

## **R.9 Credit System and Mode of evaluation**

### **1. Introduction**

The Institute is revamping its academic structure. All the courses will be credit based and the evaluation will be grade based. Due to these academic reforms the Regulation R.9, passed by the Senate in its meeting held on 10<sup>th</sup> May 2007 stands repeal and is replaced by the new Regulation R.9.

Credit 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. As per the AICTE norms 2L/week of lectures are 2 credits, while 2h/week of practicals/tutorials are 1 credit. This may be taken as the basis.

**Student workload** consists of the time required to complete all prescribed learning activities such as attendance at lectures/practicals, 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 Institute 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 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 credit 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 Institute - lecture courses and laboratory courses. Lecture courses consist of lecture (L) and tutorial (T) hours. Laboratory courses consist of practical (P) hours. 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 Practicals (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 =  
 $\frac{1}{2} \times$  No. of hours of laboratory course per week

Credits will be assigned to In-plant, 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 weight ages of different modes of assessments shall be as under.

	In-Semester evaluation		End-Semester-Exam	Components of continuous mode
	Continuous mode	Mid Semester-Exam		
Theory	30%	30%	40%	Quizzes, class tests (open or closed book), home assignments, group assignments, <i>viva-voce</i> assignments, discussions
Practicals	50%	-	50%	Attendance, <i>viva -voce</i> , journal, assignments, project, experiments, tests

#### 3.2. In-Semester Evaluation:

- (a) It is expected that the teacher would conduct at least two assessments under the continuous mode in a Semester.
- (b) The teacher will announce at the beginning of the respective course the method of conducting the tests under the continuous mode and the assignment of marks
- (c) In-semester performance of all students should be displayed and sent to the academic office by the teacher before the end-semester examination.
- (d) 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.

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

### 3.4 Passes and Fail

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

(b) The candidates who obtain marks less than 40% of 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 all the in-semester and continuous mode examination, convert them to prescribed 30% mark and submit the same to the office.

(c) The total marks (in-semester + end-semester) of a candidate in a subject head are converted into a letter grade, based on the relative (and some times the absolute) performance of the student.

<b>Letter Grade</b>	<b>Grade Point</b>
AA	10
AB	9
BB	8
BC	7
CC	6.5
CD	6
DD	5.5
EE	5

(c) 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.

<b>Letter Grade</b>	<b>Grade Point</b>	<b>Explanation</b>
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. (ii) The in-semester performance of the candidate is very poor. Further see 3.5(g) below. In the above cases, the candidate has to repeat the respective course by paying the fees.
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 or repeat examination due to genuine reasons. The candidate will be allowed to take end-semester repeat or 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.

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

(e) A candidate with an **FR** grade is not eligible for any repeat examination in that course and has to re-register for that semester by paying the appropriate fees.

(f) **I** grade will not be continued beyond the permissible number of end-semester/repeat examinations [Refer to current Regulation R.9 (9) and R.9 (10)]. In the six consecutive exams conducted by the institute, irrespective of whether the candidate fails to take any of these exams.

(g) **'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)).

(h) 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**

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*.

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

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

(ii) CD, DD 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.

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

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

(ii) CC, CD, DD 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.

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

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

(ii) BC, CC, CD, DD 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. SPI and CPI**

(a) **Semester Performance Index (SPI):** The performance of a student in a semester is indicated by **Semester Performance Index (SPI)**, 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. (SPI is to be calculated upto two decimal places.)

A Semester Grade Point Average (SGPA) will be computed for each semester as follows:

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

Where

‘n’ is the number of subjects for the semester,

‘c<sub>i</sub>’ is the number of credits allotted to a particular subject, and

‘g<sub>i</sub>’ 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 Performance Index (CPI):** An up to date assessment of the overall performance of a student from the time he entered the Institute is obtained by calculating **Cumulative Performance Index (CPI)** of a student. The CPI is weighted average of the grade points obtained in all the courses registered by the student since he entered the Institute. CPI 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:

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

Where

‘m’ is the total number of subjects from the first semester onwards up to and including the semester S,

‘c<sub>i</sub>’ is the number of credits allotted to a particular subject, and

‘g<sub>i</sub>’ is the grade-points awarded to the student for the subject based on his 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.

(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. Repeat End-Semester Examination

5.1. For those candidates who fail in a subject head or are eligible for appearing at the repeat examination, **Repeat End-Semester Examination** will be conducted within one month from the declaration of the results of regular end-semester examination, as per **Regulation R.14**.

5.2. The marks obtained by candidates in the in-semester examinations (continuous assessment and periodic test) will be carried forward in such cases.

5.3. **Grading the performance in the Repeat Examination:** The grades will be assigned as per 3.5 and 3.6 above. However, for a candidate taking any repeat examination or subsequent regular semester examination shall be awarded **one grade lower** than that decided on the basis of the actual marks obtained; provided 'EE' grade obtained in such an examination shall remain 'EE'. For reference see the table below.

Grade obtained in repeat or subsequent end-semester examination	Grade to be assigned	Grade point
AA	AB	9.0
AB	BB	8.0
BB	BC	7.0
BC	CC	6.5
CC	CD	6.0
CD	DD	5.5
DD	EE	5.0
EE	EE	5.0

## 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 Institute 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)

8.1 A candidate who has FF or I grades 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.

8.2. A candidate shall be allowed to keep terms for the subsequent academic year if he/she has FF or I grades in not more than two heads of passing from all the heads of passing of the two terms of the previous academic year taken together. Such a candidate shall be declared as **FAILED, ATKT**.

8.3. A candidate who has not cleared Semester-I and II as per clause 6 above shall not be eligible to register for semester-V and VI.

8.4. A candidate who has not cleared Semester-III and IV as per clause 6 above shall not be eligible to register for semester-VII and VIII

## 9. Repeating a course

9.1 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.

9.2 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.

9.3 If a candidate at the Second, Third or Fourth year fails to pass any semester examination in not more than 4 consecutive examinations, including the repeat 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**

A candidate will be allowed to appear at the **entire examination** after the regular end-semester examination as per the respective rules to improve the performance. In such a case if the result of the examination repeated –

1. Is better than the previous one, the previous result shall be declared null and void; and
2. Is worse than the previous one, the result of the subsequent examination shall not be declared.

## **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. Miscellaneous**

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

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