R1. CREDIT SYSTEM AND MODE OF EVALUATION

1. **Credit System and Mode of evaluation**

   All the courses in the University and affiliated colleges shall be credit based and the evaluation will be grade based. Credit based grading system is a systematic way of describing an educational programme by attaching credits to its components. The definition of credits may be based on different parameters, such as student workload, learning outcomes and contact hours.

   It is a student-centric system based on the **student workload** required to achieve the objectives of a programme. It should facilitate academic recognition of the courses and mobility of the students.

   Credits assignment is based on the principle that Credits can only be obtained after successful completion of the work required and appropriate assessment of the learning outcomes achieved.

   Student workload consists of the time required to complete all prescribed learning activities such as attendance at lectures/practical, seminars, projects, etc. Credits are allocated to all the educational components of a study programme and indicate the quantity of work each component requires to achieve its specific objectives.

   Evaluation is an important component of any teaching-learning process. The University gives emphasis on continuous evaluation with considerable freedom to the teacher in deciding the mode of evaluation of the students. The performance of the student is documented by a **grade** at the end of the semester. The grading scale ranks the students on a statistical basis. Therefore, statistical data on student performance in his/her class is a prerequisite for applying the grading system.

2. **Course Credits**

   In general, a certain quantum of work measured in terms of **credits** is laid down as the requirement for a particular degree. The student acquires credits by passing courses every semester, the amount of credits associated with a course being dependent upon the number of hours of instruction per week in that course.

   There are mainly two types of courses in the University - lecture courses and laboratory courses. Lecture courses consist of lecture (L) and tutorial (T) hours. Laboratory courses consist of practical (P) hours. As per the AICTE norms, the credit (C) for a course is dependent on the number of hours of instruction per week in that course, as given below:
   (1) 1h/week of lecture (L) or tutorial (T) = 1 credit
   (2) 2h/week of Practical's (P) = 1 credit
   (3) Credit (C) for a theory course = No. of hours of lectures per week + No. of hours of tutorials per week = L + T
   (4) Credits (C) for a Laboratory course = ½ x No. of hours of laboratory course per week

   Credits will be assigned to Industrial Training, Seminar, Projects and other mandatory course requirements also and these will be mentioned in the respective syllabi. There may be some non-credit requirements. A student is required to earn credits as mentioned in the syllabus.

3. Evaluation

3.1 The weightages of different modes of assessments shall be as under.

	In-Semester evaluation			
	Continuous mode(CA)	Mid Semester Exam	End-Semester-Exam	Components of continuous mode
Theory	20%	20%	60%	Quizzes, class tests (open or closed book but minimum 2 in the semester if only mode of CA), home assignments, group assignments, *viva-voce* discussions
Practical's	60%	-	40%	Attendance, completion of experiments *viva -voce*, journal submission, assignments, project, experiments, announced tests

3.2. In-Semester Evaluation

a) It is expected that the teacher would conduct at least two formal assessments of the students under the continuous assessment mode in a Semester.
b) The teacher will announce at the beginning of the respective course the method of conducting the assessments under the continuous mode and the assignment of marks and inform the same to the Director- Academics or Dean in University or Principal/HoD in affiliated college in the first week of the semester. The same may be also displayed on the University/ College Portal.
c) The teacher shall keep the record of the continuous assessment of a class at least for three years and produce it to the Principal of the college or Director-Academics, if needed.
d) In-semester performance of all students, both continuous assessment and mid-semester examination should be displayed on notice board as well on College / University Portal and sent to the academic office of the University/ College by the teacher before the end-semester examination.
e) For the theory courses, there will be one Mid-semester test for each course to be held as per the schedule fixed in the Academic Calendar of the University/college, preferably in the eighth week of the semester
f) A candidate who has not appeared for the in-semester continuous tests and/or mid-term examination in one or more subjects shall be considered to have not completed the course and will have to re-register for the respective subjects/course in the following year.

3.3. End-Semester examination
The semester end examination will cover the full syllabus of the course and will be conducted as per the University time table at the end of each semester.

3.4 Passes and Fail

(revised as per the Item 8 of the Minutes of the Academic Council Meeting held on 19th August 2017)

(a) The candidates who obtain 40% and more marks in a subject head of the end semester examination **AND** 40% or more of the total marks of a subject head shall be deemed to have **passed** the respective subject head.

(b) The candidates who obtain less than 40% of marks in a subject head of the end semester examination and less than 40% the total marks of a subject head shall be deemed to have **failed** in the respective subject head **(Grade FF).**

3.5 Grades

(a) The performance of a student shall be documented by a **Letter grade.** Each letter grade has a **Grade point** associated with it. The Grades and Grade points shall be assigned to each head of passing and both will be indicated in the mark-list of the semester examination.

(b) A teacher shall assign absolute marks to all the in-semester tests and the end-semester tests for the respective subject head. The teacher shall collate the marks in the mid-semester and continuous mode examinations, convert them to prescribed 20% and 20% mark, respectively and submit the same to the office.

(c) The total marks (continuous assessment + mid-semester + end-semester) of a candidate in a subject head are converted into a letter grade, based on the relative performance of the student in the class taking examination in the subject. The performance of the students who have passed the said subject shall be considered for the allotment of the relative grade on statistical basis.

Letter Grade	Grade Point
EX	**10**
AA	9.5
AB	9
BB	8.5
BC	8.0
CC	7.5
CD	7
DD	6.5
DE	6.0
EE	5

(d) The grades to be allotted in the case of students who fail or do not appear at the end-semester examination shall be as under

Letter Grade	Grade Point	Explanation
FF	0	The candidate fails in subject head. The candidate will be allowed to take end-semester repeat or subsequent examinations as per rule.

XX	0	(i) The candidate has not kept term for the subject head due to attendance less than requisite 75%. (ii) The in-semester performance of the candidate is very poor. Further see 7.3.5(g) In the above cases, the candidate has to repeat the respective course by paying the fees in the following year
I	0	The candidate has kept term for the subject head, has taken all the internal examinations with satisfactory performance, but has failed to take the end-semester examination due to genuine reasons. The candidate will be allowed to take subsequent examinations as per rule
FR	0	The candidate has exhausted all the permissible chances to clear the end-semester examinations. The candidate has to register for the respective semester again for all the subject heads or will be out of the respective degree course as per the rules.
DR	0	(i) The candidate hasn't participated in academic programme. (ii) The candidate has taken a drop for the subject head;- provided he/she intimates the same (i or ii) at least 7 days in advance of the commencement of the end-semester examination for the respective year.

(e) Grades **FF** and **I** are place-holders only and do not enter into CGPI/SGPI calculations directly. These grades get converted to one of the regular grades after the end-semester examination.

(f) A candidate with an **FR** grade has appeared for maximum number of permissible six end semester examinations and has to re-register for that course by paying the appropriate fees.

(g) **I** grade will not be continued beyond the permissible number of six consecutive end semester examinations, irrespective of whether the candidate fails to take any of these exams.

(h) **'XX' Grade:** The grade **XX** in a course is awarded if – (i) a candidate does not maintain the minimum 75% attendance in the Lecture/Tutorial/Practical classes, (ii) the student has bad or incomplete in-semester records, for example, a candidate missing all internal tests and mid-semester examination, etc., (iii) a candidate indulges in a misconduct/uses unfair means in the examination, assignments, etc., of a nature serious enough to invite disciplinary action in the opinion of the teacher.
(**Note:** Award of the **XX** grade in the case of g(iii) above shall be done by Disciplinary Action Committee (DAC)).

(i) The names/roll numbers of students to be awarded the **XX** grade should be communicated by the teacher to the Academic office as per academic calendar before the last date of submission of the application for end-semester examination.

3.6. Awarding the grades

(1) The grading scale ranks the students on a statistical basis on the basis of the overall performance of the students of a given class in the given subject head. Therefore,

statistical data on students' performance is a prerequisite for applying the grading system. While assigning grades in a given subject head, it is essential to know the **average marks (AM)** obtained by the students who have passed the subject head and the **highest marks (HM)** obtained in the same subject head.

(a) **EX** Grade shall be awarded to the candidate(s) who scored highest mark (**HM**) in the concerned subject head provided the marks obtained are 80% or higher in the given subject head.

(b) If the **average marks (AM)** obtained by the students who have passed the subject head is <60%, the interval AM shall be awarded grade CD and the other grades shall be decided as follows.

(c) AA, AB, BB, BC and CC grades shall be decided between the AM and HM by dividing the range in equal intervals.

(d) CD, DD, DE and EE grades shall be decided between the AM and minimum marks required for passing the head (i.e. 40%) by dividing the range in equal intervals.

(2) If the **average marks (AM)** obtained by the students who have passed the subject head is such that **60% ≤ AM < 70%,** the interval AM shall be awarded grade CC and the other grades shall be decided as follows:

(a) AA, AB, BB grades shall be decided between the AM and HM by dividing the range in equal intervals.

(b) CC, CD, DD, DE and EE grades shall be decided between the AM and minimum marks required for passing the head (i.e. 40%) by dividing the range in equal intervals.

(3) If the **average marks (AM)** obtained by the students who have passed the subject head is **≥ 70%,** the interval AM shall be awarded grade BB and the other grades shall be decided as follows:

(a) AA, AB and BB grades shall be decided between the AM and HM by dividing the range in equal intervals.

(b) BC CC, CD, DD, DE and EE grades shall be decided between the AM and minimum marks required for passing the head (i.e. 40%) by dividing the range in equal intervals.

(4) Illustration of award of different grades are explained in the following examples:

    i)   Example 1: HM = 92, AM = 76

                  Hence, $I_L = (76-40)/6 = 6$, $I_U = (92-76)/3 = 5.33 \approx 5$

    ii)   Example 2: HM = 84, AM = 62

                  Hence, $I_L = (62-40)/5 = 4.4 \approx 4$, $I_U = (84-62)/4 = 5.5 \approx 6$

Marks distribution for different grades:

Sr. No.	Letter Grade	Example 1 (HM=92, AM= 76, $I_L = 6$, $I_U = 5$	Example 2 (HM=84, AM= 62, $I_L = 4$, $I_U = 6$
1	EE	40 to 45	40 to 43
2	DE	46 to 51	44 to 45
3	DD	52 to 57	48 to 50
4	CD	58 to 63	52 to 55
5	CC	64 to 69	56 to 62
6	BC	70 to 76	63 to 68
7	BB	77 to 81	69 to 74
8	AB	82 to 86	75 to 80

| 9 | AA | 87 to 91 | 81 to 83 |
| 10 | EX | 92 | 84 |

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

(a) Semester Grade Point Average (SGPA)

The performance of a student in a semester is indicated by Semester Grade Point Average (SGPA) which is a weighted average of the grade points obtained in all the courses taken by the student in the semester and scaled to a maximum of 10. (SGPI is to be calculated upto two decimal places). A Semester Grade Point Average (SGPA) will be computed for each semester as follows:

$$SGPA = \frac{\left(\sum_{i=1}^{n} c_i g_i \right)}{\left(\sum_{i=1}^{n} c_i \right)}$$

Where
'n' is the number of subjects for the semester,
'ci' is the number of credits allotted to a particular subject, and
'gi' is the grade-points awarded to the student for the subject based on his performance as per the above table.

SGPA will be rounded off to the second place of decimal and recorded as such.

(b) Cumulative Grade Point Average (CGPA):

An up to date assessment of the overall performance of a student from the time he entered the Institute is obtained by calculating Cumulative Grade Point Average (CGPA) of a student. The CGPA is weighted average of the grade points obtained in all the courses registered by the student since s/he entered the Institute. CGPA is also calculated at the end of every semester (upto two decimal places). Starting from the first semester at the end of each semester (S), a Cumulative Grade Point Average (CGPA) will be computed as follows:

$$CGPA = \frac{\left(\sum_{i=1}^{m} c_i g_i \right)}{\left(\sum_{i=1}^{m} c_i \right)}$$

Where
'm' is the total number of subjects from the first semester onwards up to and including the semester S,
'c_i' is the number of credits allotted to a particular subject, and
'g_i' is the grade-points awarded to the student for the subject based on his/her performance as per the above table.

CGPA will be rounded off to the second place of decimal and recorded as such.

(c) The CGPA, SGPA and the grades obtained in all the subjects in a semester will be communicated to every student at the end of every semester / beginning of the next semester.

14

(d) When a student gets the grade 'FF', or I' in any subject head during a semester, the SGPA and CGPA from that semester onwards will be tentatively calculated, taking only 'zero' grade point for each such 'FF' or 'I' grade. When the 'FF' grade(s) has / have been substituted by better grades after the repeat examination or subsequent semester examination, the SGPA and CGPA will be recomputed and recorded.

5. Supplementary End-Semester Examination
(revised as per the item 7 of Minutes of the Academic Council meeting held on 19th August 2017)

(1) For those candidates who fail in a subject head or are eligible for appearing at the repeat examination, **A Supplementary End-Semester Examination of odd semester will be conducted before the regular End semester examination of the even semester.**

(2) **A Supplementary End-Semester Examination of even semester will be conducted before the regular End semester examination of the odd semester.**

(3) The marks obtained by candidates in the in-semester examinations (continuous assessment and mid-term examination) will be carried forward in such cases.

(4) **Grading the performance in the Supplementary Examination:**
The grades will be assigned as per 3.5 and 3.6 above.

(5) **Revaluation of end-semester and Supplementary examination**:
Candidate's performance in these examinations will be announced on web portal of the University and after one month of such announcement the grade statements will be sent to the concerned Department for distribution to the students. Those who want to get the photocopy of their answer books are required to pay the requisite fee. Revaluation of these examinations shall be allowed. Those who would like to have the revaluation of their answer books are required to pay a requisite fee.

(6) **Remedial examination**
The candidate will have an option of appearing for an Online Remedial Examination, after the declaration of each End-semester examination results, to pass the subject head where he/she has failed in regular end-semester examination of the semester. The candidate will get only EE grade if he clears the remedial examination and can continue with the next semester. However, for improving his grade in the same subject head, the candidate will have an option of appearing in the 'same' subject in the Supplementary Examination before the regular end-Semester examination.

6. Passing of a Semester Examination

A candidate shall be declared as **'PASSED'** any semester examination if he/she has
(a) Cleared all heads of passing by securing grades EE or higher in all the heads;
(b) Passed all the heads of passing such as project, seminar, training, etc as per the rules;
(c) Satisfactorily completed all the mandatory requirements of the course;
(d) paid all the University/college dues;
(e) No case of indiscipline pending against him/her.

7. Eligibility for the Award of a Degree

A candidate shall be declared eligible for the award of a degree, if he/she has cleared all the semester examinations as given in (6) above.

8. Allowed to keep terms (ATKT)

(1) A candidate who has II grade in one or more heads of passing of an odd semester of an academic year shall be allowed to keep terms for the respective even semester.

(2) A candidate (other than those specified in 6) shall be allowed to keep terms for the subsequent academic year as per the following:

(a) At the end of 1st year a candidate shall be allowed to keep terms (ATKT) to 2nd year of study provided he/she attends course work prescribed for 1st year with prescribed attendance and successfully cleared at least 60% of the total credits specified for 1st year program.

(b) At the end of 2nd year a candidate shall be allowed to keep terms to 3rd year of study provided he/she attends course work prescribed for 2nd year with prescribed attendance, and successfully cleared 1st year program and at least 60% of total credits prescribed for 2nd year program.

(c) At the end of 3rd year a candidate shall be allowed to keep terms to final year of study provided he/she attendants course work prescribed for 3rd year with prescribed attendance, and should have completed 2nd year program and 60% of total credits prescribed for 3rd year program.

All such candidates fulfilling the above criteria shall be declared as **FAILED, ATKT**

9. Repeating a course

1) A student is required to repeat the course of a subject head under the following situations:
   (a) A student who gets an **XX, FR, or DR** grade in a course; or
   (b) A student has exhausted all permissible chances to clear the subject head.

2) A candidate from second, third and fourth years who remains absent for the regular end-semester examination of a semester and the corresponding repeat examination for **ALL SUBJECTS** shall have to take fresh admission for the corresponding year; unless the candidate has dropped out / terminated from the course.

3) If a candidate at the Second, Third or Fourth year fails to pass any semester examination in not more than 6 consecutive examinations, including the supplementary examinations, from the date of registering for the respective year, the candidate shall have to take readmission for the corresponding year again in which the failure has occurred, provided the course is not changed.

10. Improvement of performance

If any student is failed to secure First Class at the end of B.Tech. Programme then he/she may be allowed to improve the class by Re-registering some of the courses he/she studied during Second year to Final year of B.Tech. Programme. In case there is, no improvement in performance the previous result will be retained.

11. Early exit for poorly performing students

A candidate shall be excluded from a course under the following conditions:

(a) If he/she fails to pass any semester examination of the first year of the course in not more than six consecutive attempts from the date of joining the course, including the repeat examinations.

(b) If he/she has five or more **XX** and/or **FR** grades after the first regular end-semester examination of the First year, due after taking the admission, and the corresponding repeat examination.

(c) If he/she has not kept a term at the First year of the course without giving any reasonable justification for doing so.

(d) If he/she does not keep two consecutive terms without giving any reasonable justification for doing so.

(e) If a candidate fails to fulfill all the requirements of his/her respective degree within the prescribed period from the date of taking admission to the course, the candidate shall be excluded from the course.

12. Award of Class

The candidates who successfully complete all course/curriculum requirements of B.Tech Programs shall be awarded class as specified below.

(a) Those who score CGPA of 8.25 and above shall be awarded First Class with Distinction.

(b) Those who score CGPA of 6.50 and above but below 8.00 shall be awarded First Class.

(c) Those who score CGPA below 6.50 shall be awarded Second Class.

Following will be the equivalent percentage of CGPA on Ten Point Scale:

The formula used to convert CGPA to percentage is:

Percentage of Marks = (CGPA – 0.5) x 10.

Cumulative Grade Point Average (CGPA)	Equivalent Percentage of Marks
6.00	55.0
6.25	57.5
6.50	60
7.25	67.5
7.75	72.5
8.25	77.5

13. Miscellaneous

(a) Although CGPA will be given in the Semester grade report, the final degree certificate will not mention any Class whatsoever.

(b) Notwithstanding anything said above if a course is revised /restructured then transient provisions applicable at the time of revision /restructuring shall be applicable.