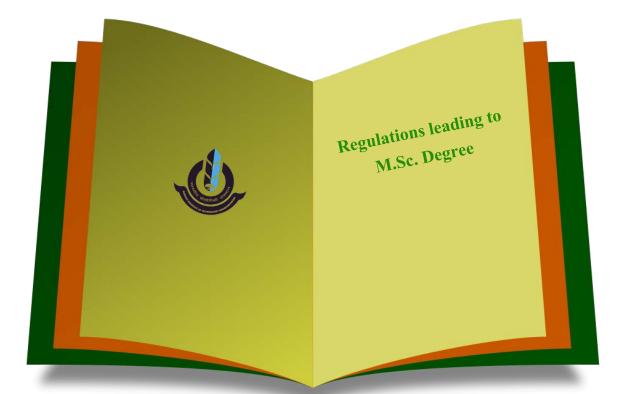
REGULATIONS LEADING TO THE DEGREE OF MASTER OF SCIENCE (M. Sc.) (4 - SEMESTER POSTGRADUATE PROGRAMME OFFERED UNDER JOINT M.SC.-PH.D. PROGRAMME)





भारतीयप्रौद्योगिकीसंस्थानभुवनेश्वर INDIAN INSTITUTE OF TECHNOLOGY BHUBANESWAR

REGULATIONS FOR POSTGRADUATE PROGRAMME LEADING TO THE DEGREE OF MASTER OF SCIENCE (OFFERED UNDER JOINT M.SC.-PH.D. PROGRAMME)

1. Introduction:

- 1.1 The provisions contained in these Regulations will govern the conditions for imparting courses of instructions, conducting examinations and evaluation of students' performance leading to the degree of **2-Year M.Sc.**(offered under joint M.Sc.-Ph.D. programme) in disciplines mentioned at 1.3 below.
- 1.2 This regulation is effective from the Academic Session starting from July 2013.
- 1.3 **Disciplines:** The disciplines in which the courses of studies available are as named below:

2-Year M.Sc. Degrees

- (i) Atmosphere and Ocean Sciences
- (ii) Chemistry
- (iii) Geology
- (iv) Mathematics
- (v) Physics
- 1.4 The provisions of this Regulation shall also be applicable to any new discipline(s) that are introduced from time-to-time and added to the list in Section 1.3.

2. Academic Calendar:

- 2.1 The academic session is divided into two semesters each of approximately 19weeks duration, namely an Autumn Semester (July-December) and a Spring Semester (January-May).
- 2.2 The Senate-approved schedule of academic activities for a session, inclusive of dates for registration, mid-semester and end-semester examinations etc., shall be laid down in the Academic Calendar for the session. The Academic Calendar shall strive to provide for a total of about 70 working days in each semester.

3. Admission:

- 3.1 Admission to all M. Sc. courses will be made in the Autumn Semester of each session, through a **Joint Admission Test for M. Sc. (JAM)** conducted by IITs every year.
- 3.2 In special cases the Institute may admit students to a course on transfer from other IITs subject to MHRD regulations. Such admission may be made after appropriate consideration by the competent authority.



- 3.3 All students admitted to any of the courses shall be required to pay at the time of joining and also in subsequent semesters prevalent tuition and other fees as prescribed by the Institute till they are on roll.
- 3.4 Foreign nationals may be admitted as per Government of India norms.
- 3.5 The Institute reserves the right to cancel the admission of any student, and ask him/her to discontinue his/her studies at any stage of the semester on grounds of unsatisfactory academic performance, irregular attendance in classes, any act of indiscipline or misconduct.

4. Residence:

4.1 The Institute is essentially a residential one and unless otherwise exempted/ permitted, every student shall be required to reside in a Hostel, and be a boarder of a Hostel, to which he/she is assigned. A student must fulfill the terms and conditions of hostel during his/her stay.

5. Attendance:

- 5.1 Attendance in all classes (lectures, tutorials, laboratories, etc.) is compulsory. A student may be debarred from appearing at an examination on ground of unsatisfactory attendance.
- 5.2 Absence from classes without prior permission will be considered as an act of indiscipline. Such cases will be dealt with in accordance with clause 3.5.
- 5.3 Detailed rules regarding attendance in classes etc., are given in Appendix I.

6. Conduct and Discipline:

- 6.1 Students shall conduct themselves within and outside the precincts of the Institute in a manner befitting the students of an institution of national importance.
- 6.2 Detailed rules regarding conduct and discipline are given in Appendix II.

7. Course Structure:

- 7.1 The duration of the courses is 4 (four) semesters. A student would be conferred the M. Sc. degree on successful completion of all 4 (four) semesters of study.
 - 7.2 The curricula and syllabi for the different degree programmes as proposed by the respective Schools and recommended by the Postgraduate Programme Evaluation Committee (PGPEC) shall have to have the approval of the Senate.
 - 7.3 All subjects would have a lecture-tutorial-experiment/design component (L-T-P) to indicate the contact hours. 'T' and 'P' components of a subject may be void. The laboratory subjects will have the (0-0-P) structure. All the subjects would have a credit count 'C'. Teaching of subjects would be reckoned in terms of credits.

A subject may have some prerequisite subjects. A student who has passed the prerequisite subjects would be allowed to register for the subject.

Subject to availability, a student irrespective of his/her level or discipline of study may be allowed to take a subject including an M.Tech./Ph.D. subject as an elective, additional subject, defined subsequently in this section, if he/she satisfies its prerequisite.



8. Additional credits:

- (i) If a student has a Cumulative Grade Point Average (CGPA) equal to or greater than 7.50 without any backlog, he/she would be allowed to take *additional subjects* within and/or outside his/her own discipline to earn additional credits equal of upto two subjects. A student would be allowed to register in additional subject only if he/she satisfies the pre-requisites, provided there is no clash in the timetable and the class-size permits.
- (iii) Once a student has registered in an additional subject the grade obtained in that subject would be recorded in his/her grade card. The credit contribution of these additional subjects to the computation of CGPA, however, would be considered as nil.

9. Registration:

- 9.1 Every student of the M.Sc. course is required to be present and register at the commencement of each semester on the day fixed for and notified in the Academic Calendar. Registration of the students for First (Autumn) Semester will be centrally organized by the Academic Section of the Institute.
- 9.2 A student who does not register on the day announced for the purpose may be permitted, in consideration of any compelling reason, late registration within the **next three working days** on payment of a prevalent additional late fee as prescribed by the Institute. Late registration beyond **three days** may be permitted by the Dean (Academic Affairs) if the justification provided by the student is found satisfactory.
- 9.3 From second semester onwards, only those students who meet the following conditions will be permitted to register:
 - (a) Cleared all Institute and Hostel dues of the previous semesters,
 - (b) Paid all required prescribed fees for the current semester, and
 - (c) Not been debarred from registering for a specified period on disciplinary or any other ground.
- 9.4 Students who have failed to clear $\frac{2}{3^{rd}}$ of the registered credits in the first year, would have to discontinue the programme or they have to repeat the first year.
- 9.5 A student who has been debarred from appearing at an examination either (i) as per recommendation of the subject teacher for unsatisfactory attendance or (ii) by the Institute as a measure of disciplinary action or (iii) for adopting malpractice at an examination, and consequently awarded a grade 'X', may re-register for the subject(s) after the term of the debarment expires, provided that other provisions of this regulations do not prevent him/her.
- 9.6 With the concurrence of the Faculty Adviser a student may be allowed to change his/her registration of subjects within one week from the day of registration.
- 9.7 If eligible (vide Section 8) a student may be allowed to register in additional subjects, with the concurrence of the Faculty Adviser, within one week from the day of registration.

10. Grading System:

10.1 As a measure of students' performance a 7-scale grading system using the following letter grades and corresponding grade points per credit, shall be followed:



Performance	Letter grade	Grade point per credit
Excellent	Ex	10
Very Good	А	9
Good	В	8
Fair	С	7
Average	D	6
Pass	Р	5
Fail	F	0

In addition, there shall be two transitional grading symbols, which can be used by the examiners to indicate the special position of a student in a subject:

- I for 'Incomplete assessment'
- X for 'Debarred'
- 10.2 A **Semester Grade Point Average** (SGPA) will be computed for each semester. The SGPA will be calculated as follows:

$$SGPA = \sum_{i=1}^{n} c_i g_i \left/ \sum_{i=1}^{n} c_i \right.$$

where 'n' is the number of subjects registered for the semester, ' c_i ' is the number of Credits allotted to a particular subject, and ' g_i ' is the grade-points carried by the letter corresponding to the grade awarded to the student for the subject. SGPA will be rounded off to the second place of decimal and recorded as such. The SGPA would indicate the performance of the student in the semester to which it refers.

10.3 Starting from the second semester at the end of each semester S, Cumulative Grade Point Average (CGPA) will be computed for every student as follows:

$$CGPA = \sum_{i=1}^{m} c_i g_i \left/ \sum_{i=1}^{m} c_i \right.$$

Where 'm' is the total number of subjects the student has registered from the first semester onwards up to and including the semester S, 'c_i' is the number of Credits allotted to a particular subject 's_i' and 'g_i' is the grade-point carried by the letter corresponding to the grade awarded to the student for the subject 's_i'. CGPA will be rounded off to the second place of decimal and recorded as such. The CGPA would indicate the cumulative performance of the student from the first semester up to the end of the semester to which it refers. The CGPA, SGPA and the grades obtained in all the subjects in a semester will be communicated to each student at the end of every semester.

10.4 When a student gets the grade 'I' for any subject(s) during a semester, the SGPA of that semester and the CGPA at the end of that semester will be tentatively calculated ignoring this (these) subjects. After the 'I' grade(s) has (have) been converted to appropriate grades, the SGPA and CGPA for that semester will finally be recalculated after taking into account this (these) grade(s).



10.5 When a student gets the grade 'F' in any subject during a semester, the SGPA and the CGPA from that semester onwards will be calculated, only for passed subjects. After the 'F' grade(s) has/have been substituted by better grades during a subsequent semester, the SGPA and the CGPA of all the semesters, starting from the earliest semester in which the 'F' grade has been obtained, will be recomputed and recorded to take this change of grade into account.

11. Assessment of Performance:

- 11.1 There will be continuous assessment of a student's performance throughout the semester and the teacher will award grades
- 11.2 (a) For arriving at a grade obtained by a student for a particular subject, initially a numeric marks obtained by the student out of 100 (hundred) is to be determined. For subjects where the laboratory component (P-component) is non-zero, separate marks, each out of 100 (hundred), in the theory component (L- & T- components) and the laboratory component are to be ascertained first. Next the failure cases (that is, the cases of student obtaining 'F' grade) are to be determined as explained in **Appendix III**.
 - (b) Once the numeric mark is obtained, the same is to be converted to letter grade following the guidelines given in **Appendix III.**
 - (c) For subject in which the theory component is greater than 1 (one), the subcomponents and the respective weights assigned to these are given below.

Subcomponent	Weightage
Teacher's Assessment (T.A.)	20%
Mid-Semester Examination	30%
End-Semester Examination	50%

- (d) For assigning marks in Teacher's Assessment (T.A.) performance in home assignments, class-tests, tutorials, viva-voce, attendance etc., are to be considered. At least two class tests are to be conducted for a subject. The weights of different subcomponents of T.A. are to be announced by the teacher at the beginning of the Semester.
- (e) For subjects in which the lecture (L) components of the L- T- P structure is 1 (one), there would be no Mid-Semester or End-Semester Examinations. The marks of the theory component would be decided by performance in class-tests, home assignments, tutorials (if any), viva-voce, attendance etc. At least two class tests are to be conducted for the theory component of such a subject. The weights of different subcomponents are to be announced by the teacher at the beginning of the Semester.
- (f) For assigning marks in the laboratory component (P-component) the relevant subcomponents that are to be considered are: day-to-day work, regularity, tests (at least two must be conducted), assignments, viva-voce etc. Percentage weights of the different subcomponents in deciding the final marks are to be announced at the beginning of the Semester/Class.



11.3Assessment of Thesis/Project Work and Research Review Paper:

(a) A student shall carry out thesis/project work during the third and fourth semesters under the supervision of at most two (2) faculty members of the school/institute.

A student may also undertake a project work in collaboration with another institute or Research and Development organization where adequate facilities exist to carry out the project work. In such a case, a joint supervisor should be appointed from the concerned institute or organization. However, under no circumstances, the number of supervisors can exceed two (2).

- (b) Performance in the various activities involved in the thesis/project would be assessed individually in each semester in which it is being carried out as per the curriculum. The detailed procedure of evaluation is given in **Appendix-IV**.
- (c) If a student fails to submit the project report within stipulated time frame, he/she may be allowed to submit later, provided School academic committee recommends. Normally extension granted in such cases should not exceed two months considered on following conditions:
 - (i) He/she would be awarded one grade lower than the grade obtained by him/her, and
 - (ii) He/she would be deemed to have completed the requirements for the degree, if applicable in the successive session.
- (e) In addition to thesis work, the curriculum also may include a Research Review Paper component. This is to be carried out by the student under the supervision of a faculty member. The evaluation process of the Research Review Paper is given in **Appendix** –**V**.

12. Examinations:

- 12.1 The Academic Section of the Institute will conduct the Mid-Semester and the End-Semester Examinations in respect of the theory component of the subjects unless otherwise permitted.
 - (i) A student will be allowed to appear in an examination, only if he/she has:
 - (a) Attendance record to the satisfaction of the teachers in the theory and laboratory classes and has completed the assignment works given, and
 - (b) Not been debarred from appearing in the examination as a result of disciplinary proceedings.
 - (ii) A student may be debarred from appearing at the Mid-Semester or End-Semester Examination on the report of a Teacher/Head of the School, if his/her
 - (a) Attendance at lecture/tutorial/laboratory classes has not been satisfactory during the period, and/or
 - (b) Performance in the assignment works during the semester has not been satisfactory.
- 12.2 (i) Class tests, mid-semester examinations, assignments, tutorials, viva-voce, laboratory assignments, etc., are the constituent components of continuous assessment process, and a student must fulfill all these requirements as prescribed by the Teacher/Head of the Schools. If due to any compelling reason (such as his/her illness, calamity in the family, etc.) a student fails to meet any of the requirements within/on the scheduled date and time, the Teacher in consultation with the concerned Head of the School may take such steps (including conduction of compensatory tests/examinations) as are deemed fit.
- (ii) (a) Appearing in the end-semester examination in the theory component of a subject is compulsory for a student, unless exempted as per clause 12.2(ii)(b) stated below. If a



student fails to appear in the end-semester examination without any proper justification, he/she will be assigned an 'I' grade in the subject and will not be permitted to appear at the supplementary examination. In such a case, the student has to re-register for the subject in the next available semester.

(b) However, if a student misses the end-semester examination due to a compelling reason like serious illness of himself/herself or a calamity in the family, he/she may appeal to the Dean (Academic Affairs), through his/her Head of the School for permitting himself/herself to appear at the supplementary examination(s), as the case may apply. A sub-committee of the Postgraduate Program & Evaluation Committee consisting of the following members may, after examining the documents and being convinced about the merit of the case, recommend permitting him/her to appear in the supplementary examination(s) with full credit condoning his/her absence:

(<i>i</i>)	Dean (Academic Affairs)	- Chairman
(ii)	Dean (Student Affairs)	- Member
(<i>iii</i>)	Medical Officer of the Institute	- Member
(iv)	Assistant Registrar (Academics)	- Secretary

- 12.3 Students will be permitted to appear in the examinations in only those subjects for which they have registered at the beginning of the semester and has not been debarred.
- 12.4 The final grades awarded to the students in a subject must be submitted by the Teacher, within seven days from the date of holding the examination to the concerned Head of the School for onward transmission to the Assistant Registrar (Academic).
- 12.5 Any change of grade of a student in a subject, consequent upon detection of any genuine error of omission and/or commission on part of the concerned teacher, must be approved by the School PG Committee and must be forwarded by the Teacher, through the Head of the concerned School within 20 (twenty) days from the date of commencement of the next Semester. The Grade Revision Format approved for this purpose by the Senate be used.
- 12.6 For the benefit of and as a process of learning by the students, the answer scripts after correction of all class tests, mid-semester examinations, assignments etc., would be shown to the students within 3 weeks from the date of tests/examinations. The answer scripts of the end-semester examinations are to be shown within 15 days from the date of commencement of the next semester.
- 12.7 The normal duration for completing the 4-semester programme is 2-years. A student in any other circumstances, on account of poor performance or otherwise must complete the prescribed course work of the first four semesters within a maximum period of 3 years, including the period of temporary withdrawal. The Senate on the recommendation of the School and the PGPEC can extend the total time limit for completion of all requirements upto 4 years, which will be final and binding on all concerned.
- 12.8 Students who have obtained CGPA lower than 6.00 may be allowed, on the recommendation of the Head of the School and the approval of the Dean (Academic Affairs), to re-register in one or more subjects in which he/she received 'P' grade(s), so as to improve his/her CGPA to 6.00 or above, provided that the subject(s) is/are otherwise being offered in that semester and there is no clash in the time table. The grade will be revised and recorded only if there is an improvement.



13. Degree Requirement:

- 13.1 In order to qualify for a M.Sc. degree of the Institute covered under these Regulations, a student must:
 - (a) Complete all the credit requirements for the degree, as laid down in the prescribed curriculum of the discipline, with a minimum grade 'P' scored in every subject.
 - (b) Obtain a CGPA of <u>6.00</u> or higher at the end of the semester in which he/she completes all the requirements for the degree.
 - (c) Have cleared all dues to the Institute, the Hostel, the Library and the School.
- 13.2 The minimum total credit requirements that has to be satisfactorily completed for the award of a degree is depicted below:

Atmosphere & Ocean Sciences	: 108
Chemistry	: 97
Geology	: 108
Mathematics	: 102
Physics	: 96

13.3 Normally a student should complete all the requirements consecutively in four semesters for 2-Year M.Sc. course, or extendable as specified vide Clause - 12.8 of the regulations depending upon the merit of the case.

^{14.} Withdrawal from the Institute:

- 14.1 A student who has been admitted to a degree course of the Institute may be permitted to withdraw temporarily for a period of one semester or more from the Institute on grounds of prolonged illness or acute problem in the family, which compelled him to stay at home, provided:
 - (a) He/she applies to the Institute within 15 days of the commencement of the semester or from the date he/she last attended his/her classes whichever is later, stating fully the reasons for such withdrawal together with supporting documents and endorsement of the father/guardian.
 - (b) The Institute is satisfied that, inclusive of the period of withdrawal, the student is likely to complete his/her requirements for the degree within the time limits specified in clause 13.3.
 - (c)There are no outstanding dues or demands from him/her by the Institute/Hostel/School/Library/Gymkhana.
- 14.2 A student who has been granted temporary withdrawal from the Institute under the provisions of clause 14.1 will be required to pay the tuition fee and other essential fees/charges for the intervening period till such time as his/her name is borne on the rolls.
- 14.3 A student will be granted only one such temporary withdrawal during his/her tenure as a student of the Institute.
- 14.4 A student who has completed/attended the First and the Second semesters of studies in this Institute may, on grounds of health, be permitted to apply for transfer to any other IIT. If the Director approves such an application may be forwarded by the Dean of Academic Affairs to the other IIT concerned for their consideration. The decision of the Competent Authority of the other IIT in the matter shall be final.



15. Medals, Awards and Prizes:

List of medals and prizes that the Institute awards from its own fund and the rules that govern such awards are stated in **Appendix** – **VII**.

16. Assistanceship for M.Sc. students:

The Institute Assistantship (on the monthly stipend basis) & Financial Assistantship (SC/ST) for M.Sc. students are awarded from the Institute funds. Rules pertaining to the award of these Assistantships are stated in **Appendix – VIII**.

17. Modality to opt for Ph.D. Programme:

- **17.1 (i)** Those students securing CGPA \ge 8.5 after completing the third semester are eligible to opt for the Ph. D. programme.
 - (ii) Maximum limit of 20% students of the sanctioned strength of the programme can be selected for the Ph.D. programme subject to 17.1(i).
 - (iii) A student, who has already been selected for Ph.D. programme, as per the selection mechanism given in Appendix-VIII, but fails to maintain a CGPA \geq 8.5 after the 4th Semester, will not be permitted for enrollment into Ph.D. programme.
 - 17.2 An additional financial incentive of Rs. 4,000/- per month for the first two years of theprogramme would be provided to the students only after their successful registration into the Ph.D. programme. The rules in detail are stated in **Appendix IX.**

18. Relaxation:

The Senate may, under exceptional circumstances, consider any case of a student having a minor deficiency in respect of any of the requirements stated in these Regulations and relax the relevant provision of these Regulations based on the merit of the case. The grounds on which such relaxation is granted shall invariably be recorded and cannot be cited as precedence.



APPENDIX – I

RULES REGARDING ATTENDANCE (See *Clause 5.3* of the Regulations)

Following are the rules relating to attendance at classes:

- **M.** Attendance in all classes lectures, tutorials, laboratories are compulsory. A student may be debarred from appearing at an examination on the ground of unsatisfactory attendance.
- 2. The teacher concerned may condone absence from classes for a very short period due to unavoidable reasons provided he/she is satisfied with the explanation.
- 3. (a) If the period of absence is for a short duration (of not more than two weeks) application for leave shall have to be submitted to the Head of the School concerned stating fully the reasons for the leave requested for along with supporting document(s). The Head of the School will grant such leave.
 - (b) Absence for a period not exceeding two weeks in a semester due to sickness or any other unavoidable reason for which prior application could not be made may be condoned by the Head of the School provided he is satisfied with the explanation.
- 4. If the period of absence is likely to exceed two weeks, a prior application for grant of leave will have to be submitted through the Head of the School to the Dean, Academic Affairs, with the supporting documents. The decision to grant or condone such leave shall be taken by the Dean (Academic Affairs) after considering the recommendation of the Head of the School.
- 5. It will be the responsibility of the student to get his absence from classes condoned by the appropriate authority.
- 6. A student must intimate his/her absence to the Warden of the Hostel in which he/she is residing, before availing of any leave. Failing to do so will be construed as breach of discipline and will be dealt with as per provisions in **Appendix II**.



RULES REGARDING CONDUCT AND DISCIPLINE (See *Clause 6.2* of the Regulations)

Following rules shall be in force to govern the conduct and discipline of all students:

- 1. Students shall show due respect to the teachers of the Institute, the Wardens of the Hostels of Residence, the Sports Officers of the Gymkhana and the Officers of the National Cadet Corps; proper courtesy and consideration should be extended to the employees of the Institute and of the Hostels of Residence. They shall also pay due attention and courtesy to visitors.
- 2. Students are required to develop a friendly relationship with fellow students. In particular, they are expected to show kindness and consideration to the new students admitted to the Institute every year. Law bans ragging in any form to any body acts of ragging will be considered as gross indiscipline and will be severely dealt with.
- 3. The following acts of omission and/or commission shall constitute gross violation of the code of conduct and are liable to invoke disciplinary measures:
 - Ragging.
 - Furnishing false statement of any kind in the form of application for admission or for award of scholarship etc.
 - Displaying lack of courtesy and decorum; resorting to indecent behavior anywhere within or outside the campus.
 - Willfully damaging or stealthily removing any property/belongings of the Institute, Hostel or fellow students.
 - Possession, consumption or distribution of alcoholic drinks or any kind of hallucinogenic drugs.
 - Involvement in misuse of internet/e-mail facilities or servers anywhere in the Hostel / School/Centre
 - Adoption of unfair means in the examinations.
 - Organizing or participating in any group activity in company with others in or outside the campus without prior permission of the Dean of Students' Affairs.
 - Mutilation or unauthorized possession of library books.
 - Resorting to noisy and unseemly behavior, disturbing studies of fellow students.
 - Not intimating his/her absence to the warden of the Hostel before availing any leave.

Commensurate with the gravity of the offence, the punishment may be reprimand, fine, expulsion from the Hostel, debarment from an examination, rustication for a specified period or even outright expulsion from the Institute.

- 4. For an offence committed (a) in a Hostel, (b) in the School or a classroom and (c) elsewhere, the Warden, the Head of the School and the Dean of Students' Affairs, respectively, shall have the authority to reprimand or impose fine or take any other suitable measure. All cases involving punishment other than reprimand shall be reported to the Chairman of the Standing Disciplinary Committee.
- 5. (a) All major acts of indiscipline, which may have serious repercussion on the general body of students, and/or which may warrant a uniform and more formalized nature of investigation, shall



be handled by the *Standing Institute Disciplinary Committee* appointed by Senate. The Standing Disciplinary Committee consists of the following ex-officio and other members:

(<i>i</i>)	Dean of Student Affairs	- Chairman
(ii)	Warden of Hostels	- Member
(iii)	Three member of faculty nominated by	- Member
	the Senate, by rotation for two years	
(iv)	Two representatives of the students	- Members
	(nominated by the Senate)	
(v)	Assistant Registrar (Academics)	- Secretary

In addition, the Chairman may invite any other person(s) to be associated with the proceedings of a particular case, if his/their participation is considered necessary in disposing of the matter.

- (b) Recommendation of the committee, which will include the suggested punishment in cases of guilt proven, will be forwarded to the Chairman Senate for necessary action.
- 6. Cases of adoption of unfair means in an examination shall be dealt with by the *Committee on Prevention of Examination Malpractices* consisting of the following members:

(<i>i</i>)	Dean, Academic Affairs	- Chairman
(ii)	Dean, Student Affairs	- Member
(iii)	Professor-in-Charge of Examination	- Member
(iv)	Invigilator reporting the case	- Members
(v)	Subject teacher concerned	- Member
(vi)	Vice-President, Students' Gymkhana	- Member
(vii)	Assistant Registrar (Academics)	- Secretary

The Committee shall recommend appropriate measures in each case to the Chairman of the Senate for awarding the punishment.



GUIDELINES FOR AWARD OF LETTER GRADES

(Vide *Clause 11.2(a) and (b)* of the Regulations)

- **M.** In general there shall be no rigid marks-to-grade linkage. Difficulty levels of the examinations, tests, assignments, viva-voce and other factors that contributed to the final marks are to be considered by the teacher/co-ordination committee of a subject while converting marks into letter grades.
- 2. (a) The grades F and Ex are to be considered as bench mark grades.
 - (b) For subjects, which have a laboratory component (P-component), to secure any grade higher than 'F' a student has to achieve individually, more than the cut-off marks in both the theory component and the laboratory component. Otherwise, he/she has to achieve higher than the cut-off marks in the theory component alone.
 - I The range of cut-off marks below which a student would be assigned an 'F' grade is 30-35 for the theory component and 35-40 for the laboratory component, the exact cut-off marks is to be decided by the teacher/co-ordination committee.
 - (d) The exceptionally brilliant performance is to be assigned an 'Ex' grade. Even the best student of any class needs to be good enough to be awarded the 'Ex' grade.
- 3. In the case of a relatively large class and/or classes where the performance level depicts more or less a normal distribution:
 - (a) The average performance (around mean value of marks) is to be assigned 'C' grade. However, if by teacher's/co-ordination committee's perception the general level of the class is considered to be appreciably high, the average performance may be assigned 'B' grade.
 - (b) All other marks to grade conversion are to be done relatively with respect to the average performance in between (but excluding the F and Ex grades), which have already been assigned, by choosing appropriate boundary marks between grades.
 - I Normally, in a reasonably large class of students distribution of grades is expected to be as follows:

Ex	<=10 %
Α	10 – 20 %
B, C, D	20 – 35 %
Р	10 – 25 %
F	< = 5 %

- 4. In the case where a student appears in the supplementary examination or attends summer quarter, the conversion from marks to grade would be done applying the same norm as was framed for the original class.
- 5. For classes where excessive bunching occurs resulting in all most all the marks tending to cluster into same category, conversion from marks to grade may be done using the table given below, where 'm' stands for the marks obtained. However, the teacher may, on his/her perception of the difficulty level of assessment process undertaken, alter the boundary (cut-off) marks by +/- 5 marks.



Range of Marks	Grade
m >= 90	Ex
80 <= m < 90	А
70 <= m < 80	В
60 <= m < 70	С
50 <= m < 60	D
$35 \le m \le 50$	P for Theory Component
40 <= m < 50	P for Laboratory Component
m < 35	F for Theory Component
m < 40	F for Laboratory Component

- 6. Co-ordination committee would moderate the results of the different sections of a class if wide disparity in performance across sections were observed.
- 7. All the requirements for the laboratory component are to be satisfied by a student within deadline setup by the teacher/co-ordination committee before the start of the end-semester examination. If a student due to a genuine reason like illness of himself/herself or calamity in the family cannot complete a particular sub-component, the teacher/co-ordination committee may allocate him/her additional time. In this case an I-grade if needed may temporarily be allocated to the student in the subject. However, the requirement in any case has to be fulfilled within 15 days after the end of the end-semester examination and the grade finalized. There is no provision for supplementary examination or summer quarter in the laboratory component. If a student cannot clear the laboratory component of a particular subject, he/she will be assigned the grade 'F' in that subject and has to reregister in the subject, if permitted, in the immediately following semester in which it is offered.



PROCEDURE AND GUIDELINES:

- 1. The normal duration for M. Tech./M. Sc. thesis work is 2 semesters. The thesis is to be evaluated in two stages, i.e., Stage-1 evaluation at the end of first semester of the thesis work and Stage-2 evaluation at the end of the second semester of the thesis work. Stage-1 and Stage-2 evaluations are termed as **Interim Evaluation** and **Final Evaluation**, respectively.
- 2. For evaluation of each thesis, two internal examiners and an external examiner are to be appointed. The internal examiners (within the School) are nominated by the Head of School. The external examiner (outside the institute) is to be appointed by the Dean (Academic Affairs) from the list of the examiners recommended by the School. The recommended practice is that one external examiner is appointed for examination of at most six (6) theses. *The Head of School shall send the list of external examiners to the Dean (Academic Affairs) at least two months before the final examination date.*
- 3. The interim evaluation is to be done by the internal examiners and supervisor(s) of the thesis. The final evaluation is to be done by a committee consisting of supervisor(s), internal examiners and the external examiner. The supervisor will be the coordinator for the interim and final evaluation.
- 4. For interim evaluation, the student must give an open oral presentation and submit a written report on the work carried out by him/her. For the final evaluation, the student must submit a soft-bound copy of the thesis to the School at least three weeks before the date of final examination. The School should send the thesis to the examiners well before the final examination date.
- 5. The evaluation report should be recorded by the supervisor and the examiners by filling up the prescribed evaluation forms. For each evaluation, the mark awarded to a student is computed as the average of the marks awarded to the student (as mentioned in the evaluation form) by the supervisor(s) and the examiners. In the final evaluation, the final marks awarded to a student is computed by assigning 40% weightage and 60% weightage to the average marks awarded to the student in the interim and final evaluations, respectively, and the final grade is awarded based on this final composite score of a student (as per the grading system given in the following Table).

Performance	Letter Grade	Range of marks ('m') obtained
Excellent	Ex	<i>m</i> ≥ 90
Very Good	А	$80 \le m < 90$
Good	В	$70 \le m < 80$
Fair	С	$60 \le m < 70$
Average	D	$50 \le m < 60$
Pass	Р	$35 \le m < 50$
Fail	F	<i>m</i> < 35

Grading System



INDIAN INSTITUTE OFTECHNOLOGY BHUBANESWAR Thesis Evaluation for M.Sc. Programmes

- 6. The grades from **EX** to **P** are the Pass Grades. If the student is not awarded one of these grades, then the student is deemed to have failed in this examination and is given an **F** grade and such a student, having incorporated the suggestions and observations of the panel, can ask to be re-evaluated within ONE MONTH. The student can pass this re-evaluation with a **P** grade. Should the student fail again, re-registration for this Semester is required.
- 7. The Head of School shall organize the evaluation process in the School.
- 8. After the evaluation process is over, the School must send the original evaluation reports and the hard-bound thesis (final form) to the Academic Section for further processing. The final thesis will be archived in the Institute Library.



INDIAN INSTITUTE OFTECHNOLOGY BHUBANESWAR Thesis Evaluation for M.Sc. Programmes

INTERIM EVALUATION OF THESIS

NAME OF THE STUDENT:

ROLL NUMBER:

TITLE OF THE THESIS:

DATE OF EXAMINATION:

REMARKS and SUGGESTIONS are to be included on the reverse of this form.

Summary of Marks Awarded in Mid-Term Evaluation:

Panel Member	Name	Marks awarded	Signature	Marks awarded to
		(out of 100)		the student [*]
Supervisor				
Co-supervisor				
(if any)				
Internal				
Examiner-1				
Internal				
Examiner-2				

Approved By: Head of School:

*Mark awarded to the student is the average of the marks awarded by the supervisor(s) and the internal examiners.



INDIAN INSTITUTE OFTECHNOLOGY BHUBANESWAR Thesis Evaluation for M.Sc.Programmes

FINAL EVALUATION OF THESIS

NAME OF THE STUDENT:

ROLL NUMBER:

TITLE OF THE THESIS:

DATE OF EXAMINATION:

Summary of Marks Awarded in Final Evaluation:

Panel Member	Name	Marks awarded (out of 100)	Signature	Marks awarded to the student [*]
Supervisor				
Co-supervisor (if any)				
Internal				
Examiner-1				
Internal				
Examiner-2				
External				
Examiner				

Calculation of Final Marks Awarded:

	Final Marks awarded to the student (out of 100)
40% of marks awarded in interim evaluation	
60% of marks awarded in final evaluation	

GRADE AWARDED: EX A B C D P F

(Please circle the awarded grade clearly AND strike out the others)

RECOMMENDATIONS:

The thesis submitted by the candidate is: (please choose ONE)

(a)Acceptable and may be regarded as final in its present form.

(b)Acceptable with minor revisions. The revisions and modifications have been indicated to the student during the examination (the revisions and modifications to be done should be outlined on the reverse of this form). The student should submit the modified thesis certified by the supervisor for final submission.

(c) Not acceptable in its present form and it needs major revision. The modifications to be done should be outlined in a separate document. The modifications must be incorporated by the student in the thesis and the same must be certified by the supervisor and the internal examiner before final submission.

Approved By:

Head of School:

^{*}Mark awarded to the student is the average of the marks awarded by the supervisor(s) and the examiner(s).



INDIAN INSTITUTE OFTECHNOLOGY BHUBANESWAR Thesis Evaluation for M.Sc.Programmes

INTERIM EVALUATION OF THESIS BY SUPERVISOR/EXAMINER

NAME OF THE STUDENT:

ROLL NUMBER:

SCHOOL/ CENTRE:

Assessment:

Part A: Based on the Report

S. No.	Assessment criterion	Marks (out of 10)	Remarks
1.	Review of the research area		
2.	Objective/Aim/Goals set for the thesis work		
	(Clarity and completeness)		
3.	Work carried out		
4.	Extent of independent study		
5.	Analysis and interpretation		
6.	Conclusion		
7.	Report organization and quality		

Part B: Based on the Presentation and Viva-Voce Examination

S. No.	Assessment criterion	Marks(out of 15)	Remarks
1.	Presentation: clarity and structure		
2.	Answers to questions– demonstrating depth of understanding of the problem and inference drawn		

TOTAL MARKS =

REMARKS and SUGGESTIONS are to be included on the reverse of this form.

Name of the Supervisor/Examiner:

Signature with Date:



INDIAN INSTITUTE OFTECHNOLOGY BHUBANESWAR Thesis Evaluation for M.Sc.Programmes

FINAL EVALUATION OF THESIS BY SUPERVISOR/EXAMINER

NAME OF THE STUDENT:

ROLL NUMBER:

SCHOOL/ CENTRE:

I. Assessment:

Part A: Based on the Thesis

S. No.	Assessment criterion	Marks (out of 10)	Remarks
1.	Review of the research area		
2.	Objective/Aim/Goals set for the thesis work (Clarity and completeness)		
3.	Work carried out		
4.	Extent of independent study		
5.	Analysis and interpretation		
6.	Conclusion		
7.	Thesis organization and quality		

Part B: Based on the Presentation and Viva-Voce Examination

S. No.	Assessment criterion	Marks(out of 15)	Remarks
1.	Presentation: clarity and structure		
2.	Answers to questions– demonstrating depth of understanding of the problem and inference drawn		

TOTAL MARKS =

II. Recommendations: The thesis submitted by the candidate is: (please choose ONE)

(a)Acceptable and may be regarded as final in its present form

(b)Acceptable with minor revisions. The revisions and modifications have been indicated to the student during the examination (the revisions and modifications to be done should be outlined on the reverse of this form). The student should submit the modified thesis certified by the supervisor for final submission.

(c) Not acceptable in its present form and it needs major revision. The modifications to be done should be outlined in a separate document. The modifications must be incorporated by the student in the thesis and the same must be certified by the supervisor and the internal examiner before final submission.

Name of the Supervisor/Examiner:

Signature with Date:



PROCEDURE AND GUIDELINES:

- 1. The normal duration for research review paper work in M. Tech./M. Sc. programmes is one semester. The research review paper is to be evaluated in two stages, i.e., Stage-1 evaluation at the middle of the semester and Stage-2 evaluation at the end of the semester. Stage-1 and Stage-2 evaluations are termed as the **mid-term evaluation** and **final evaluation**, respectively.
- 2. For each research review paper evaluation, an internal examiner is to be appointed. The internal examiner (within the School) is nominated by the Head of School before mid-term evaluation.
- 3. Both mid-term and final evaluations are to be performed by a committee consisting of supervisor and the internal examiner. The internal examiner will serve as the coordinator for the evaluation process. The duration of evaluation of each research review paper should not be less than an hour.
- 4. For every evaluation, the student must give an oral presentation followed by an open vivavoce and submit a written review paper/report. For the final evaluation, the student must submit soft-bound copy of the research review paper to the School at least two weeks before the date of final examination. The School should send the review paper to the evaluation committee before the final examination date.
- 5. The evaluation report should be recorded by the supervisor and the internal examiner by filling up the prescribed evaluation form. For each evaluation, the mark awarded to a student is computed as the average of the marks awarded to the student (as mentioned in the evaluation form) by the supervisor and the internal examiner. In the final evaluation at the end of the semester, the final marks awarded to a student is computed by assigning 40% weightage and 60% weightage to the average marks awarded to the student in the mid-term and end-term evaluations, respectively, and the final grade is awarded based on this final composite score of a student (as per the grading system given in the following Table).

	Grading System				
Performance	Letter Grade	Range of marks ('m') obtained			
Excellent	Ex	$m \ge 90$			
Very Good	А	$80 \le m < 90$			
Good	В	$70 \le m < 80$			
Fair	С	$60 \le m < 70$			
Average	D	$50 \le m < 60$			
Pass	Р	$35 \le m < 50$			
Fail	F	<i>m</i> < 35			

Grading System



- 6. The grades from **EX** to **P** are the Pass Grades. If the student is not awarded one of these grades, then the student is deemed to have failed in this examination and is given an **F** grade and such a student, having incorporated the suggestions and observations of the panel, can ask to be re-evaluated within ONE MONTH. The student can pass this re-evaluation with a **P** grade. Should the student fail again, re-registration for this Semester is required.
- 7. After the final evaluation process is over, the School must send the original evaluation reports and the hard-bound research review paper (final form) to the Academic Section for further processing. The final research review paper will be archived in the School Library. Copies of all evaluation reports must be kept in the school office.



MID-TERM EVALUATION OF RESEARCH REVIEW PAPER

NAME OF THE STUDENT:

ROLL NUMBER:

TITLE OF THE RESEARCH REVIEW PAPER:

DATE OF EXAMINATION:

REMARKS and SUGGESTIONS are to be included on the reverse of this form.

Summary of Marks Awarded in Mid-Term Evaluation:

Panel Member	Name	Marks awarded (out of 100)	Signature	Marks awarded to the student [*]
Supervisor				
Internal				
Examiner				

Approved By: Head of School:

^{*}Mark awarded to the student is the average of the marks awarded by the supervisor and the internal examiner.



FINAL EVALUATION OF RESEARCH REVIEW PAPER

NAME OF THE STUDENT:

ROLL NUMBER:

TITLE OF THE RESEARCH REVIEW PAPER:

DATE OF EXAMINATION:

Summary of Marks Awarded in Final Evaluation:

Panel Member	Name	Marks awarded (out of 100)	Signature	Marks awarded to the student [*]
Supervisor				
Internal				
Examiner				

Calculation of Final Marks Awarded:

	Final Marks awarded to the student
	(out of 100)
40% of marks awarded in mid-term evaluation	
60% of marks awarded in final evaluation	

GRADE AWARDED: EX A B C D P F

(Please circle the awarded grade clearly AND strike out the others)

RECOMMENDATIONS:

The Research Review Paper submitted by the candidate is: (please choose ONE)

(a) Acceptable and may be regarded as final in its present form.

(b) Acceptable with minor revisions. The revisions and modifications have been indicated to the student during the examination (the revisions and modifications to be done should be outlined on the reverse of this form). The student should submit the modified research review paper certified by the supervisor for final submission.

(c) Not acceptable in its present form and it needs **major revision**. The modifications to be done should be outlined in a separate document. The modifications must be incorporated by the student in the review paper and the same must be certified by the supervisor and the internal examiner before final submission.

Approved By:

Head of School:

*Mark awarded to the student is the average of the marks awarded by the supervisor and the internal examiner.

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MID-TERM EVALUATION OF RESEARCH REVIEW PAPER BY THE SUPERVISOR/EXAMINER

NAME OF THE STUDENT:

ROLL NUMBER:

SCHOOL/ CENTRE:

Assessment:

Part A: Based on the Report

S. No.	Assessment criterion	Marks (out of 15)	Remark(s)
1.	Understanding of the research area		
2.	Clarity and completeness/progress of the review work		
3.	Analysis and interpretation done		
4.	Organization and quality of the review report/paper		

Part B: Based on Presentation and Viva-Voce Examination

S. No.	Assessment criterion	Marks (out of 20)	Remarks
1.	Presentation: clarity and structure		
2.	Answers to questions – demonstrating depth of understanding of the problem and inference drawn		

TOTAL MARKS =

REMARKS and SUGGESTIONS are to be included on the reverse of this form.

Name of the Supervisor/Examiner:

Signature with Date:



FINAL EVALUATION OF RESEARCH REVIEW PAPER BY THE SUPERVISOR/EXAMINER

NAME OF THE STUDENT:

ROLL NUMBER:

SCHOOL/ CENTRE:

I. Assessment

Part A: Based on the Review Paper

S. No.	Assessment criterion	Marks (out of 15)	Remarks
1.	Understanding of the research area		
2.	Clarity and completeness of the review work		
3.	Analysis and interpretation done		
4.	Organization and quality of the review paper		

Part B: Based on the Presentation and Viva-Voce Examination

S. No.	Assessment criterion	Marks (out of 20)	Remarks
1.	Presentation: clarity and structure		
2.	Answers to questions – demonstrating depth of understanding of the problem and inference drawn		

TOTAL MARKS =

II. Recommendations: The Research Review Paper submitted by the candidate is: (*please choose ONE*) (a) Acceptable and may be regarded as final in its present form

(b) Acceptable with minor revisions. The revisions and modifications have been indicated to the student during the examination (the revisions and modifications to be done should be outlined on the reverse of this form). The student should submit the modified research review paper certified by the supervisor for final submission.

(c) Not acceptable in its present form and it needs major revision. The modifications to be done should be outlined in a separate document. The modifications must be incorporated by the student in the review paper and the same must be certified by the supervisor and the internal examiner before final submission.

Name of the Supervisor/Examiner:

Signature with Date:



APPENDIX – VI

RULES REGARDING SUPPLEMENTARY EXAMINATION

- 1. Except as specified in Clause 12.2(ii)(b), a student will be eligible to appear in the supplementary examination in a subject if he/she had actually appeared at the last end-semester examination in that subject and obtained the grade 'F'.
- 2. A student will not be allowed to appear in more than 3 (three) subjects in the supplementary examinations.
- 3. Intending students must submit their application, countersigned by the teacher(s) of the subject(s) or the Head of the School concerned, along with the necessary fees to the Assistant Registrar (Academic) by the date as announced by a notification.
- 4. The supplementary examinations shall be held on such dates as laid down in the Academic Calendar for the year or as notified separately.
- 5. The grade in the subject scored by the student appearing in the supplementary examination will be recomputed by substituting the marks of the end-semester in the total marks scored by that scored in the supplementary examination. Unless exempted as per regulation in Clause 12.2 (ii) (b), a student is entitled only to one grade lower than the actual grade thus scored, except that the performance grade 'P' remains unaltered, as elucidated in the table below:

Grade obtained	Grade to be awarded
F	F
Р	Р
D	Р
С	D
В	С
Α	В
Ex	Α

6. The final grades awarded to the students must be sent to the Assistant Registrar (Academic) within 3 days from the date the supplementary examination was held.



RULES FOR THE AWARD OF INSTITUTE MEDALS, AWARDS AND PRIZES (Vide *Clause 15* of the Regulations)

Eligibility Criteria:

A student is eligible for the award of any medals or prize if :

- (i) He/she has passed in all the prescribed subjects and cleared all other requirements, if any, obtaining a CGPA not lower than 8.50 in the semester after which the Medal or Prize is to be awarded.
- (ii) He/she has not failed in any subject at any stage during his/her academic career till the time of the award.
- (iii) No disciplinary action has been taken against him/her for any offence at any time prior to the award.
- (iv) He/she has not been punished under examination malpractice and involved in violation of code of conduct at any stage of the course in the Institute/ Hostel/ School/Gymkhana etc.

The medals and prizes awarded by the Institute for 2-Year M. Sc. are listed below. Specific rules that govern these awards have been mentioned against each. In the event of a tie between two or more students, their performance at the end of the immediately preceding semester will be taken into consideration for deciding the award. This criterion will be exclusively applied including using the All-India-Rank in the JAM till the tie is broken.

1. INSTITUTE GOLD AND SILVER MEDALS

(i) DIRECTOR'S GOLD MEDAL

This Gold medal is awarded to the student being adjudged to be the academically best, securing the highest CGPA at the end of the 4th Semester, among the graduating students of all 2-Year M. Sc. courses in the Schools, on the same criterion as is being followed in respect of existing President of India gold medal.

(ii) INSTITUTE SILVER MEDALS

The silver medal is awarded to the student in each discipline of 2-Year M. Sc. who secures the highest CGPA at the end of 4th Semester, among the graduating students of the batch admitted through JAM.

2. INSTITUTE PROFICIENCY PRIZE

The Institute will award one prize, called as *Proficiency in Project Work Prize*, for the best Project work in each of the discipline of 2-Year M. Sc. course among all Schools.



RULES FOR THE INSTITUTE ASSISTANCE (MONTHLY STIPEND BASIS) & FINANCIAL ASSISTANCEAND OTHERS FOR M.Sc. STUDENTS (Vide *Clause 16* of the Regulations)

The Institute awardsthese Assistantships to all eligible students of the 2-year M.Sc. courses, in accordance with the following rules:

- 1. All students continuing M.Sc. programme, except the students belonging to SC and ST (who are eligible for Financial Assistantship) and fulfill the conditions hereinafter appearing shall be eligible for the award of monthly stipend @ Rs.1000/- for the first two years.
- 2. All admitted students will be given waiver of tuition fee for the first two years.
- 3. SC/ST students, whose parental income are not more than Rs. 4.5 lakhs /- per *annum* (*as specified by Govt. of India time to time*) are entitled to avail Financial and Other Assistance as per the following.

Free Basic Menu (as per actual) + pocket allowance @ Rs.250/- per month for 12 months + Exemption from paying room rent of the hostel @ Rs.1000/- per year (in accordance with the present Fee Structure)

or

@ Rs. 300/- per month as Scholarship for 12 months + Exemption from paying room rent of the hostel @ Rs.1000/- per year (in accordance with the present Fee Structure).



MODALITIES FOR ENROLLMENT IN Ph. D. PROGRAMME

The joint M. Sc. - Ph. D. Programme programme encourages bright and motivated students to enrol themselves for Ph. D. programme after completion of third semester of M. Sc. programme. The modalities for opting for Ph. D. and selection to the Ph. D. programme in the joint M. Sc. - Ph. D. programme are as given below.

1. (a) After completing the third semester of the M. Sc. Programme, those students securing CGPA ≥ 8.5 and have expressed their desire in writing are eligible to opt for the Ph. D. programme.

(b) Those with CGPA < 8.5 are not allowed to opt for the Ph. D. programme and shall exit with the M. Sc. degree.

(c) If the CGPA of the opted student falls below 8.5 at the end of fourth semester, the student will also have to exit with the M. Sc. degree only.

- 2. The number of students allowed to opt for the Ph. D. programme shall ordinarily limit to 20% of the prevailing sanctioned strength in the respective M. Sc. programme.
- 3. On completion of M. Sc. and on enrolment to the Ph. D. programme, the student will be paid assistantship as applicable to a Ph. D. student and shall be regulated by the Ph. D. regulations of the Institute.
- 4. All students will receive the grade card and degree subject to completing all requirements of the M. Sc. part of the programme.
- 5. The students continuing with the Ph. D. programme (after completion of M. Sc.) shall submit two dissertations/theses; one for M. Sc. as required under the programme and the other for Ph. D.
- 6. In the fourth semester of M. Sc. Programme, students who have been allowed to enrol for Ph.D. programme can take up two additional Ph. D. level subjects, if recommended by the Doctoral Scrutiny Committee of the student.

Selection Mechanism for Enrollment into Ph. D. Programme:

- 1. The eligible students (as per the regulations given above) applying for admission into Ph. D. programme, will have to go through the written test and interview conducted by the School.
- 2. The maximum number of students being selected in this category is limited to 20% of the prevailing sanctioned strength in the respective programme. The reservation policy of GoI would be followed for allocation of seats in this 20% of the sanctioned strength of the respective programmes. For selection, separate merit lists will be prepared for each category of candidates.
- 3. A candidate in this category is eligible for final selection if he/she scores at least 50% of the maximum marks individually in the written test and interview. The final selection will be based on combined scores in the written test and interview.

