Regulations

for

PhD Program

(Effective from the Academic Year 2017-18)

National Institute of Technology Durgapur

1.0. Introduction

1.1. The Institute offers doctoral research programme leading to the degree of Doctor of Philosophy (PhD) in the following disciplines.

- I. "Doctor of Philosophy", Department of Biotechnology
- II. "Doctor of Philosophy", Department of Chemical Engineering
- III. "Doctor of Philosophy", Department of Chemistry
- IV. "Doctor of Philosophy", Department of Civil Engineering
- V. "Doctor of Philosophy", Department of Computer Science & Engineering
- VI. "Doctor of Philosophy", Department of Electrical Engineering
- VII. "Doctor of Philosophy", Department of Electronics & Communication Engineering
- VIII. "Doctor of Philosophy", Department of Earth & Environmental Studies
- IX. "Doctor of Philosophy in English/ Economics/ Management", Department of Humanities & Social Sciences
- X. "Doctor of Philosophy", Department of Management Studies
- XI. "Doctor of Philosophy", Department of Mathematics
- XII. "Doctor of Philosophy", Department of Mechanical Engineering
- XIII. "Doctor of Philosophy", Department of Metallurgical & Materials Engineering
- XIV. "Doctor of Philosophy", Department of Physics

1.2. The provisions of the regulations shall be applicable to a PhD programme in a new department that is set up in the Institute and added to the list in clause 1.1.

1.3. Notwithstanding any of the clauses provided in the Regulations, the Senate can exercise its powers to amend/interpret/implement decisions and actions concerned with academic matters.

1.4. A joint PhD degree may be awarded by NIT Durgapur and another premier academic institution with which NIT Durgapur has MoU to this effect. However, each such case shall have to be approved by the respective Senate.

1.5. All the norms and guidelines of the UGC will be followed in the PhD programme at NIT Durgapur. (UGC Regulations, 2016; The Gazette of India, July 5, 2016, Part III, Section 4)

1.6. The Board of Governors of the Institute may, on the recommendation of the Senate, change any or all parts of the Regulations at any time.

1.7. The medium of communication, instruction, examination, seminars and the defense of PhD thesis will be English.

2.0. Admission

2.1. Status of research scholar: The status of the candidates admitted to the PhD programme shall be classified under any one of the following categories:

- A. Full-time research scholar with Institute Scholarship
- B. Full-time research scholar with financial support from Government/ Semi-Government / other organizations
- C. Full-time research scholar selected in externally sponsored projects in the Institute
- D. Full-time research scholar under QIP/ EFIP scheme
- E. Full-time foreign research scholar admitted through Government of India
- F. Part-time research scholar from the Institute (NIT Durgapur) Faculty/ Staff
- G. Sponsored research scholar from Government/ Semi-Government / other highly reputed organizations

Beside above categories, admission of research scholar from foreign institution/organization shall be made as per laid down terms and conditions in MoU with respective institute / organization.

The PhD degree awarded to all categories of students shall be treated as the same and equivalent.

2.2. Eligibility for Admission

The minimum qualification required for admission to PhD programme is one of the following:

2.2.1. Minimum Eligibility Criteria for Admission to Full Time Ph.D. Programme of NIT Durgapur

| Qualifying Degree* (for relevant discipline) | General / OBC | SC / ST | National Eligibility Test Qualifications |
|--|--------------------------|--------------------------|--|
| M. Tech./ M.E./ M. Arch/ M. Pharm / equivalent / MBA/ PGDBM/ PGDM | 6.5 CGPA or 60% marks | 6.0 CGPA or 55% marks | To be considered as full-time research scholar a National Eligibility Test (NET) qualification, as listed below, is a must for A, B and C categories of candidates. |
| M. Sc./ M. Com./ MA/ MBBS/ BDS | 6.5 CGPA or 60% marks | 6.0 CGPA or 55% marks | List of NET qualifications: CSIR-UGC, GATE, JAM, GPAT, DBT- JRF, JEST, ICMR, ICAR, NBHM, |
| B. Tech/ B.E./ MCA/ B. Arch/ B. Pharm | 7.5 CGPA or 70% marks | 7.0 CGPA or 65% marks | Bioinformatics National Certification Examination etc. (OM No. SB/S9/2-01/2015 dated |
| CA/ ICWAI/ CS with a graduation degree | 55% marks | 50% marks | 07.01.2015) However, these qualifications will have to be relevant to the qualifying degree of the candidate concerned. |

*All the degrees will be from a recognised technical institute / university. However, no post-graduate degree obtained under correspondence mode will be considered for admission to Ph.D. programme.

2.2.2. Scholars under categories F and C must submit a no-objection certificate from the Institute / PI of the project respectively during admission. They shall work for the PhD programme while discharging their normal duties.

2.2.3. Sponsored research scholars (category G) may carry out their research work in their parent organization after fulfilling the residential pre-requisites in the Institute. They shall submit a Sponsorship certificate from the employer during admission.

2.2.4. The maximum age during admission to the PhD program under categories A, B and C shall be 28 years with relaxation of 5 years for SC/ST/OBC/PWD/FEMALE Candidates.

2.2.5. Mere possession of required degree and a good academic record do not guarantee admission to a candidate for the Ph.D. programme. Apart from academic record, the DRPC will take into consideration the research aptitude, ability to work in a team, subject interest, availability of supervisors, facilities in the department and the research focus of the department while selecting candidates to the Ph.D. programme.

2.3. Residential Requirement:

2.3.1. Normally all candidates admitted to the PhD programme will be required to stay in the Institute till they complete all assigned work and submit thesis. However, for candidates sponsored from Government / Semi - government / major industry with established R&D facilities, the DRPC may recommend to reduce the minimum residential requirement to one year or higher (for completing the course work and formulating the research problem).

2.3.2. If a sponsored candidate intends to carry out a major part of his research work in his place of employment, he must convince the DRPC at the time of selection that adequate research facilities and research tradition exist in his organisation. While taking the decision DRPC will examine all the documents presented to it regarding adequacy of the R&D facilities available in the sponsoring organisation. These documents have to be furnished by the candidate during the time of interview. In general major Central Govt. (CSIR, DRDO, DAE, ISRO, CDRC etc.) labs, research organisations, industries (public or private) with established R&D facilities are taken as organisations with adequate facilities. Regarding recognition of other organisations the DRPC has to make a recommendation on the basis of the material available to it to the Director through Dean (Academic) for approval. In every case, the Senate will decide the residential requirement.

2.4. Admission procedure:

2.4.1. Admission of scholars under categories A and B shall be made once in each semester as per a predecided schedule indicating the total number of seats available. Dean (Academic) will publish the admission notice on the Institute website. The departments will screen the applications sent by the Academic Section and prepare the shortlist. They will conduct admission tests and viva voce, select the candidates on the basis of overall academic performance, written test and viva voce and send the list of selected candidates to the office of the Dean (Academic). One expert from other department, selected from a panel of experts nominated by Director, will act as an observer in the viva voce.

2.4.2. Admission of scholars under categories C shall be made once in each semester along with the scholars under categories A and B. The candidate shall submit the application through the Dean (R&C) in the prescribed format of Sponsored Research and Consultancy Cell (SRCC) on recommendation of concerned PI and Head of the Department.

2.4.3. Admission under categories F and G shall be made once in every academic year, during Odd Semester only.

2.4.3.1. The admission under category F shall be made directly subject to fulfillment of eligibility criteria fixed by the respective departments, and submission of requisite documents and no-objection certificate.

2.4.3.2 Admission of candidates under category G shall be made against the admission notice on the Institute website. The departments will conduct admission tests and viva voce, select the candidates on the basis of overall academic performance, written test and viva voce and send the list of selected candidates to the office of the Dean (Academic). Dean (Academic) shall publish the selection list on the Institute website. The candidates need to produce a sponsorship certificate in the prescribe format of the Institute during admission test.

2.4.4. Admission of research scholar from foreign institution/organization shall be made as per laid down terms and conditions in MoU with respective institute / organization during Odd Semester only.

2.4.5. Applications of candidates shall be received by the office of Dean (Academic) and forwarded to the departments for screening. Dean (Academic) shall publish the short-list of the candidates screened by the departments on the Institute website along with the date, time and venue of the admission test and viva voce.

2.4.6. Dean (Academic) shall publish the selection list on the Institute website. All communication related to the admission procedure shall be made through the Institute website <u>www.nitdgp.ac.in</u> only. Regular reservation policy of the Government of India shall apply.

2.4.7. All selected candidates will fill in the admission form (vide **Annexure - I**) and submit an undertaking that s/he would abide by all rules and regulations and codes of conduct of the Institute.

2.4.8. Respective departments shall be responsible for the selection of research scholars.

2.5. Withdrawal

2.5.1. A sponsored student, pursuing PhD by staying on campus, can become non-resident by taking withdrawal from the programme. She/he may return to his place of work on completion of residence

requirement, provided that such a scenario was mentioned in his application for admission and the student has a second supervisor from his place of employment. The minimum period of work will be extended by one year, except when the student is employed in a superior R&D organization and is engaged in full time research on the same topic as his PhD works. The Deputy Registrar (Academic) will issue a withdrawal order.

2.5.2. In case of students, who secure a new job or otherwise wish to move outside the institute and end their doctoral programme prematurely, need to refund any scholarship received.

3.0. Supervisors

3.1. The assignment of Ph.D. students to supervisor(s) by DRPC and constitution of Doctoral Scrutiny Committee (DSC) following enrollment / admission of the Ph.D. students will be made within a period of fifteen days. Chairperson (DRPC), in consultation with the supervisor(s), shall constitute the DSC (vide **Annexure - II**). The supervisor(s) shall finalize the broad (tentative) title of the research topic of a selected candidate after mutual discussion.

3.2. All supervisors of PhD programme shall be at least in the rank of Assistant Professor or equivalent having a PhD degree. If a person from outside the Institute, not satisfying these criteria, is proposed to be a supervisor, the matter shall be referred to the Senate for decision.

3.3. The maximum number of research scholars that one supervisor can supervise, at any point of time, is eight. The candidates who have already submitted the thesis will not be included for the purpose.

3.4. There can be maximum three supervisors for a research scholar, with maximum one supervisor from outside the Institute.

3.5. At least one of the supervisors must be a regular faculty member of the Institute belonging to the department in which the research scholar will be registered for doctoral studies.

3.6. Other supervisor may be from the same department of the Institute or other departments / highly reputed institutes or organizations in India.

3.6.1. A person from abroad satisfying the qualification criteria may become a supervisor, if NIT Durgapur has a formal collaboration through MOU with the Institute/ organization to which s/he belongs.

3.6.2. A person from an institute / organization abroad, not having MOU with NIT Durgapur, may become a supervisor, if he arranges to sponsor the research scholar to work in his/her laboratory for at least one semester. NIT Durgapur will have no financial responsibility, whatsoever, in the visit.

3.6.3. Supervisor from other institutions/ organizations shall submit curriculum vitae, a consent letter and a no-objection certificate from the employer during formation of DSC, if they do not have MoU with NIT Durgapur.

3.7. Any change in supervisor shall have to be recommended by the DSC and forwarded to the office of Dean (Academic) for approval of Senate.

3.7.1. Change of supervisor under exceptional circumstances shall be permitted on the recommendation of the DSC, subject to the consent of the research scholar, the present supervisor and the proposed supervisor. However, the candidate shall not be permitted to present synopsis seminar within one year from the date of change of supervisor.

3.7.2. Addition of supervisor shall be permitted on the recommendation of the DSC, subject to the consent of the research scholar. However, the candidate shall not be permitted to present synopsis seminar within one year from the date of addition of supervisor.

3.8. When a supervisor leaves the Institute permanently or temporarily for a period exceeding one year, the DSC shall appoint a new supervisor for the research scholar before his/her departure.

3.9. When a supervisor leaves the Institute temporarily for a period of less than one year, the DSC may make alternative arrangements in consultation with the supervisor for the supervision of the research scholar.

3.10. The DSC may consider continuation of the original supervisor on his/her return to the Institute as one of the supervisors.

3.11. A supervisor after superannuation shall continue to act as the supervisor. However, if the research scholar has no other supervisor from the department in which s/he is registered, one more faculty member of the same department shall be made a supervisor/caretaker supervisor after consultation with the superannuating supervisor and the research scholar. In case of the candidate already presented synopsis seminar successfully, no additional supervisor shall be necessary.

4.0. Semester Registration

4.1. A student enrolled in the PhD programme will be required to register every semester along with endorsement of satisfactory progress by the DSC (vide **Annexure-***IV*) and by paying tuition fees and other Institute dues [the Semester registration is different from Academic registration]. The DSC shall prepare a report on the progress made by the scholar at the end of each semester and submit along with the registration form.

4.2. Sponsored students who have been sanctioned withdrawal also need to do semester registration. They may, however, be permitted to send registration form by post to their supervisors, who will present them to the Academic Section through the HOD.

4.3. Failure to do semester registration within the stipulated dates as per Academic Calendar will result in termination of studentship, which in a very special case can be restored by the Senate on consideration of all circumstances, payment of additional fines and extension of thesis submission date.

4.4. It shall be the responsibility of the student to bring any deviation in his status in matters of course work, registration, withdrawal etc. to the attention of Dean (Academic) at the time of semester registration, if he has not done so earlier.

4.5. A student may be exempted from semester registration by Dean (Academic) / Director if he submits thesis within 30 days of scheduled semester registration. If he fails to submit thesis within 30 days, he must do semester registration before the thesis is accepted for evaluation. However, the student will lose his fellowship (if any) during the said period.

5.0. Registration

5.1. Every student enrolled in the Ph.D. programme is given provisional registration soon after his enrolment. The provisional registration defines:

- (a) The broad area of research and
- (b) The course work to be carried out by the student.

The student continues to work for close to a year before his research plan is properly formulated.

5.2 A Ph.D. student, provisionally registered, will be formally registered for the degree of Ph.D. on completion of following steps:

- (a) The candidate has successfully completed all assigned course works,
- (b) Worked out a road map of the programme and submitted a formal work plan to the DSC and
- (c) Delivered an open seminar to the satisfaction of the DSC.

5.3. Subsequent to obtaining a favourable recommendation from the DSC, the PhD registration fee of Rs. 2,000/- (may be revised from time to time) shall be paid by the candidate. The date when the candidate deposits the PhD registration fee shall be treated as the date of registration.

5.4. The registration of PhD candidates may be approved by Chairperson, Senate and be ratified by the Senate in its subsequent meeting.

5.5. Candidates should normally present the registration seminar not later than two years from the date of admission, failing which the admission shall be cancelled.

5.6. Any change in the title of PhD work shall have to be approved by the DSC not later than three months before the date of submission of the final synopsis of the PhD thesis. The same shall be notified to the office of Dean (Academic).

5.0 Course Work

5.1. Course work is compulsory for all students enrolled for Ph.D. program including those with Master Degree in the same discipline.

5.2. All the Ph.D. scholars are required to enroll for three to four Master level courses, including Research Methodology. The course work shall be treated as prerequisite Ph.D. preparation. A minimum of four credits shall be assigned to one or more courses on Research Methodology, which could cover areas such as quantitative methods, computer applications, research ethics and review of published research in the relevant field, training, field work, etc. Other courses shall be advanced level courses preparing the students for Ph.D. degree.

5.3. The supervisor may recommend more courses to be taken up by the research scholar, if needed.

5.4. All candidates admitted to the Ph.D. programmes shall be required to complete the coursework prescribed by the Department during the initial one or two semesters.

5.5. The research scholars will take courses based on the recommendation of the supervisor(s) and approved by the DSC. The list of courses to be taken by a research scholar during a particular semester shall be endorsed by the DSC and informed to the PG & Research Cell (Academic Section) within seven days from the start of the semester or within seven days from the date of admission. In case a course is taken from another department, it is to be endorsed by the Head of the concerned department.

5.6. Ph.D. students enrolled in courses are subject to the same regulations as applicable to other students in the courses with regard to attendance, discipline, assessment and grading.

5.7. The concerned teachers shall forward the grades of the research scholar at the end of a semester to the Associate Dean (A&E) for publication of results.

5.8. They must pass each of these courses with at least C grade in a 7-point scale. In case of failure, the student should appear the examination held next time.

6.0. Submission of Thesis

6.1. The research scholars of all categories shall normally submit their PhD thesis within a period of five years from the date of registration for the PhD programme. However, for satisfactory reasons, the period may be extended, not exceeding two consecutive terms of one year each. The extension shall have to be recommended by the DSC. In case, no extension for registration is applied for, the registration shall automatically stand terminated at the end of the above-stipulated period.

6.2. A research scholar shall submit his/her PhD thesis not earlier than two years from the date of registration for the PhD programme.

6.3. Prior to submission, when the thesis is nearly ready and can comfortably be submitted within six months the candidate will submit the synopsis of the thesis [typically 10 pages including tables, graphs and references] along with thesis processing fee and present a seminar to an open audience, which will include members of DSC. Copies of a draft thesis on paper or electronic media and the synopsis should be handed over to the members of the DSC at least one week before the date of the seminar.

6.4. The DSC shall assess the work through a pre-synopsis seminar in presence of all supervisor(s). It is mandatory that all the supervisors are present during the seminar. The DSC should confirm that the student has completed the required number of courses. The student shall respond to the suggestions of every DSC member. If and when the DSC is satisfied with the extent of work done and the quality of the thesis the candidate will be allowed to submit the thesis. The DSC shall forward one hard copy and a soft copy of the

synopsis of the PhD thesis along with recommendations (vide *Annexure - VI*) to the office of Dean (Academic).

6.5. The scholar must have at least two papers published / accepted for publication based on his/her doctoral research in a SCI/SSCI/AHCI / Scopus/ Web of Science journal and make two paper presentations in conferences/seminars before the submission of the dissertation/thesis for adjudication, and produce evidence for the same in the form of presentation certificates and/or reprints.

6.6. A general format and guidelines (*Annexure - XII*) prepared from the Academic Section of NIT Durgapur shall be used for writing PhD thesis.

6.7. Plagiarized check shall be made for PhD thesis to satisfy maximum permissible match of 20% excluding publications of the research scholar and corresponding supervisor(s).

6.8. The thesis examination fee of Rs. 6,000/- (may be revised from time to time) shall be deposited, subject to completion of all formalities.

6.9. The research scholar shall submit two copies of the PhD thesis with soft cover for the external examiners to the office of the Dean (Academic) within three months from the date of pre-synopsis seminar. The soft copy of the thesis shall be emailed to Dean (Academic). After successful defense of the thesis, the research scholar shall submit one hardbound copy of the final version and a soft copy of the PhD thesis to the office of Dean (Academic).

6.10. Electronic copies of the theses will be posted on Institute web site for wide distribution.

7.0. Examination of PhD Thesis

7.1. The DSC shall submit panels of five external examiners in the area of the submitted research work each from India and abroad, to Dean (Academic) in hard and soft copies, for appointment as external examiners of the thesis. The list must include the name, designation, affiliation, full postal address, telephone number and email IDs of the examiners. It shall also include the name and registration number of the research scholar, thesis title, the department registered and the name of the supervisor(s) etc. (vide *Annexure - VII*). Director as the Chairperson of the Senate shall select one external examiner each from India and abroad from the recommended panel. The supervisor(s) shall be the Internal Examiner(s).

7.2. It is expected that the DSC submits the panels of examiners immediately after the synopsis seminar to the Dean (Academic), so that the consent of examiners is obtained before submission of the thesis.

7.3. Dean (Academic) will arrange to dispatch the synopsis to the external examiners by email. On receipt of their acceptance to become the external examiner of the PhD thesis, the Academic Section will arrange to dispatch the thesis to them by post. The soft copy of the PhD thesis shall also be sent through email, if examiner (s) so desires. Normally, the examiner will be required to submit the evaluation report within six weeks.

7.4. The supervisor(s) shall submit the report as Internal Examiner(s) as soon as possible after submission of thesis by the scholar.

7.5. When a thesis is unanimously accepted by the board of examiners for the award of the PhD degree (vide **Annexure - VIII**), the scholar shall be required to defend the work in an open seminar followed by a viva-voce conducted in presence of the external examiner from India, DSC members and other interested persons (vide **Annexure - IX**). It is not mandatory for the supervisors from abroad to be present during the viva voce. In case the Indian external examiner is not able to attend the seminar and viva-voce, Director shall appoint an alternate examiner for the purpose from the existing panel of external examiners from India.

7.6. If an external examiner does not respond within two weeks from the date of dispatch of the synopsis or within two months from the date of dispatch of the thesis, Director may select an alternate name from the recommended panel of Experts as the external examiner. The examiners may be electronically reminded of sending the report of the thesis after two months of dispatch of the thesis.

The examiners may send the report on the thesis by email and / or post with a "confidential" label on the mail.

7.7. If a thesis in the present form is not found to be acceptable by the external examiners for award of the PhD degree and is likely to be accepted after revision in line with the modifications suggested by the external examiners in their report, the research scholar may re-submit the thesis incorporating the suggested amendments within three months from the date of the earlier decision of the DSC.

7.8. If a thesis is recommended by one external examiner for the award of the PhD degree but is not recommended by the other external examiner, the thesis may be sent to another examiner. The supervisor(s), if needed, may submit a fresh panel of external examiners. The research scholar may submit another copy of the thesis after depositing an additional thesis examination fee of Rs. 3,000/-, which may be revised from time to time.

7.9. If a thesis is not recommended by both the external examiners, the research scholar may submit a fresh thesis after a period of six months from the date of the pre-synopsis seminar. The thesis examination fee of Rs. 6,000/-, which may be revised from time to time, shall be deposited again before the submission of the thesis. The supervisor(s) will recommend a fresh panel of five external examiners in the area of the submitted research work each from India and abroad for appointment as external examiners of the thesis.

8.0. Defense of Ph.D. work:

- 8.1. The Dean (Academic) shall invite the examiners, on approval of Chairman, Senate.
- 8.2. Open Ph.D. seminars and viva will be conducted at respective departments in presence of DSC members.
- 8.3. Recommendations of the external examiner and DSC will be forwarded to the Dean (Academic) for its onward submission to the Chairman, Senate.

9.0. Award of Degree

9.1. On the recommendation of the Doctoral Scrutiny Committee, the Senate or the Chairperson, Senate (when the Senate is not sitting early) shall decide whether the candidate should be awarded the degree of Doctor of Philosophy. If the Chairperson, Senate has approved the award of degree, the award needs to be confirmed by the Senate.

9.2. Normally a student will be awarded Ph.D. degree in the branch of study in which he is enrolled. But in exceptional cases, the DSC may recommend to the Senate to award the degree in another branch depending on the contents of the thesis. This can be done at the time of provisional-registration (preferred), Registration or even after the thesis is submitted.

9.3. A provisional degree certificate will be issued to the scholar on successful defense of the thesis and approval of Chairperson, Senate. The final degree certificate will be issued in the convocation or by any other mode approved by the Senate. The date of the defense examination shall be the effective date of award of degree and will be mentioned in the provisional certificate and degree certificate.

9.4. Any deliberate false statement or plagiarized text will lead to summary disqualification, in addition to other punitive measures commensurate with the offence. Degrees, even after being awarded, may be revoked if gross violation of academic ethics is established.

10.0. Fellowship

10.1. Institute doctoral fellowships shall be governed by the rules of MHRD. When the number of Institute fellowships is limited; they will be distributed among different departments by the Director on recommendation of Dean (Academic). Generally, the number of fellowships will be proportional to the faculty strength, but changes can be made to ensure that the positions are filled to the extent possible.

10.2. In case of students awarded a scholarship by an external agency or from a research project operating in the Institute; the provisions specified by the sponsor shall govern the rules.

10.3. Students who have earned a GATE/NET score and have been enrolled in the Ph.D. programme with project fellowship for at least 18 months and have successfully completed registration formalities will get first

priority in award of Institute fellowship under the same supervisor and in the same department. Other project fellows may apply for Institute fellowship under open competition, if selected by the department, they may regenerate with their present research problems.

10.4. Institute fellowships shall not be awarded to candidates above 28 years of age [33 years for SC / ST / PWD / women candidates] on the date of selection.

10.5. While in most departments selection of research fellows can be done purely through interview, a formal selection procedure may be adopted in departments with a strong demand for research fellowships. The formal system, which should be worked out by the DRPC in advance, may contain points for basic degrees in the department's own specialization, master's degree in the specialization, degrees in relevant departments, academic scores, reputation of institutes attended, work experience, written test and interview. While the point system shall serve as a good guideline for eliminating unsuitable candidates, the final selection should be done by collective advice of the selection committee.

10.6. Financial support shall normally be given initially for a period of three years, which can be renewed on year-to-year basis on satisfactory performance upto a maximum period of 5 years (including project fellowship, if any) / tenure of the research scheme. The scholarship shall, however, automatically be terminated after one month of the submission of PhD thesis.

10.7. Enhancement in rate of fellowship, after two years of enrollment, may be considered on successful assessment by the DSC and submission of report (vide **Annexure X**) to the Dean (Academic) towards satisfactory progress in the research activity. The student will submit a summary of the progress of the work to the Chairperson, DSC through the supervisor(s) and deliver an open seminar. In case the recommendation of the DSC is not favourable, the candidate may deliver a fresh seminar after six months from the previous one for consideration of enhancement in scholarship. Enhancement of scholarship shall be effective from the date of recommendation by the DSC to the Dean (Academic).

10.8. If a doctoral student abandons his study prematurely he will be required to surrender the fellowship received, without interest. In case of being terminated due to poor performance, normally there shall be no recovery. But if the DSC is convinced that the student consciously performed poorly only to avoid paying back the fellowship received, it can still recommend recovery of the fellowship paid. In both cases, the institute will normally not pursue the recovery, e.g. through a law court, but will deny certificates and other privileges if requested by the student. Fellowships (JRF/SRF) paid from research projects will normally not be recovered unless explicitly mentioned at the time of award of the fellowship.

10.9. If a student with Institute fellowship fails to complete registration formalities within 24 months of enrollment, payment of fellowship will be suspended (with permanent loss) till registration formalities are over.

10.10. All research scholars with fellowship (Institute sponsored / Externally funded) will be required to assist the Department in teaching activity (sessional, laboratory etc.) and other academic activity; the quantum of such contribution being decided by the administration from time to time.

10.11. Change of fellowship, other than project fellowship (due to completion of project duration), shall not be permitted.

11.0. Leave rules

11.1. A research student, except when granted withdrawal by the Institute must attend to his work on a whole time basis. The departments will maintain attendance record of the student. The DSC will examine the attendance record of students, and if it is found unsatisfactory, will recommend extension of minimum duration for submission of thesis, deregistration or termination of studentship, as it thinks fit.

11.2. Research scholars other than Institute employee are eligible to enjoy 30 days leave as and when necessary in a calendar year.

- 1. Request for the sanction of any type of leave, formal application should be addressed to the HOD which should usually be recommended and forwarded by the supervisor(s) before availing any leave excepting exigencies.
- 2. The HOD and his/her office would take care of the leave applications and approvals. The same office would also keep the records of the leave as usual and submits the attendance report to the

appropriate authority for scholarships or other grants. The HOD may refer appropriate cases to the Dean (Academic) to issue leave certificate, as and when required, and to settle and dispute or cases of exigency.

- 3. Leaves of research scholars under CSIR/UGC/DST sponsored research schemes and other categories will be governed by the rules of the bodies, which provide financial support.
- 4. In case of medical leave, the Institute Medical Officer must endorse the medical certificate.
- 5. Maternity and childcare leave are applicable to female student only. A female student is entitled to avail maternity leave for a maximum of 180 days and childcare leave for a maximum of 60 days once during the tenure of their studentship. If availed, the loss of days due to these leaves may be augmented by extending their registration period, by the same number of days, on the basis of written prayer from the scholars to the Dean (Academic) with due recommendation of DSC.
- 6. There will be no loss of scholarship/fellowship for the female students availing the maternity and childcare leave but the total time period of scholarship will remain same and will not be extended.
- 7. In all cases, an application for medical/maternity leave must be accompanied by all relevant medical papers prescriptions, admission and discharge reports, diagnostic reports, medicine purchase slips etc.
- 8. All leave application must be filed within 3(three) working days after joining.
- 9. Absence without sanctioned leave will entail loss of financial assistantship for the period of absence and may result in the termination of the students' program.

11.3. There shall be no summer or winter vacation for research students.

11.4. For part of a year, the entitlement will be on pro-rata basis.

11.5. In matter of course work, leave rules applicable to other program will also be applicable to PhD students.

12.0. Miscellaneous

12.1. All seminars and viva voce for the PhD programme shall be open house, with a notice normally circulated to all departments of the Institute at least seven days in advance.

12.2. All seminars; pre-registration, enhancement and pre-synopsis seminars must be conducted within a maximum period of one month from the date of application by the candidate, subject to concurrence of the DSC.

12.3. If the DSC finds the performance of the research scholar unsatisfactory, it will give at least two warnings (in writing) to the candidate. If there is no improvement in her/his performance even after the warnings, the DSC may recommend termination of the PhD programme for the scholar through DRPC for approval of the Senate.

12.4. The Institute may revise the fee structure from time to time.

12.5. The list of documents, which need to be submitted at various stages of Ph.D. programme starting from the time of admission are listed in *Annexure-XIII*.

12.6. External supervisors will submit a no objection certificate (vide **Annexure- XIV**) from their organization and willingness certificate (vide **Annexure- XV**) from their end during formation of DSC or at a time when appropriate.

13.0. Termination of Studentship

The studentship of a Ph.D. scholar may be terminated by the Senate on exceptional grounds. They are:

- Recommendation of Institute's Disciplinary Committee.
- Failure to do semester registration.
- Failure to complete registration within two years from the date of enrollment.
- Poor progress as noted by DSC. Such a decision may be implemented only after approval of the Senate.
- Prolonged absence (exceeding six months) from the Institute without sanctioned leave or withdrawal.

14.0. Transition issues

These revised regulations shall come into effect from Odd-Semester, 2017-18. Students enrolled prior to this date shall also be covered under these regulations, except when the implementation of these regulations leads to obvious anomalies and serious hardship to the students. The final decision on each specific issue will be taken by the Senate (or Chairman Senate on its behalf), on case-to-case basis.

15.0. Exceptions

Notwithstanding anything stated in the rules, the Senate can make special provisions and exceptions depending on the merit of a case. Such cases shall not be cited as precedence in future occasions of similar nature, because two situations appearing similar may not be identical.

In emergency situations, the Director in capacity of the Chairman Senate, can exercise powers of the Senate and discharge the functions of the Senate. Such decisions must be reported to the Senate at its next meeting.

16.0: Committees / Functionaries

The following committees shall be constituted for the research programme.

16.1: Board of Studies (Research) [BOS(R)]

16.1.1: Constitution:

| I. Dean (Academic) | - Chairperson |
|---|---------------|
| II. All other Deans | - Members |
| III. Chairman of all DRPCs | - Members |
| OR | |
| Any one faculty (with Ph.D.) nominated by Chairman of respective DRPCs | |
| IV. One representative with Ph.D. degree from industry / R&D organization | - Member |
| V. Associate Dean (A&E) | - Member |
| VI. Deputy Registrar (A&E) - 0 | Convener |

16.1.2: Functions:

- i. To consider the recommendations of the DRPC on matters relating to research programme and to make suitable recommendations to the Senate
- ii. To ensure that all norms and regulations pertaining to research programme are strictly followed
- iii. To make periodic review of ordinances, regulations and instructions pertaining to research programme and to recommend to the Senate any modification thereof
- iv. To review the academic performance and make suitable recommendations to the Senate regarding the award of degrees
- v. To conduct at least one meeting each semester and send the proceedings to Secretary, Senate
- vi. The quorum for each meeting will be ten.

16.2 Departmental Research Programme Committee (DRPC)

16.2.1 Constitution

| i. | Head of the Department (In case, Head of the department does not possess PhD degree, | - Chairperson |
|------|---|---------------|
| | the Director shall nominate Chairperson) | |
| ii. | All faculty members of the department having PhD degree | - Members |
| iii. | One Professor from a premier national academic institution / | |
| | one expert from industry / R&D organization with PhD degree | - Member |

16.2.2: Functions

i. To ensure academic standard and excellence of the PhD programme offered by the department

- ii. To assign the supervisor(s) to the research scholar in consultation with the Scholar and the supervisor(s)
- iii. To conduct admission test/ interview
- iv. To consider any general matter related to the research programme of the department and propose change in policy pertaining to the PhD programme.
- v. The external expert to be present in the non-routine DRPC meetings where policy decisions are recommended.

16.3 Doctoral Scrutiny Committee (DSC):

16.3.1: Constitution

- i. Chairperson (DRPC)/ A senior Faculty member of the Department (if Chairperson is supervisor) – Chair
- ii. Two faculty members of the department having PhD degree iii. One faculty member from other department of the institute
- having PhD degree (Nominated by Senate)
- iv. Concerned supervisor(s) for the research scholar

16.3.2: Functions

There shall be a Doctoral Scrutiny Committee for each Ph.D. scholar. One of the Supervisors shall be the Convener of this Committee. This Committee shall have the following responsibilities:

- i. To review the research proposal and finalize the topic of research;
- ii. To guide the research scholar to develop the study design and methodology of research and identify the course(s) that he/she may have to do.
- iii. To periodically review and assist in the progress of the research work of the research scholar.
- iv. A research scholar shall appear before the DSC once in six months to make a presentation of the progress of his/her work for evaluation and further guidance. The six monthly progress reports shall be submitted by the DSC to the Academic Section before each Semester registration.
- v. In case the progress of the research scholar is unsatisfactory, the DSC shall record the reasons for the same and suggest corrective measures. If the research scholar fails to implement these corrective measures, the DSC may recommend with specific reasons for cancellation of the registration of the research scholar.
- vi. To conduct registration, enhancement and pre-synopsis seminars, viva voce.
- vii. To act as the examiners in the above seminars and viva voce.
- viii. To oversee and advise on all matters related to the PhD work of the candidate

16.4. Supervisor:

16.4.1: Functions:

- i. To assign a topic for research to the research scholar in consultation with the Scholar
- ii. To recommend the courses to be taken up by the research scholar
- iii. To provide or arrange for facilities to carry out research and supervise the research scholar for the entire research studies
- iv. To monitor the progress of the research scholar.
- v. To report to the DSC the performance of the student at the end of each semester
- vi. To recommend a panel of PhD thesis external examiners to DSC.
- vii. To forward all applications of the research scholar working under him to the DRPC

16.5. Central Admission Committee (CAC)

16.5.1: Constitution

i. Dean (Academic)

– Chairman

– Chairperson- Members

- Members

- Member
- Member(s)

| ii. Chairman of all DRPCs |
|----------------------------|
| iii. Associate Dean (A&E) |
| iv. Deputy Registrar (A&E) |

MembersMemberConvener

16.5.2: Functions

To prepare the final list of the selected candidates based on the selection lists prepared by the departments and communicate it to the office of Dean (Academic).

17.0 Guidelines for Utilization of Contingency Grant for attending National/International Conference/Lab visit etc.

The following guidelines shall be applicable for all research scholars (except sponsored candidates):

17.1 The financial assistance shall be provided to a research scholar in different heads as follows for attending National/International Conferences within India:

| Head | Eligibility | Remarks |
|---------------------|--|---|
| Registration Fee | Maximum upto Rs. 5000 | On production of fee receipt |
| Travel | Train(AC III Tier)/AC Bus (by the shortest route) | As per actuals on production of ticket. In case the scholar travels by flight or any other mode, the reimbursement should be actual subjected to an upper ceiling of 3- tier AC Train fare. |
| Local Travel | Auto/Bus | As per actuals subjected to an upper limit of Rs 100 per day on production of bills/self certification |
| Lodging | Hostel/Guest House/Hotel for the conference days plus one day each prior to and after the conference days | Actuals subjected to a ceiling of Rs 1000 per day |
| Per diem | The conference days plus one day each prior to and after the conference days | Rs. 250 per day (No bills required) |

17.2 Maximum two conferences can be attended in a calendar year subjected to availability of contingency grant.

17.3 A research scholar will be given the support provided he/she continues to be a student for at least three months after attending the conference.

17.4 The scholar has to obtain an approval from competent authority before attending the conference and should submit settlement of financial assistance granted by the Institute (by listing all the expenses incurred in an orderly manner and duly enclosing all supporting documents) within ten days to the Academic Section.

17.5 In case the purpose of the travel is for data collection/lab visit for conducting experiments, the scholar will be permitted to travel within India, subjected to availability of contingency grant, and the entitlements will be the same as that of conference travel within India.