

**ORDINANCES**

- O.1 The provisions contained in these Regulations govern the conditions for imparting courses of instructions, conducting examinations, and evaluation of students' performance leading to the degree of Master of Science (M.Sc.). These regulations are effective for the batches of students admitted in the Academic Session 2019-20 onwards.
- O.2 Discipline/Specializations: The disciplines and the specializations in which the courses of study are available and degrees will be offered are:
- I. Department of Physics
    - (i) Applied Physics
  - II. Department of Mathematics
    - (i) Mathematics
  - III. Department of Chemistry
    - (i) Applied Chemistry

New discipline/Specialization may be added in future with the approval of the competent authority. Likewise, a Program may also be temporarily suspended if the situation so arises.

- O.3 The number of seats in each Program and specialization for which admission is to be made will be decided by the Senate. Seats are reserved for candidates belonging to the Scheduled Castes, Scheduled Tribes, Other Backward Classes, and Physically challenged etc. as per the Government of India orders from time to time. Furthermore, 15% supernumerary seats are also available under various schemes of the Govt. of India.
- O.4 The Program is monitored by the Departmental Postgraduate Program Committee (DPPC). Composition of DPPC, along with its functions, is given in Annexure I
- O.5 The provisions of these regulations shall also be applicable to any new discipline(s) that is(are) introduced from time to time and added to the list in Sec. O.2.
- O.6 Supplementary regulations, whenever necessary, may be framed and implemented by the Senate from time to time.
- O.7 Notwithstanding all that have been stated in these regulations, the Senate has the power to modify any of the clause(s) from time to time.
- O.8 In the event of occurrence of any doubt/ambiguity in the interpretation of any clause of the Regulations and also with any matter pertaining to M.Sc. Program which has not been covered by the Regulations, the ruling of the Chairman, Senate shall be final.
- O.9 A student becomes eligible for the award of M.Sc. degree, if he/she
- (a) fulfills all the academic requirements prescribed in the Regulations.
  - (b) no disciplinary action pending against him/her
  - (c) no pending dues to the Institute, department, hostel etc.
- O.10 The award of M.Sc. degree must be recommended by the Senate and approved by the Board of Governors (BOG) of the Institute.
- O.11 Legal disputes, if any, shall be under the jurisdiction of Silchar court(s) of Cachar district in the state of Assam only

## **REGULATIONS**

### **R.1 Qualification for Admission**

Students seeking admission to M.Sc. Program must satisfy the following criteria:

A bachelors' degree (at least 10+2+3) in Science with the appropriate subject as one of the subjects for at least two years/four semesters (e.g. Physics for M.Sc. in Physics), and a minimum score of 55% or 6.0 CPI/CGPA in a 10 point scale either as aggregate or in honours/major subject, with a valid JAM score. A relaxation of 5% marks or 0.5 CPI/CGPA may be extended to the candidates belonging to SC/ST/PWD categories. However, the concerned Departments may specify additional requirements over and above these minimum requirements.

### **R.2 Admission Procedure**

For Indian nationals, admissions to the Program will be as per guidelines of CCMN (Centralized Counselling for M.Sc./M.Sc.(Tech.)) or any other procedure prescribed by the Council of NITSERS/MHRD and is admitted on the basis of selection made by the centralized counselling. In the event of existence of vacancies after the centralized counselling, the Institute may arrange for counselling of its own

### **R.3 Semesters: Odd and Even**

The Institute follows a credit based semester system. There are two regular semesters in a year: odd semester (July-November) and even semester (January-May).

### **R.4 Academic Calendar**

Each academic session is divided into two regular semesters of approximately 16 weeks duration: an odd semester and an even semester. The senate approved schedule of academic activities for a session, including dates of registration, mid-semester, and end-semester examinations etc. shall be laid down in the Academic Calendar for the session.

### **R.5 Program Coordinator**

For each and every Program (specialization), there shall be a Program coordinator to be appointed by the Head of the Department. The role of the Program Coordinator is the overall coordination under the supervision of DPPC in all matters related to the concerned Program.

### **R.6 Program Structure**

Every M.Sc. Program shall consist of core courses, elective courses, seminars, laboratory, and project work. Each course shall normally be assigned credits points as follows:

- a) 1 credit per lecture hour per week
- b) 1 credit per tutorial hour per week
- c) 1 credit per two hours/2 credits per 3 hours laboratory per week

The students will be required to successfully complete 70 credits of loads through course work, practical, project etc. as per curriculum to become eligible for the award of the degree.

In addition to the prescribed academic courses, every student must successfully complete any Extra Curriculum Activity (EAA) as per curriculum to be eligible for the award of the degree. The class timing of the EAA courses may be chosen differently from the other academic courses, depending on weather conditions.

### **R.7 Program Duration**

The minimum and maximum durations for completion of the Program is 4 and 6 semesters, respectively.

### **R.8 Enrolment and Registration**

- R.8.1 A student selected for admission has to enrol to the program, in person, on the day fixed for this purpose after paying the due fees
- R.8.2 After enrolment, every student is required to register, in person, for the approved courses (including project) as per the advice of the Program coordinator at the commencement of each semester on the day fixed for such registration and notified in the Academic Calendar until he/she completes his/her program. The Dean (Academic) may cancel the registration of one or more courses/project phase, if they are found to violate some rules or if there are restrictions imposed due to disciplinary reasons.
- R.8.3 There are two parts to the registration process: academic registration and administrative registration. Academic registration involves selection of courses consistent with the specific program of study as per rules. Administrative registration involves payment of requisite fees along with outstanding dues, if any, and submitting the filled-in registration form complete in all respect to the office of the Dean (Academic). The responsibility for completing both parts of the registration process rests with the students. The Dean (Academic) may cancel the registration of one or more courses (including project) if they are found to violate some rules or if there are restrictions imposed due to disciplinary reasons. **If a student fails to register during any semester without valid and cogent reasons, his/her studentship is liable to be cancelled.**
- R.8.4 A student shall register for a minimum of 16 and a maximum of 23 credits per semester.
- R.8.5 Students who do not register on the day announced for the purpose may be permitted to register late by the Dean (Academic) under special circumstances only on payment of a fine, unless the fine is waived. Normally, no late registration shall be permitted after the due date from the scheduled date, except in special cases like those
- (i) dictated by counseling authorities in first semester. Normally, the first semester course registration date(s) shall primarily be dictated by the counselling schedule, which may be different from the date(s) specified in the academic calendar. After the enrolment (admission), the academic section shall notify the dates and procedure for the same.
  - (ii) a serious and genuine medical illness
  - (iii) a family calamity or natural calamity stopping the candidate to report for registration on the scheduled date
  - (iv) participation in a national/international event/internship etc. with prior permission from the Dean (Academic).

Permission from Dean (Academic) is needed for late registration.

- R.8.6 The minimum percentage of attendance requirement of a student registering late will be calculated from the date of their registration. But, no special consideration is admissible in the matter of assessment/evaluation or grading. Normally, late registration is permitted till a specified date as per academic calendar. However, he/she may apply for registration of the same during the next academic session for course work in the same semester or next semester for project work, without any extension of the total allowed duration of study.
- R.8.7 Under very exceptionally, unforeseen, and unavoidable circumstances late registration beyond the specified deadline may be allowed on case-to-case basis by the Dean (Academic)/Chairman, Senate. This is possible only when the reasons cited are genuine and the authorities are satisfied with the same. In this case, the total attendance requirement shall be calculated from the last date of late registration.
- R.8.8 Only those students will be permitted to register in the next semester who have
- (a) Fulfilled the minimum academic requirements (CGPA 5.5) for continuing in the program in any semester.
  - (b) Cleared all dues of the Institute, hostel, and library and fines (if any) of the previous semesters.
  - (c) Paid all required advance payments of the Institute and hostel dues for the current semester.
  - (d) Not been debarred from registering on any specific ground.
- R.8.9 A failed/W-graded elective subject may be replaced by another elective subject from within the same group.

### **R.9 Supervisor/Cosupervisor**

Every student admitted into the M.Sc. Program of the Institute must carry out his/her project under the supervision of at least one faculty member of the department which admits the students. This faculty member will be called the Supervisor of the student. The student may also have a second person (Cosupervisor) from the same or another allied department of the Institute. All the administrative responsibilities related to the Program of the student, however, shall lie with the supervisor. In no case, more than two persons are permitted to get associated with a student as supervisor and/or Cosupervisor.

### **R.10 Appointment of Supervisor/Cosupervisor**

Departmental Post-graduate Program Committee (DPPC) shall evolve modalities for appointing Supervisor/Cosupervisor, keeping in view the student's aspirations and faculty interest. The DPPC will coordinate this activity and will formally communicate the appointment of the Supervisor/Cosupervisor to all concerned, along with the Academic section of the Institute.

### **R.11 Course Assessment**

There will be continuous assessment of performance throughout the semester and grades will be awarded by the concerned course coordinator/instructor or the appropriate committee appointed for this purpose for various category of courses as follows:

#### **R.11.1 Theory Subjects**

- (a) The evaluation will be based on the performance on mid-semester examination, end semester examination, and sessional assessment.
- (b) The sessional assessment is based on the performance in class test/quiz/viva/assignment/class impression/attendance etc. as decided by the DPPC and declared at the beginning of the semester by the concerned course coordinator.
- (c) The overall performance in a course is decided by the following component-wise weightage

<b>Component</b>	<b>% Weightage</b>
Sessional assessment	20
Mid semester exam	30
End Semester	50

#### R.11.2 Practical subjects

The evaluation will be on the basis of attendance, assessment of the tasks assigned including experimental works, and the test/exam/viva/report to be decided by the concerned departmental/ course coordinator. As such, the assessment procedure may vary from department to department and instructor to instructor. However, the evaluation procedure needs to be declared by the course coordinator at the beginning of the semester. The assessment pattern will be as follows:

Assessment	Duration	Weightage (%)
Continuous Assessment	-	50
Semester Examination	2 or 3 Hour	50

End semester practical examinations shall be conducted by the department and the necessary modalities shall be framed by the concerned DPPC.

#### R.11.3 Seminar(s)

The evaluation will be done by a committee constituted by the department or a coordinator (faculty member) assigned by the department. The evaluation will be on the basis of presentation, report, and any other task assigned by the coordinator/committee etc. However, the evaluation procedure needs to be declared by the committee/coordinator at the beginning of the semester.

#### R.11.4 Project

The project shall be assigned in the final semester (fourth semester) on a topic relevant to the Program. The students are to submit a consolidated report (thesis) on the findings of the project work as per thesis preparation guidelines. The thesis, along with a soft copy, is to be submitted to the concerned Program Coordinator at least 7 days prior to the date of final evaluation.

#### R.11.5 Extra Academic Activity (EAA) Courses

As per curriculum, there may be some EAA courses which are non-credit but mandatory. These courses shall also have syllabus and examinations like a lab course. For this category of courses, instructions shall be imparted and practice supervised by the concerned instructor. Students shall be awarded PP grade for passed (successful) or NP grade for not passed (unsuccessful), which shall be recorded in the Grade card but not taken into account for computation of the SGPA (semester grade point average) and CGPA (cumulative grade point average).

## **R.12 Attendance**

A student having less than 75% attendance shall be debarred from appearing the end-semester exam. His/her registration for that course shall be treated cancelled and is awarded “W” grade (registration cancelled for want of minimum attendance). This ‘W’ grade shall appear in the grade card. The name of the students who have attendance less than 75% in a given course shall be announced in the class by the teacher himself/ herself on monthly basis from the date of starting of classes. The minimum attendance requirement is also applicable to EAA courses. For the purpose of calculating percentage attendance, there shall be a cutoff date as per the academic calendar.

However, under exceptional situations, a committee comprising of the Chairman, Senate, Dean (Academic), and the concerned Head of the department may consider condoning of the required attendance.

## **R.13 Leave Rules**

Leave rule for M.Sc. students shall be same as that of latest B.Tech. Ordinances and Regulations.

## **R.14 Internship/Conference/Seminar/Workshop etc**

Internship or participating conference/seminar/workshop etc. are not mandatory requirements for the award of the degree. However, a student may be permitted to carry out internship in a well-known industry or other Academic/Research organizations upto a maximum of 6 weeks, during summer vacation and with permission from the department/T&P section. Likewise, a student may also be permitted to participate in conference/workshop/seminar etc. organized by a well-known organizations availing his/her leave (upto a maximum of one week), with permission from the Head of the department.

## **R.15 Examination System**

In assessing the students’ attainment in subjects (Theory and Practical), seminars, project work, EAA etc. the system of continuous assessment is adopted by the Institute. A student may be debarred from appearing in any of the examination/assessment due to the following reasons:

- (a) A prohibitive disciplinary action/pending disciplinary action
- (b) Attendance has not been satisfactory during the semester

### **R.15.1 Theory Courses**

In conformity with practice of the Institute, there will be one mid semester examination and one end semester examination for every theoretical subject, in addition to sessional assessment. The mid semester and the end semester examination will be conducted centrally by the Academic Section of the Institute. The class tests or quizzes will be organized by the concerned teacher/course coordinator.

The Institute shall provide sick room facility inside the Institute building or in a nearby hospital as deemed convenient by the Institute to assist students who may fall sick during the examinations. The examinations will normally be “closed book type” where the students are not permitted to bring any study material. All necessary charts and tables will be provided by the Institute. If recommended by the course coordinator, data sheets without any marking and in the book form is only permitted. No photocopy of data book shall be allowed to be used in the examination hall. It is the course teacher’s responsibility to recommend the material to be provided, and to check with the Examination office that the arrangement has indeed been made. While normal scientific calculators are permitted, other

electronic devices such as programmable calculators and calculators containing communication devices, MOBILE phones are strictly forbidden. Any exception to these provisions must be specially approved by the Senate. All question papers submitted by the teachers will be treated as “confidential documents” till the end of the examination of the subject concerned. It is an open document after the examination is over.

**R.15.2 Seminar, Laboratory, and EAA courses**

No centralized examinations shall be arranged for these courses. The concerned Department/course coordinator shall arrange for all the assessment components in appropriate and suitable times.

**R.15.3 Project**

**Thesis Preparation and Submission:** The students shall prepare and submit the thesis as per guidelines and submit the thesis (with acceptable similarity report) for evaluation, along with the soft copy, to the Member Secretary, DPPC at least 7 days prior to the date of final evaluation. The Thesis shall be modified as per suggestions/advice, if any, of the evaluation committee and submitted within 7 days from the date of evaluation. Apart from the requirement of the department and supervisor(s), a copy of the final thesis (with acceptable similarity report), along with its (thesis) soft copy be submitted to the central Library.

**Evaluation:** Apart from regular monitoring by the Supervisor/Cosupervisor, the project shall be evaluated at the end of the semester by the following committee constituted by the DPPC.

**Evaluation committee**

- (a) One senior faculty member from the department : Chairperson
- (b) One or more Experts from the concerned department : member(s)
- (c) One faculty member from another allied department : member
- (d) One external expert : member
- (e) Supervisor and Cosupervisor, if any : member(s)

The external expert at sl (d) shall be approved by the Dean (Academic). For this purpose, the Chairman, DPPC shall propose a panel of 3 experts from reputed and well known Institute/industry.

**Marks Distribution for Project Evaluation**

Component	Weightage (%)	Remarks
Supervisor	40	Supervisor shall award an overall assessment mark after due consultation with Cosupervisor, if any.
External expert	30	Overall assessment
Other committee members	30	Overall assessment
Total Marks	100	

The concerned DPPC shall formulate rubrics for evaluation for various weightages.

### **R.16 Grading System**

Based on the performance of a student, each student is awarded a final letter grade in each subject, including project, at the end of the semester. The letter grades and the corresponding grade points are as follows:

Grade	Grade Points	Remarks
AA	10	
AB	9	
BB	8	
BC	7	
CC	6	
CD	5	
DD	4	
F	0	Fail
W	0	Registration cancelled due to lack of minimum attendance (Fail)

A student passes the course if he/she gets any grade in the range of AA to DD, but fails if he/she gets the F/W grade. Attending end semester exam is a must to be eligible for a pass grade. Irrespective of performance in all other components, an F grade is automatically awarded to an absentee in the end semester examination in a given course. In addition, there shall be one transitional incomplete grade (I grade), eligible for one repeat end semester examination. I grade may be awarded in specific cases only.

### **R.17 I Grade**

I grade (theory, laboratory, seminar, project) may be awarded to a student if the student was compelled to remain absent from the end semester examination on account of

- Illness or accident which disabled him/her from appearing the examination
- A calamity in the family at the time of the examination, which, in the opinion of the Institute/course coordinator, required the student to remain away from the campus

A student will be eligible for the award of I grade only if his/her attendance at classes and performance in other components of assessment are complete and satisfactory in the opinion of the course instructor/supervisor as the case may be.

An awarded I grade must be converted by the concerned course instructor/committee to an appropriate letter grade and communicated to the Academic Section within the prescribed date. Any outstanding 'I' grade after the prescribed date will be automatically converted to F/unsatisfactory grade, as the case may be.

### **R.18 Conversion of Grades**

Wherever it is expedient to convert the SGPA/CGPA into percentage of marks, the obtained SGPA/CGPA may be multiplied by 10. For example, SGPA/CGPA 5.5 is equivalent to 55%.

### **R.19 Semester Grade Point Average (SGPA)**

SGPA will be computed for each semester as follows:

$$SGPA = \frac{C_1G_1 + C_2G_2 + \dots + C_nG_n}{C_1 + C_2 + \dots + C_n}$$

where n is the number of courses registered for the given semester,  $C_i$  is the total credit allotted for the  $i$ th course, and  $G_i$  is the grade points (as defined in R.16) awarded to the  $i$ th course.

### **R.20 Cumulative Grade Point Average (CGPA)**

The CGPA gives the cumulative performance of the student from the first semester up to the end of the semester to which it refers, and will be calculated as follows:

$$CGPA = \frac{C_1G_1 + C_2G_2 + \dots + C_mG_m}{C_1 + C_2 + \dots + C_m}$$

where m is the number of courses registered upto that semester,  $C_i$  and  $G_i$  as defined in R.19.

Both SGPA and CGPA will be rounded off to second place of decimal and recorded as such. Whenever the CGPA is to be used for the purpose of determining the merit ranking of a group of students, only the rounded off values will be used. CGPA will be computed at the end of each semester (second semester onwards) and communicated to the students along with the SGPA in the form of a grade card.

### **R.21 Award of Grades**

Total marks for which a student is evaluated in a course, including project, shall be normalized to 100, irrespective of the mark for which evaluation is made, and the grades as described below shall be awarded as per secured total marks. Fractional part of the final marks, if any, shall be rounded to the nearest integral value.

#### **R.21.1 Theory Courses**

Marks Obtained	Grade Awarded
100 – 91	AA
90 – 81	AB
80 – 71	BB
70 – 61	BC
60 – 52	CC
51 – 43	CD
42 – 35	DD
Below 35	F

#### **R.21.2 Other than Theory Courses**

Marks Obtained	Grade Awarded
100 – 94	AA
93 – 87	AB
86 – 80	BB
79 – 73	BC
72 – 65	CC
64 – 57	CD
56 – 50	DD
Below 50	F

The results of performance of the students in the semester examinations shall be announced by the course coordinator/teacher(s) of the subjects concerned after duly approved by the DPPC. It is mandatory for the course coordinator/subject teacher to show all evaluated answer scripts (theory subject) to the students in stipulated dates as per academic calendar. The students should point out discrepancies in the evaluation, if any, on the spot. After conclusion of the spot verification of answer scripts, no claim whatsoever shall be entertained.

#### **R.22 Audit Courses**

A course is called an audit course for a given student when it is neither compulsory nor any credit earned is taken into consideration for SGPA or CGPA calculation. The Program Coordinator may recommend a student to register for an audit course provided the course coordinator allows auditing the course. The word “AU” shall be written alongside the course name in the grade card. Pass or fail status will be shown in the grade card as “PP” for passed and “NP” for not passed. Since it is optional and is not credited, a student is not required to register again for passing a failed audit course to earn the degree.

#### **R.23 Preserving Answer Scripts and Marks**

End semester examination answer scripts (theory courses only) shall be preserved by the concerned department/teacher(s) for a period not less than one semester. However, the sheet containing details of marks converted to grades must be preserved by DPPC till the students complete their course of study.

#### **R.24 Submission of Grades**

The final grades for a course, other than EAA, must be submitted by the course coordinator(s)/committee after the end semester examination to their Chairperson, DPPC for scrutiny and approval by DPPC and onward transmission to the Academic section within the specified date, by the Chairperson, DPPC.

As mentioned, evaluation of performance in EAA course shall be done by the concerned instructor and the awarded grade will be directly communicated to the Academic Section.

#### **R.25 Declaration of Results**

The Academic section of the Institute, after due scrutiny, shall declare the results as per academic calendar.

#### **R.26 Grievance Redressal**

If a student is not satisfied with the marks awarded, he/she may request higher authorities for review in the following order: Chairman, DPPC, Dean (Academic), and finally the Chairman, Senate within the specified time as per academic calendar. If the grievance is not resolved at the intermediate level, the decision of the Chairman, Senate shall be final. However, the prayer must be made within the stipulated time as per academic calendar. In such a case, the deadline for revised grade, if any, submission shall get extended till the authorities concerned resolve the issue.

Furthermore, any other grievances from any stake holders of the program shall be addressed in the following order: Head, Dean (Academic), Director, and finally the Senate. Decision of the Senate shall be final and no further appeal shall be entertained.

**R.27 MOOCs/online courses**

- R.27.1 A student may be permitted to undertake MOOCs/online/other such courses of relevant area as additional courses to enhance his/her knowledge base. Such courses shall be over and above the standard requirement of the Program
- R.27.2 On the recommendation of the DPPC and with the approval from the Dean (Academic), a student may register courses under MOOCs/online/other platforms during the Program period, with a maximum of 24 weeks contact per semester. To undertake such a course, the students are to apply to the Chairman, DPPC. The DPPC shall scrutinize the application whether it is suitable or not. Based on the recommendation of the DPPC, Dean (Academic) shall finally take a decision on whether to permit for such registration. Approval for registration for such course(s) must be taken in advance and not after the completion of the course(s)
- R.27.3 Once permitted and after completion, the student has to submit the official transcript of the grades obtained by her/him to the concerned DPPC, along with other related documents for evaluation and forwarding the same to Dean (Academic). Under no conditions will the grades earned at any other Institution/from MOOCs/online courses appear on the Semester Grade Report. All such courses and/or requirements will be deemed to carry zero credit for SGPA/CGPA calculation for awarding degree from this Institute
- R.27.4 The grades obtained in such course(s) shall be reflected in the official transcript of the Institute against the student. However, if completion date of such course(s) falls after the date of completion of the Program then these courses will not be reflected in the official transcript

**R.28 Withholding of Grades/Result**

Grades shall be withheld when the student has not paid his/her dues or when there is a disciplinary action pending against him/her.

**R.29 Eligibility for the Award of Degree**

A student shall be declared eligible for the award of M.Sc. degree, if he/she has

- (a) completed all the credit requirements for the degree with a minimum SGPA of 5.5
- (b) satisfactorily completed all the non-credit requirements for the degree viz Extra Academic Activities.
- (c) no dues to the Institute, Department, Hostels, NCC and NSO etc.
- (d) no prohibitive disciplinary action is awarded or there is no pending disciplinary action

The award of the degree must be recommended by the Senate and approved by the Board of Governors of the Institute.

**R.30 Conduct and Discipline**

Conduct and discipline rules shall be same as that of the latest B.Tech. Regulations.

**DEPARTMENT POST GRADUATE PROGRAM COMMITTEE (DPPC)**

**Composition:**

(i)	Head of the Department (ex-officio)	Chairperson
(ii)	One faculty member of the department nominated by the Head of the Department	Member Secretary
(iii)	At least three faculty members of the Department nominated by the departmental faculty	Member(s)
(iv)	One faculty member from another allied department nominated by the Dean (Academic)	Member
(iv)	One Full-time M.Sc. student (second year) with CGPA not less than 7.5, nominated by the Head of the Department. He/she can participate only in major policy decision processes, not involving a specific case	Member

**Tenure:**

Two years for faculty members and one year for student members.

**Functions:**

- (i) To oversee the conduct of the departmental M. Sc. Programs.
- (ii) To discuss and recommend the course curriculum and syllabi of all the M. Sc. Programs offered by the department from time to time
- (iii) To ensure academic standard and excellence of the M. Sc . Programs of the department.
- (iv) To consider and recommend to the Dean (Academic) any matters related to the M. Sc. . Program of the department.

NB: The committee shall be constituted by the concerned Head of the Department. A copy of constitution/reconstitution shall be forwarded to the Dean (Academic).