CE) and 80% weightage shall be for the End Semester Evaluation (ESE) for Seventh to Tenth Semesters.

There shall be a University examination at the end of each semester. Each written course carrying 50 Marks is divided into 40 Marks for written examination and 10 Marks for internal assessment from I to VI Semesters.

For semesters from VII<sup>th</sup> to X<sup>th</sup>, each course carrying 100 Marks is divided into 80 Marks for written examination and 20 Marks for internal.

#### **7.5 Continuous Evaluation (CE)**

The continuous evaluation shall be based on a pre-determined transparent system involving any of the three components. For theory course: written test, assignments, seminars, Viva etc. For practical course lab involvement, records, Practical test etc. The three components and their respective weightages shall be as prescribed in the scheme and syllabus by the Board of Studies concerned. Attendance ***shall not be*** a component for Continuous Evaluation (CE) for 1 to 6 semesters.

Internal Assessment Marks for the CE from first to Sixth Semester in each written paper shall be distributed as follows:

- a) Test Paper – 5 Marks (Average of two test papers)
- b) Assignment – 2.5 Marks
- c) Seminar – 2.5 Marks

Internal Assessment Marks for the CE from Seventh to Tenth Semester in each written paper shall be distributed as follows:

- a) Attendance – 3 Marks (1.5 Marks for 75% of attendance and additional 0.5 Marks for every 5% attendance above 75%)
- b) Test Paper – 10 Marks (Average of two test papers)
- c) Assignment – 4 Marks
- d) Seminar / Debate – 3 marks

The marks for internal assessment shall be awarded by the Teacher in charge of each paper, countersigned by the HOD and Principal and forwarded to the University before the commencement of the written examination. A statement containing the marks awarded to every student as internal assessment in each paper shall also be published.

To ensure transparency of the evaluation process, the continuous evaluation marks awarded to the students in each component of each course in a semester shall be

notified on the notice board at least three days before the commencement of End Semester Evaluation. There shall not be any chance for improvement for Continuous Evaluation. Only the total CE marks awarded to a candidate in each course need be sent to university by the Principal of colleges concerned. The College shall maintain the academic record of each student registered for the course, with the details of the marks awarded to each component of Continuous Evaluation of courses with the signatures of the students, course teacher and HOD which shall be preserved in the college for a period of six years from the last date of the End Semester Examination of the semester concerned and shall be made available to the University for inspection as and when required. Complaints if any with regard to the Continuous Evaluation shall be submitted by the student to the Course Teacher first. If the student feels that justice is denied, she/he can submit appeal to Head of the Department and thereafter to the Principal of the College. The Department Council/ College Council shall consider the complaint and ensure that assessments are done by the teacher in a just and fair manner. In case the student is not satisfied with the decision at the college level, further appeal/complaints may be submitted by the student to the Controller of Examinations, Kannur University for being placed before the University Level Committee for consideration.

#### **7.6. End Semester Evaluation (ESE)**

The End Semester Evaluation of theory courses are to be conducted with question papers set by external experts. The evaluation of the answer scripts shall be done by examiners appointed by the University based on a well-defined Scheme of valuation and answer keys provided by the University. After the End Semester Evaluation only marks are to be entered in the answer scripts. Marks secured for End Semester Evaluation only need be communicated to University. **All other calculations including grading are done by the university.** The End Semester Evaluation of practical courses shall be conducted by two examiners (one internal and one external) appointed by the University. All question papers shall be set by the university.

#### **7.7 Project/Dissertation Work**

Students have to submit a Project at the end of VI and X Semester.

The project VI Semester should be based on field visit conducted to Institutions and Places related to the Discipline. All students are to carry out a project work either individually (X Semester) or in a group (VI Semester) of not more than Two, under the supervision of a Teacher. The project work may commence in the V semester and IX semester respectively. The report of the project shall be submitted to the College in duplicate before the completion of the VI and X semester.

As part of the course, instructed to conduct a compulsory field visit to

intuitions and places related to the Discipline. The report of the field visit should be submitted to the Head of the Department.

The Board of Examiners appointed by the University shall evaluate the report of the Dissertation/project work. The viva-voce based on the project report shall be conducted individually.

The maximum marks for the evaluation of the project shall be 100 marks is divided into 80 Marks for ESE examination and 20 Marks for internal assessment for VI Semester. The maximum marks for the evaluation of the project shall be 100 marks is divided into 75 Marks for ESE examination and 25 Marks for internal assessment for X Semester.

Minimum Pass percentage of project evaluation is same as the pass percentage of other courses)

The distribution of marks among the components of project evaluation. Are as follows

#### VI Semester

SLNo	Description	Max. Marks ESE	Max. Marks CE
1	Introduction(Statement of the problem, objectives and significance of the study)	05	2
2	Review of literature and discussion of research methodology	10	2
3	Content analysis (Chapters)	10	2
4	Discussion of findings and conclusion	15	2
5	Language, style and Grammar	05	1
6	Bibliography	05	1
7	Project Presentation	15	5
8	Viva Voce based on project	15	5
	Grand Total	80	20

#### X Semester

SLNo	Description	Max. Marks ESE	Max. Marks CE
1	Introduction(Statement of the problem, objectives and significance of the study)	05	2
2	Review of literature and discussion of	05	3

	research methodology		
3	Content analysis (Chapters)	10	3
4	Discussion of findings and conclusion	15	5
5	Language, style and Grammar	05	1
6	Bibliography	05	1
7	Project Presentation	15	5
8	Viva Voce based on project	15	5
	Grand Total	75	25

The component for the project evaluation may be modified by concerned Board of Studies concerned.

Attendance is considered for CE in VII to X semesters. Attendance component need not to be included in the CE marks distribution for Project also.

## 7.8 Improvement

i) Improvement of courses in a particular semester can be done only once. The student shall avail the improvement chance in the succeeding year along with subsequent batch.. If the candidate fails to appear for the improvement examination after registration, or if there is no change in the results of the improvement examination, the mark/grade obtained in the first appearance will be retained. Candidates may be permitted to cancel their improvement registration/appearance if applied before the publication of results, and after that application for cancellation shall not be permitted. To avoid a situation of undergoing two courses of study during the same academic year, those candidates who intend to avail improvement chance after successful completion of the Programme, shall surrender their Grade Cards and submit their Transfer Certificate to the University along with application for registration for examination. Transfer Certificate shall be returned to the students after releasing the hall tickets and fresh Grade Card shall be issued incorporating the improvement results.

ii) There shall be no improvement chance for continuous evaluation, project/viva voce/practical. The internal marks already obtained will be carried forward to determine the new grade/mark in the improvement examination. In an instance of inability of obtaining a minimum pass marks, the project work shall be re- done and the report may be re-submitted along with subsequent exams, through parent department.

There shall be no supplementary examinations. For reappearance/improvement the students shall appear along with students of subsequent admissions as and when the examinations are conducted by the University.

## 8. GRADING

- 8.1 Indirect Grading System based on the scale specified is used to evaluate the performance of students.
- 8.2 Indirect grading system shall be adopted for the assessment of a student's performance in a course(both CE and ESE) Each course is evaluated by assigning marks with a letter grade (A+, A, B, C, D, E and F) to that course by the method of indirect grading. Mark system is followed instead of direct grading for each question. For each course in the semester, letter grade, grade point and percentage of marks are introduced in the indirect grading system with scale as per guidelines given below:

<b>% of Marks (CE+ESE)</b>	<b>Grade</b>	<b>Interpretation</b>
<b>90 and above</b>	<b>A+</b>	<b>Outstanding</b>
<b>80 to below90</b>	<b>A</b>	<b>Excellent</b>
<b>70 to below80</b>	<b>B</b>	<b>Very Good</b>
<b>60 to below 70</b>	<b>C</b>	<b>Good</b>
<b>50 to below 60</b>	<b>D</b>	<b>Satisfactory</b>
<b>40 to below50</b>	<b>E</b>	<b>Pass</b>
<b>Below 40</b>	<b>F</b>	<b>Failure</b>

- 8.3 Evaluation (both CE and ESE) is carried out using Mark system. The grading on the basis of a total CE and ESE marks will be indicated for each course. Each letter grade is assigned a 'Grade point' (GP) which is a point given to a grade on the scale as envisaged under clause 8.2 and is obtained using the formula:

$$\text{Grade Point} = (\text{Total marks awarded} / \text{Total Maximum marks}) \times 10.$$

- 8.4 'Credit point' (CP) of a course is the value obtained by multiplying the grade point (GP) by the credit (C) of the course

$$\text{CP} = \text{GP} \times \text{C}$$

A minimum of grade point 4 is needed for the successful completion of a course.

- 8.5 A candidate securing not less than 40% of aggregate marks of a course with not less than 40% in End Semester Evaluation (ESE) shall be declared to have passed the course



.A minimum of grade point 4 with letter grade E is needed for the successful completion of a course.

- 8.6 Appearance for Continuous evaluation (CE) and End Semester Evaluation (ESE) are compulsory and no grade shall be awarded to a candidate if she/he is absent for CE/ESE or both.
- 8.7 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.

**SGPA = Sum of the Credit Points of all courses in a semester / Total Credits in that semester**

**Semester Grade Point Average (SGPA)** is the value obtained by dividing the sum of credit points obtained by a student in the various courses taken in a semester by the total number of credits in that semester. SGPA determines the overall performance of a student at the end of a semester.

For the successful completion of a semester, a student should pass all courses in that semester. However, a student is permitted to move to the next semester irrespective of SGPA obtained. SGPA shall be rounded off to three decimal places.

- 8.8 The **Cumulative Grade Point Average (CGPA)** of the student is calculated at the end of each semester. The CGPA of a student determines the overall academic level of the student in each stage of the programme. CGPA can be calculated by the following formula:

**CGPA = Sum of Credit Points of all completed semesters / Total Credits acquired**  
CGPA shall be rounded off to three decimal places.

- 8.9 At the end of the programme, the over all performance of a candidate is indicated by the Overall Grade Point Average. **Overall Grade Point Average (OGPA)** of the student is calculated at the end of the programme. The OGPA of a student determines the overall academic level the student in a programme and is the criterion for classification and ranking the students. OGPA can be calculated by the following formula

**OGPA = Sum of Credit Points obtained in all semesters of the programme / Total Credits.**

If the candidate is taking exit option the total credits for the programme (BSc) is 120. If the candidate gets admission through lateral entry, the total credits for the programme (MSc) is 80, otherwise the total credits for the programme (Integrated MSc) is 200  
(120 + 80)



OGPA shall be rounded off to three decimal places.

An overall letter grade for OGPA for the entire programme shall be awarded to a student after completing the entire programme successfully. Over all letter grade based on OGPA and conversion of Grades into classification shall be in the following way.

Grade range OGPA	Overall Letter Grade	Classification
9 – 10	A+	First class with Distinction
8 - 8.999	A	
7 - 7.999	B	First class
6 - 6.999	C	
5 - 5.999	D	Second class
4 - 4.999	E	Pass
Below 4	F	Fail

8.10 The Percentage of marks based on OGPA is calculated by multiplying them by 10.

**Percentage in two decimal places = [OGPA in three decimal places] x 10%**

8.11 Those candidates who pass all the courses prescribed for a programme shall be declared to have successfully completed the programme and eligible for the degree. Minimum OGPA required for the successful completion of the degree programme is 4. In the event a candidate fails to secure pass in any course in a semester, consolidation of SGPA and CGPA will be made only after obtaining pass in the failed course in the subsequent appearance.

8.12 A student who fails to secure a minimum mark for a pass in a course is permitted to write the examination along with the subsequent batch.

8.13 **Moderation:** Moderation shall be decided by the concerned Board of examiners subject to the Statistics of marks made available from the Examination branch and as per the prescribed guidelines.

8.14 **Revaluation:** In the new system revaluation is permissible. The prevailing rules and regulations of revaluation are applicable to this programme also.

## 9. PUBLICATION OF RESULTS

The results of the Tenth semester examination shall be published only after the candidate has passed all the previous semester examinations.

## 10. GRADE CARD

10.1 The University shall issue to the students grade/marks card (by online) on completion of each semester, which shall contain the following information:

- a) Name of University
- b) Name of college
- c) Month and Year of examination
- d) Title of the Programme
- e) If the candidate is taking exit option he/she may be issued a certificate in B.Sc. Computer Science (Artificial Intelligence and Machine Learning) If the candidate gets admission through lateral entry, he/she may be issued certificate in M.Sc. Computer Science (Artificial Intelligence and Machine Learning). If the candidate is successfully completed ten semesters, he/she may be issued certificate in Integrated M.Sc. Computer Science (Artificial Intelligence and Machine Learning)
- f) Semester concerned
- g) Name and Register Number of student
- h) Course Code, Title and Credits of each course opted in the semester
- i) Continuous Evaluation marks, End Semester Evaluation marks, total marks, Grade point (G), Credit point and Letter grade in each course in the semester
- j) The total credits, total credit points and SGPA in the semester (corrected to three decimal places)
- k) Percentage of total marks and CGPA separately.

10.2 The **final Grade/mark Card** issued at the end of the 6<sup>th</sup> semester and 10<sup>th</sup> semester shall contain the details of all courses taken during the respective period of entire programme including those taken over and above the prescribed minimum credits for obtaining the degree. The final grade card after six and ten semester shall show the percentage of total marks, OGPA (corrected to three decimal places) and the overall letter grade of a student for the entire programme. The final grade/mark card shall also include the grade points and letter grade of common course, core courses, complementary elective courses and generic elective courses separately.

## 11 AWARD OF DEGREE

For the successful completion of all the courses (common, core, complementary elective and generic elective courses) a candidate has to secure minimum E grade (OGPA 4 to 4.9)

## 12. RANKING

12.1 Ranking shall be done on the basis of the OGPA obtained by the candidate in the whole examination (Ten semesters) passed in the first chance.

12.2 Candidates taking exit after successful completion of first 6 semesters shall not be considered for Ranking along with other UG programmes.

- 12.3 Lateral entry candidates will not be considered for ranking.

### **13 TIME LIMIT FOR THE COMPLETION OF PROGRAMME**

- 13.1 A candidate who is offered Integrated M.Sc. in **Computer Science (Artificial Intelligence and Machine Learning)** programme shall be required to complete the programme within a period of eight years after joining the programme.
- 13.2 The maximum time limit to complete the course for a candidate taking exit on completion of 6 semesters shall be 6 years after joining the programme
- 13.3 The maximum time limit to complete the course for Lateral entry candidates joining in 7<sup>th</sup> semester, shall be 4 years after joining the programme

### **14. MONITORING OF THE PROGRAMME AND GRIEVANCE REDRESSAL MECHANISM**

- 14.1 **College level:** Every programme conducted under the Choice Based Credit and Semester System in a College shall be monitored by the College Council. The College shall form a Grievance Redressal Committee in each department comprising of course teacher and one senior teacher as members and the Head of the department as chairperson. This committee shall address all grievances relating to the continuous evaluation marks of the students. There shall be a college level Grievance Redressal Committee comprising of staff advisor of College Union as Convener, Chairperson of College Union, General Secretary of College Union, two senior teachers and two members elected by the College Council from among the teachers of the College as members and Principal as Chairperson.
- 14.2 **University level:** The University shall form a Grievance Redressal Committee under the chairmanship of Pro-Vice Chancellor as the Chairperson with Conveners of Standing Committees of Examinations, and Student Welfare, Controller of Examinations as Convener, One Senior officer in Examination branch not below the rank of Joint Registrar/Deputy Registrar, Director of Student Services, University Union Chairperson, University Union General Secretary as members to consider the complaints/appeal from students with regard to Continuous Evaluation or any other matter coming under the purview of these regulations

## 15. 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 make provisions by order to address any issues arising out of the implementation of these regulations for solution of which no provisions are explicitly provided in these regulations. All such decisions taken by the Vice Chancellor shall be reported to the Academic Council and the Syndicate.