Ph.D. Regulations

Dr. B R Ambedkar
National Institute of Technology Jalandhar – 144011
(An Institute of National Importance)

Contents

Definitions

- NITJ/Institute: Dr. B R Ambedkar National Institute of Technology, Jalandhar

- Academic Calendar: The exact dates for the important academic events scheduled during the Academic Session shall be specified in the Academic Calendar.

- Academic year: Institutes academic year begins from July, 1 and ends on June, 30 every year.

- Applicant: Aspirant desirous to take admission in doctoral program.

- Administrative Supervisor: Who substitutes internal supervisor during his deputation, study leave, sabbatical leave, lien or any other long leave.

- Course Work: Mandatory requirement for Registration where a student has to write examinations and deliver state of art seminar to earn minimum required credit and CGPA.

- DAC: Departmental Admission Committee

- RAC: Research Advisory Committee: Constituted to discuss all policy issues pertaining to research scholars of the department.

- SDPC: Senate Doctoral Programme Committee

- Supervisor: Faculty who mentors, advises, and is associated with scholar in all Ph.D. related matters and looks after the progress of research work on the chosen topic and provide guidance.

- HoD: Head of the Department

- Ph.D. Supervisor: Supervisor who is from NITJ.

- Other Supervisor/Co-Supervisor: Supervisor who is from outside NITJ.

- NET: National Eligibility Test

- GATE: Graduate Aptitude Test in Engineering

- JRF: Junior Research Fellow

- Registration: Enrolment for the courses/research that a student wants to pursue during a semester as required by the Program.

- RS/Research Scholar-Students who are willing to pursue Research studies on full time/part time basis either with/without Institute scholarship or scholarships awarded by any other sponsoring agency such as QIP/CSIR/AICTE/UGC or other equivalent organizations.

- SENATE: Senate of the Institute

- Synopsis: A brief document that summarize research work, methodology and findings with list of publication.

Ph.D. Regulations

Regulations for the Admission to Ph.D. Programme and Award of Ph.D. Degree (Regular)

1. Minimum Qualifications for Admission

1.1 Ph.D. for Indian Nationals

- **Engineering Departments: General (For all Departments):** Master's Degree in Engineering/Technology in the relevant area of research along with Bachelor's Degree in appropriate branch of Engineering/Technology with a first class or minimum 60% marks (or CGPA of 6.5 on 10 point scale) in the qualifying examination.

- For all Engineering Departments, direct Ph.D. admission is also available in case of candidate with B.Tech./B.E./BS (4 year) with a CGPA of 8.0 and above on a 10 point scale or 75% aggregate from a Centrally Funded Technical Institute (CFTI). All such candidates must be GATE qualified. Number of credit courses to be cleared will be 24 credits before comprehensive examination.

Engineering Department Specific Qualifications:

(i) **Department of Biotechnology:** "The Candidate should be B.E./B. Tech. and/or M.E./M. Tech. in the relevant branches of Engineering/Technology out of which either B.E./B.Tech. or M.E./M. Tech. should be in Biotechnology. The candidates with M.Sc.in Biotechnology/Industrial Biotechnology/ Environment Biotechnology/ Biochemical Engineering/ Biochemical Technology/ Biomedical Technology/ Biochemistry/ Microbiology/ Bioinformatics with GATE/NET in Biotechnology/Life Sciences are also eligible.

(ii) **Department of Chemical Engineering:** The qualification for admission to PhD programme in the Department is Master Degree in Chemical Engineering or its allied branches. Master degree in Science (Chemistry or its equivalent) must have qualified in GATE/NET for scholarship. However, the candidate with Master degree in Science without GATE/NET can join in PhD (Part Time) Programme.

(iii) **Department of Instrumentation and Control Engineering:** The candidate should have Master's degree in Science in related fields but more preference will be given to Master's Degree in Science with Engineering (Ex. M. Sc. Engg.) Interdisciplinary department candidates will also be allowed (Ex. CSE, Mechanical Engg./Chemical Engg. Etc.).

(iv) **Department of Textile Technology:** The qualification for admission to PhD programme is M. Tech. in any discipline whereas B.Tech. should be in Textile Technology/Engineering.

- **Science Departments:** Master's Degree in appropriate branch of Science with a first class or minimum 60% Marks (or CGPA of 6.5 on 10 point scale) in the qualifying examination.
- **Humanities & Management:**
- **Humanities:**
- PhD (English Literature): Master's degree in English or English Language Teaching with at least 55% marks or a CGPA of 6.0 on 10 point scale.

- PhD (Linguistics): Master's degree in Linguistics or English or English Language Teaching with at least 55% marks or a CGPA of 6.0 on 10 point scale.

- **Management:**
- PhD (Management): Master's degree in Management or Commerce with at least 60% marks or a CGPA of 6.5 on 10 point scale.

Only primary mode of evaluation (CGPA or percentage) as mentioned in the qualifying degree certificate/mark sheet will be considered while verifying eligibility. Conversion from CGPA to percentage or vice versa given by individual Institute/University will not be allowed.

The candidates in Humanities and Management must be NET/GATE qualified for the award of stipend cum teaching assistantship as per Ministry of HRD norms and Institute norms.

Note 1: Only primary mode of evaluation (CGPA or percentage) as mentioned in the qualifying degree certificate/mark sheet will be considered while verifying eligibility. Conversion from CGPA to percentage or vice versa given by individual Institute/University will not be allowed

Note 2: For the SC / ST / PwD applicants, the eligibility requirement of marks be relaxed by 5%, or by a CGPA of 0.5 (on a 10 point scale) at both the Bachelor's and Master's level

1.1.1   For all Engineering Departments, GATE is not mandatory for scholarship for the candidates with Master's degree in Engineering. Candidate with Master's degree in Science must have qualified in GATE/NET for scholarship. However, the candidates with Master's degree in Science without GATE/NET can join in PhD (part time) programme.

1.1.2   Candidates with GATE/NET(JRF/LS)/UGC(JRF/LS)/Inspire Fellow/Sponsored by some outside agency as a full-time candidate need not clear Institute written examination. For all other candidate Institute written examination is to be cleared. However, GATE/NET(JRF/LS)/UGC(JRF/LS)/Inspire Fellow/ Sponsorship from outside agency or Institute Examinations are only for short listing of the applicants. Mere short listing of an applicant does not confirm admission to Ph.D. Programme. The admission shall be solely based upon the performance of individuals during "presentation and interaction" and availability of the Supervisor in the proposed area of research.

1.2   Ph.D. for Foreign Nationals

Foreign national candidates, who apply through Ministry of Human Resource Development, Govt. of India, or Indian Council of Cultural Relations, Govt. of India, are eligible to apply provided that they possess the same minimum qualifications as given in 1.1.

1.3   Ph.D. for Candidate/Staff working under Sponsored Projects

Candidate/staff working under the projects sponsored by MHRD/DST/UGC or some other government agency and coordinated by the institute faculty as Principal

investigator/Coordinator shall be eligible for admission to Ph.D. programme. However, the candidate/staff should have the same academic qualifications as given in 1.1.

The candidates admitted under DST/INSPIRE projects will be offered Provisional Endorsement by the concerned faculty after approval of the Dean (Academic) of the institute. Such candidates will be enrolled for Ph. D only after securing the DST/ INSPIRE fellowship (candidates will be required to submit an undertaking to the effect). If they fail to secure the DST/INSPIRE, they will not be considered for Ph. D enrollment.

2. **Admission Process**

Applications on prescribed format for admission to Ph.D. programme will be invited twice in a year through advertisement in the national dailies, media and on institute's website. The advertisement shall include the predetermined seats and as per the guidelines of reservation policy of Government of India. The person's desires for applying in more than one department/category shall be required to apply on separate application form along with appropriate fee. The candidate shall be required to submit a write-up (1-2 pages) of his/her proposed area of research along with the application.

i. The admission to Ph.D. programme (Full Time & Part Time) in all disciplines mentioned in this advertisement shall be made purely on the basis of a "presentation" to be made by the shortlisted applicants in their proposed area of research followed by "interaction" to be conducted by the respective Department Admission Committee and availability of the Supervisor in the proposed area of research.

ii. Short listing of candidates (other than GATE/NET (JRF/LS)/ UGC (JRF/LS) / Inspire Fellow / Sponsored by some outside agency as a full-time candidate) shall be done by Departmental Admission Committee for the process of "presentation and interaction" for the applicants. For this purpose, a screening test shall be conducted by the respective Departments. Only those applicants who score marks above the cutoff of 40%, i.e. 24 marks out of 60 for General category candidates, and 35% i.e. 21 out of 60 for SC/ST/OBC/EWS/PWD candidates in the screening test shall be eligible for presentation and interaction process. Marks obtained in the screening test shall not be counted for preparation of final merit list of the successful candidates. The details of the Syllabi will be separately notified on the Institute website.

iii. The Department Admission Committee for each Department shall recommend the suitable candidates for admission based on its assessment of presentation and

interaction. Marks obtained in the screening test shall not be counted for preparation of final merit list of the successful candidates.

iv. Merely short listing of an applicant does not confirm admission to Ph.D. programme. The admission shall be solely based upon performance of individuals during "presentation and interaction" and availability of the Supervisor in the proposed area of research. The Department Admission Committee/Institute reserves the right not to recommend any candidate for admission to Ph.D.in the respective Department if the performance of the shortlisted candidates is not found satisfactory during "presentation and interaction". The decision of Department Admission Committee (approved by the competent authority of the Institute) shall be final.

v. The merit list of the selected candidates (based on presentation & interaction) shall be prepared on marks basis. The admission shall be solely based upon performance of individuals during "presentation and interaction" and availability of the Supervisor in the proposed area of research. Further, a candidate who scores less than 40 marks (out of 100) for "presentation and interaction" shall not be considered "qualified" for admission to Ph.D. programme and his/her name shall not be recommended for admission by Departmental Admission Committee.

2.1   Screening Committee

A Screening Committee will comprise of the Head of Department and three faculty members (co-opted by HoD from the department) holding Ph.D. degree. The committee shall screen all applications for admission to Ph.D. programme. The committee is expected to verify the eligibility of the applicant(s) for the Entrance Test/Interview based upon his/her details mentioned in the application (s) and the documents enclosed. After screening of all applications, the Head of Department shall forward the list of the eligible candidates to Deputy/Assistant Registrar (Academic) with a copy to Dean (Academic). The Deputy/Assistant Registrar (Academic) shall consolidate the list of all the departments and notify through appropriate means with the approval of Dean (Academic).

2.2   Entrance Test

The Entrance Test will be of MCQ Mode. The syllabus for the same will be notified on the Institute Website. At the time of interview, candidates are expected to discuss their research interest/area of interest. Short listing of candidates shall be done by the Departmental Admission Committee for the process of "presentation and interaction" for the applicants. For this purpose, a screening test shall be conducted by the respective Departments. Only those applicants who score marks above the cutoff of 40%, i.e. 24 marks out of 60 for General category candidates, and 35% i.e. 21 out of

60 for SC/ST/OBC/EWS/PWD candidates in the screening test shall be eligible for presentation and interaction process.

2.3 Interview (Presentation and Interaction)

Candidates who secure 40% marks (minimum) in the Entrance/Screening Test, shall be called for interview (Presentation and Interaction).

2.4 Departmental Admission Committee

The eligible candidates who have qualified Entrance Test shall have to appear before the Departmental Admission Committee for an interview (Presentation and Interaction). The Interview Committee shall comprise of the following:

1. Chairman   -   Dean (Academic)

2. Member Secretary   -   HoD of the concerned Department

3. Member-I   -   One senior faculty member

4. Member-II   -   Director's Nominee

HOD may invite other Ph.D. holding faculty members of the Department during the presentations/interview of the applicants for the Ph.D. admission programme. However, they will not be part of above-mentioned Committee.

Keeping in view the available seats, the Departmental Admission Committee shall recommend the names of candidates found suitable for admission to Ph.D. Programme for the approval of Chairman, Senate. The Deputy/Assistant Registrar (Academic) shall notify the list of selected candidates through appropriate means.

3. Research Guidance and Publication Ethics

3.1 Ph.D. Supervisor

A permanent faculty member of the institute with Ph.D. qualification can act as a research supervisor. The Supervisor allotted to the Research Scholars in the Department in which he/she is registered at time of admission shall be designated as "Main Supervisor" and any other Supervisor added in addition to Main Supervisor will be designated as Co-Supervisor. However, in case of demise/any other casualty, the "Research Scholar (RS)" registered under a supervisor(s) shall be transferred to other suitable supervisor(s) in the department subject to the approval of RAC. However, it shall be the responsibility of the Head of the Department to bring the matter for the information of Chairman, RAC, to decide the future course of action for the candidate (s) registered with the Supervisor. In addition, if a supervisor(s) gets transferred/re-employed/avails deputation/lien in other department/ workplace/ Centre with in NIT, Jalandhar or retirement/resignation/long leave of a supervisor(s) from the institute (more than 06 months)/lien/deputation to join other institute then he/she shall continue supervising the RS in the department where RS is initially registered if there is joint

supervision of the RS with the Institute faculty. In case the Supervisor is likely to be superannuated within five (5) years from the date of registration of a Research Scholar, he/she shall be allowed to act as supervisor if there is one more regular faculty member from the same department to act as other supervisor. However, in any case faculty member (s), having solo Ph.D. guidance for the students, is going under lien/deputation/resign from Institute, then the concerned Head of the Department will be the Administrative guide for those Ph.D. students.

The total number of Research Scholars (PhD Full-Time/Part-Time whether solo/joint supervision) under the supervision of an individual faculty member at any time, including all projects funded by DST/INSPIRE/other agencies, Institute scholarship, Joint Guidance with other Institutes (Full-Time/Part-Time) is 08 at any time. However, Professor (HAG) can supervise 12 Research Scholars including all schemes at any time.

Professors/Associate Professors can guide a maximum of 3 Research Scholars (with Institute fellowship) at any time. Further, the senior most Assistant Professor (s) of the Institute can also guide 3 Research Scholars (with Institute fellowship) subject to the availability of vacancy in their slot as per Institute norms. The number of Research Scholars with stipend from Institute to be supervised by other faculty members of the Institute shall not exceed two at any time for sole supervisor. In case of joint supervision for candidate with Institute scholarship, the counting of number Research Scholars with Institute fellowship will be halved provided other guide is from NIT Jalandhar. It may be added that maximum of two research guides is allowed for any joint supervision. Further, maximum of one new Research Scholar with stipend from Institute may be allocated to a faculty member for PhD supervision during a full academic year. However, Professor (HAG) can take maximum of 2 candidates under the Institute Fellowship in an Academic Year provided fulfillment of aforementioned criteria. In case of Joint guidance, one of the faculties will act as Supervisor and other one will be Co-supervisor.

3.2   Other Supervisor

Depending upon the nature of the research problem, another supervisor may be allowed in addition to the supervisor from the department where the RS is registered. In such case, another supervisor may be recommended by RAC, from the same/other department from NIT, Jalandhar (in – service or retired) or from an organization other than NIT, Jalandhar, preferably a centrally funded institution/ university/Research laboratory of Government of India/Public Sector undertakings/state funded University /institution. For the purpose of another

supervisor the consent of the supervisor from NIT Jalandhar or NOC from the employer of another supervisor outside NIT, Jalandhar (on the official letter head), as applicable shall be forwarded to Dean (Academic) for consideration in the RAC. After going through credentials of the person, the RAC may recommend him/her as another supervisor. The candidate is allowed to have only two Supervisors for his/her Ph.D. guidance. There shall not be any provision for third supervisor from inside/outside of NIT, Jalandhar. The request for appointment of another supervisor may be entertained within 18 months of the registration of the RS and before the conduct of Comprehensive Viva Voce Examination. No request to add another supervisor shall be entertained after 18 months of registration.

The case of addition of external supervisor outside NITJ shall be put up to Dean (Academic) with suitable justification and the case shall be referred to Chairman Senate for approval and the decision of the Chairman Senate shall be final in this regard.

Guidelines for acting as Co-Supervisor by faculty members of the Institute outside NITJ:

The Institute faculty members can be allowed can be allowed to act as Co-Supervisor in the IITs, NITs, IIITs, CFTIs, Central Universities/Institutes, State Universities/Institute. For Private Institutes/Universities, the ranking of that Private Institute/University should be within 100 NIRF ranked in any one of preceding 03 years.

Guidelines for acting as Co-Supervisor for outside faculty members at NITJ:

The outside faculty members should be from IITs, NITs, IIITs, CFTIs, Central Universities/Institutes, State Universities/Institute/Govt. funded Research Laboratory. For Private Institutes/University, the faculty should be Professor by designation with PhD degree and the ranking of that Private Institute/University should be within 100 NIRF ranked in any one of preceding 03 years. For the persons from the Industry, the concerned person should be Ph.D holder. For Medical professionals, the faculty should be from the Medical Institute with DM/DS degree with Professor designation.

3.3 Change of Supervisor

The request for change of supervisor(s) may be entertained within 18 months of the registration. Permission may be granted to a RS for the change of Research supervisor(s) by the RAC under exceptional circumstances. However, in such cases, the consent of both, i.e. approved Research supervisor and proposed (new) Research supervisor shall be essential.

3.4   Maximum Number of Research Scholars

The number of RS with a 'supervisor' and/or 'other supervisor' shall not exceed eight at a time. However, Professor (HAG) can supervise 12 Research Scholars including all schemes at any time. Further, a faculty member can act as co-supervisor for research scholars registered with any other Institute/University after getting approval from the competent authority, provided the institute work does not suffer due to the same.

3.5   Publication Ethics

All the Research Scholars must ensure that their publication does not include any other student's name. They should take the credential of their publication as per PhD guidelines.

4.   Admission

Candidates, whose selection is recommended by the Interview Committee and approved by Chairman Senate, shall be offered admission and advised to deposit prescribed fee. After depositing the fee, he/she shall be designated as "Research Scholar (RS)". For all purposes, the date of registration of a RS shall be the date on which he/she has deposited fee in the institute. After registration, Research Advisory Committees (RACs) for the individual RS shall be constituted by Dean (Academic) in consultation with the concerned HOD and Supervisor(s) as per Clause 10. After the constitution of the RACs, the first meeting shall be held within a month to approve the supervisor(s), broad area of Research and the courses of study for individual RS.

5.   Registration

5.1   General Instructions

The RS is required to follow the instructions given below for registration:

- He/she is required to register himself/herself (in person) on the scheduled dates of registration (only). There shall not be any provision of deputing any representative by him/her for registration purposes. Further, he/she shall be required to register in subsequent semesters till the submission of Ph.D. thesis.

- If a candidate is unable to register himself/herself within the prescribed period of registration due to any exigency, then he/she can be granted permission by Dean (Academic) on the recommendations of the concerned Supervisor to register within 4 weeks of the last date of registration with an additional late fee of Rs.5,000/-. No registration shall be allowed thereafter, in any case.

- He/she shall deposit the requisite fee at the time of registration in every semester.

- He/she is required to fill the registration form and deposit it with the department through his/her supervisor(s).

- He/she shall be allowed to register for the subsequent semester(s) if his/her

progress report by his/her supervisor(s)/HOD during the previous semester(s) is found satisfactory.

- The act of not-depositing the fee or not-completing the registration process as mentioned above shall be treated as the "voluntary discontinuation" of studies by the RS. In such case, he/she will cease to be a bonfire student with immediate effect.

- The instructions as above for registration shall be applicable for all full-time and part-time Research Scholars.

- The candidate is required to follow the registration rules till he/she submits his/her Ph.D. thesis.

5.2   Provision for Compulsory Registration in the Ph.D. programme

All the research scholars are required to register in the beginning of the semester in person in the Institute. All the Research Scholars are required to maintain 100% attendance. In case, a research scholar remains absent for more than 15 days without any intimation to the authorities, the concerned Supervisor will send his/her report and the name of the Research Scholar will be struck off from the Institute Rolls.

5.3   Provision of Semester Drop

There are certain cases in which the Research Scholars are not able to attend the Institute due to unforeseen circumstances beyond the available leaves. It is proposed that a provision of semester drop may be included in the Ph.D. regulations for such unforeseen circumstances.

A maximum of 1 semester drop may be allowed to any Ph.D. research scholar. However, such an application shall be considered by Dean (Academic) only in exceptional circumstances and such application should be duly recommended by the concerned Supervisor and HoD concerned. The concerned RS shall be required to pay the full semester fee and such semester drop shall be counted towards the total duration of the Ph.D. programme. No stipend/scholarship shall be paid for the semester dropped.

6.   Duration of Ph.D. Programme

The minimum period of residential requirement for study and research at the institute from the date of registration to the date of submission of thesis shall be 36 months. A candidate is normally expected to submit his/her thesis within five years from the date of registration. This period may be extended by the Senate as a special case to a maximum of seven years from the date of registration after which the registration shall stand cancelled.

7.   Course Work

7.1   Minimum Credit and CGPA requirements

Before 2019 admitted Batch:

Every Internal/External Research Scholar (Full Time/Part Time) admitted under Ph.D. Programme is required to pass the theory courses approved by the RAC (for minimum 12 credits) securing CGPA=6.0 (minimum). The grading system similar to post-graduate programmes shall also be applicable to Ph.D. Programme.

From 2019 admitted Batch onwards:

Every Internal/External Research Scholar (Full Time/Part Time) admitted under Ph.D.
Programme is required to pass the theory courses approved by the RAC (for minimum 12 credits) securing CGPA=7.0 (minimum). The grading system similar to post-graduate programmes shall also be applicable to Ph.D. Programme.

Re-Appear Provision for candidates who secure CGPA less than 7.0

A Research Scholar who has secured less than 7.0 CGPA in a theory course will be allowed to re-appear in that particular theory course for one time only. The stipend of such Research Scholar shall be stopped immediately, if he/she secures below 7.0 CGPA. The stipend will be released only after he/she secures minimum 7.0 CGPA. No arrear for this period till he/she secures 7.0 CGPA shall be released in any case. If any Research Scholar fails to secure 7.0 CGPA in the re-appear chance, he/she will have to leave the Ph.D programme.

From 2020 admitted Batch onwards:

The candidates who will be admitted in Engineering Departments either on the basis of M Tech in Interdisciplinary Programmes or on the basis of Master's Degree in Science or on the basis of Direct Admission under B Tech/B.E./BS (4 year) shall be required to clear 24 credit courses before Comprehensive Examination.

7.2   Courses

The course work must include one course of Research Methodology and rest of the courses may be taken as per the recommendations of RAC. Courses completed after the date of registration shall count towards the requirement for the award of Ph.D. degree. A Research Scholar who has completed his/her M.Tech. from NITJ shall not be allowed to select a course for course work of Ph.D. which he/she has already studied during his/her M.Tech.

7.3   Attendance requirements

The institute desires 100% attendance in the theory courses with a provision for consideration for absence due to unavoidable circumstances. The attendance

requirements of 75% of the scheduled classes in a course are needed for appearing in the theory examination.

The course coordinator will consolidate the attendance record for the course from the beginning of the semester up to class test-I and class test-II and also up to the end of the semester. The teacher offering the course shall notify the students having less than 75% attendance with an intimation of the same to the concerned HOD.

Every faculty offering a course will take attendance till three calendar days before the last instruction day in the semester. The percentage of attendance, calculated up to this instruction day, will be indicated in a code number/ letter as follows:

Attendance rounded to	Code No/letter
95% and above	H
85% to 94%	9
75% to 84%	8
Below 75%	L

The RS who has attendance code letter L will not be allowed to sit for end semester examination in the course in which the short fall exists.

8. Leave Rules for Regular Candidates (Applicable to all Ph.D. students w.e.f. 01.01.2020)

8.1 Leave Application

The RS is required apply to the concerned HOD for leave stating the reasons whenever they are not in a position to attend classes/perform thesis work.

8.2 Leave Record

Leave record of an RS shall be maintained by his/her Department and any leave application of the RS shall be sanctioned by the Dean (Academic). It is required by the Department to fill the complete leave details of the candidate in the leave proforma clearly stating the nature of leave before sending it to the Dean (Academic).

8.3 Casual Leave/Restricted Holiday

Each RS shall be eligible for 8 Casual Leave (CL) and 2 Restricted Holiday (RH) in a calendar year.

8.4 Medical Leave

All Ph. D Research Scholars are eligible for medical leave upto 20 days in a Calendar Year. Medical Leave shall be sanctioned by the Dean (Academic). The RS will be required to produce a medical certificate issued either by the Institute Dispensary or from a Medical Officer of the Government Hospital. In case, the RS requires more leave beyond the period of 20 days, the RS will be required to drop the semester without fellowship. The semester drop shall be counted towards the total duration of the Ph.D. programme.

8.5   On Duty Leave

All RS shall be allowed to leave station for visiting other places preferably after completion of their course work or during vacations when there is no teaching work scheduled, if recommended by Supervisor(s) and HOD, and approved by Dean Academic well in advance for various purposes like library consultation, meeting experts, presentation of research papers/participation in the conferences/short term courses/symposiums etc., getting samples tested from other laboratories, using the lab facilities elsewhere if the same is not available at NIT Jalandhar, interaction with the External Supervisor, and any other similar purpose as recommended by his/her Supervisor(s) and HOD. For these purposes, he/she shall be permitted for 30 days per year.

8.6   Long Duty Leave

If a Research Scholar under Joint-supervision with an External Supervisor from Industry/Research Laboratory/Institute needs to visit his/her External Supervisor for experimental work/data collection, the student can avail a total of 180 leave for his research work in the entire duration of Ph.D. on the recommendations of the Research Advisory Committee. The minimum duration for such leave shall be of 60 days.

However, the student will register himself in person at the time of registration if it falls within the leave period. Stipend shall be paid to the RS on the basis of the attendance and performance report received from the external Supervisor.

8.7   Maternity Leave

The woman RS will be eligible for Maternity Leave with Assistantship as per Govt. of India notification released from time to time. However, the minimum registration period will be extended by the leave period only.

Any additional leave of any kind can be permitted by the Director on the recommendation of RAC.

9.   Discipline

9.1   The RS is required to observe proper discipline and decorous behaviour both inside and outside the campus. He/She should not indulge in any activity, which will tend to lower the prestige of the institute.

9.2   Any act of indiscipline on the part of RS, which is reported to Dean (Academic), will be referred to the Discipline Committee of the Senate from time to time. The Committee will investigate the charges. If the charges are substantiated, it will recommend suitable punishment for the same to the Director. The decision of the Director will be final in this regard.

10. Research Advisory Committee (RAC)

The RAC shall be constituted within one month of the registration of the research scholar. The head of the department shall prepare the case and will submit the same in the office of Dean Academic.

10.1 Composition of Research Advisory Committee

The following will be the composition of RAC:

1. Dean (Academic) (Ex-officio) (Chairman)
2. Head of the concerned Department (Member).
3. All approved Ph.D. supervisors of the RS (Member(s)).
4. Subject expert(s) outside the institute to be nominated by the Chairman, Senate. The concerned supervisor(s) shall provide a list of three Subject Experts with their addresses, telephone numbers and e-mail IDs (through Head of Department) to Dean (Academic) well in advance.

10.2 Responsibilities of Research Advisory Committee

The RACs will have the following responsibilities:

1. Confirmation of supervisor to the RS.
2. To monitor the performance of the RS.
3. To recommend the Courses of studies for the concerned RS.
4. To hold the comprehensive viva-voce examination of RS.

11. Minimum Residential Requirements

For a regular RS under scholarship/Project scheme, the minimum period of residential requirement for study and research at the institute from the date of registration to the date of submission of thesis shall be 36 months. During this residential requirement, the RS(s) shall report to his/her supervisor(s) from the department where he/she is registered. The RS is allowed to leave station to visit other libraries/ laboratories/industry etc. for consultation/ experimentation/data collection/ attend a conference/present a paper in a conference/ symposium after due permission from his/her supervisor(s) and approval of the concerned Head of Department. However, there shall not be any residential requirement for the regular internal faculty registered as part-time RS. All other Part-Time RS shall be required to be present in the Institute for one week in a semester and the record of the attendance shall be maintained by the concerned Supervisor (s) and concerned HoD. These external/part time RSs shall be required to submit a Certificate from their Employers at the time of registration stating that the concerned candidate(s) is an employee of that organization and is allowed to pursue his/her research work at NIT, Jalandhar, and his/her routine work permit him/her to devote sufficient time for research work. In case of transfer/ deputation/change of employment, it will be the

responsibility of the RS to obtain the similar document from his/her new/immediate employer and submit it to the institute. A full-time research scholar may be allowed to continue as part time research scholar only after the successful completion of his/her comprehensive examination and then onwards he/she will be governed by Part-Time Ph.D. regulations. However, the Research Scholars admitted in 2018-19 and who opt to convert to part-time programme before completion of 03 years, shall also be eligible for award of Ph.D. degree only after publication of 02 research papers in SCI indexed journals out of their research work.

12.   Comprehensive Viva-voce Examination

12.1   The research scholar is required to submit his/her research proposal for Open House Comprehensive Examination within a period of 18 months (maximum) from the date of registration. If due to any reason the research scholar is not able to submit his/her research proposal for comprehensive examination within 18 months of registration, his/her name may be discontinued with the recommendations of the concerned supervisor(s) and HOD. By this time, if there is some conflict reported between the RS and the supervisor(s) and either/both of them show their inability to continue to work with each other, an Inquiry Committee shall be constituted to look into the matter and based upon its recommendations, allocation of new supervisor (from the concerned department) to the candidate may be initiated by the concerned Head of the Department in consultation with the Dean (Academic). Head of the Department is required to get the supervisor replaced through RAC within one month (maximum) after completion of 18 months from the date of registration. Till this change of supervisor is done, there will be a provision of Administrative Supervisor for the concerned RS. In such case the concerned Head of the Department shall act as Administrative Supervisor to manage the daily activities like stipend-cum-teaching assistantship/leave etc. of the concerned RS. Further, the RS in such case shall be allowed to submit his/her research proposal for comprehensive examination within six months (maximum) after change of supervisor. After this time period, if RS is not able to submit his research proposal, then his/her name shall be discontinued with immediate effect. If no other faculty member from the same department agrees to supervise this RS, then a NOC shall be issued to such research scholar so as to enable him/her take admission elsewhere keeping his/her admission intact at NIT Jalandhar for a period of six months, on his/her request. After six months, his/her admission shall be discontinued from NIT Jalandhar.

If the performance of the RS is not satisfactory, then he/she may be given one more chance to present his/her research proposal within three months of first presentation. Further, in case, the second chance could not be availed by the candidate due to

unavoidable circumstances/exigency within the stipulated time of 3 months, extension of additional 3 months can be granted in exceptional circumstances by the approval of Director-cum-Chairman, Senate on the recommendations of the concerned Supervisor and HoD. After the second attempt, if the performance of the RS remains unsatisfactory, his/her registration shall be cancelled from the institute. All the result(s) of the Ph.D. research scholars shall be conveyed to them by the office of Dean (Academic).

After comprehensive examination but before submission, if some conflict between RS and the supervisor(s) is reported, and the supervisor produces sufficient evidences to disown the RS, after the enquiry committee report, the candidature of such RS shall be discontinued with immediate effect and an NOC shall be issued to such research scholar so as to enable him/her take admission elsewhere.

A candidate who is declared unsuccessful in the 1st attempt of Comprehensive Viva Voce Examination will not be paid any stipend/teaching assistantship till he is declared successful in the 2nd attempt of the Comprehensive Viva Voce Examination. No further extension after the 2nd attempt will be granted in any case.

If the research scholar is not able to pass Comprehensive Examination within two years (maximum) from the date of registration, his/her admission shall be cancelled with immediate effect and a NOC shall be issued to such research scholar so as to enable him/her to take admission elsewhere.

12.2   The comprehensive examination shall be held as oral.

12.3   For the comprehensive examination, the RS is required to present a Research Plan/Detailed Research Proposal before RAC. In case, the RAC is satisfied with the presentation, then he/she shall be declared successful/pass in the comprehensive examination and his/her Research Plan/detailed Research Proposal shall be approved. On the other hand, "If the performance of the RS is not satisfactory, then he/she may be given one more chance to present his/her research proposal within three months of first presentation. Further, in case, the second chance could not be availed by the candidate due to unavoidable circumstances/exigency within the stipulated time of 3 months, extension of additional 3 months can be granted in exceptional circumstances by the approval of Director-cum-Chairman, Senate on the recommendations of the concerned Supervisor and HoD. After the second attempt, if the performance of the RS remains unsatisfactory, his/her registration shall be cancelled from the institute."

12.4   The research plan/detailed research proposal to be submitted by the RS for **Comprehensive Examination** shall be called as **'Ph.D. Research Proposal'**, which shall preferably be prepared on the following guidelines:

1. The proposal may have the following Sections:

a) Introduction, which may include brief introduction to the research area and its importance

b) Brief review of literature on the proposed area of research and Research gap

c) Research significance

d) Objectives

e) Scope and Methodology

f) Bar Chart indicating time schedule

g) List of most appropriate references

2. The title page should contain the proposed title of the research, name and roll number of the RS, name (s) of the supervisor (s), department, institute, month and year of submission.

3. The total number of pages of the proposal are limited to 15 inclusive of the title page.

4. It should be typed on a A4 size paper, Times New Roman 11 point font size, preferably at 1.5 line spacing with 30 mm margin on left and 25.4 mm margin on right, top and bottom.

5. The Major Headings as given in S.No.1. above shall be in bold block capitals having 12 point font size. The Sub headings (if any) shall be bold title case.

13.   Pre-submission Seminar and submission of synopsis

Upon satisfactory completion of course work including research methodology and comprehensive examination, which shall form part & parcel of Ph.D. Programme, RS, before submission of synopsis, shall make a pre- Ph.D. presentation in the Department that may be open to all faculty members and research students, for getting feedback and comments, which may be suitably incorporated into the draft thesis under the advice of the supervisor. If the RAC is satisfied with the performance of RS, he/she is required to submit the synopsis (10 copies) of his/her research work. The synopsis will be submitted preferably three months before the submission of Ph.D. thesis. It should be computer printed on A4 size paper with appropriate references/bibliography.

The Synopsis to be submitted by the RS for **Pre-Submission Examination** shall be called as **'Ph.D. Synopsis'**. It should preferably contain Sections on Introduction which includes brief Review of Literature, Objectives, brief Methodology, brief Analysis of Results, Case Studies if any, Conclusions and Recommendations. List of publications should also be given at the end. The Figure (s) and Table (s) may only to be given if considered utmost necessary.

The formatting guidelines of the **Ph.D. Research Proposal** given above in (B) may

be followed.

The title page should contain the title of the research, name and roll number of the RS, name (s) of the supervisor (s), department, institute, month and year of submission.

The total number of pages of the synopsis are limited to 10 inclusive of the title page.

14. Submission of thesis

14.1 On the recommendations of RAC, Dean (Academic) may allow a RS to submit his/her thesis provided he/she has published/accepted for publication minimum two research papers in the area of Ph. D research in refereed international journal (out of his/her research work) without paying any fee for publication and submit the synopsis of his/her thesis subject to fulfilling all other regulation.

For Ph.D. (Full Time) and Ph.D. (Part Time) students' of 2017 batch, the following shall be applicable:

"Two research papers in the area of Ph.D. research shall be published in Science Citation Index (SCI)/SCOPUS indexed journals, out of which at least one must be in Science Citation Index (SCI) indexed journals."

Criteria for thesis submission (Applicable from 2018 Batch onwards):

02 research publications accepted/published in SCI/Emerging SCI/Web of Science indexed non-paid journal out of which at least one research publication should be in SCI.

After completion of three years from the date of registration, extension @ 6 months for award of stipend shall be granted, if recommended by RAC based on the progress of the concerned RS. All supervisor(s) are requested to encourage the RS to submit within a time period of 04 years (maximum) from their date of registration. No scholarship/contingency shall be awarded after 05 years from the date of registration.

14.2 The thesis should be written in English in a format, which may include preferably the following sections:

    i. Abstract
    ii. Introduction
    iii. Literature review
    iv. Research gap
    v. Research significance
    vi. Objectives
    vii. Experimental/Theoretical work
    viii. Results and discussion

    ix.   Conclusions

    x.   Scope of the future work

    xi.   References/Bibliography

In thesis write up, the following guidelines should be followed:

- The thesis should be typed 1.5 spaced on both sides of the paper of A4 size, leaving 40 mm margin on the left-hand side. After open house viva-voce to defend thesis finally, six copies of the thesis, with all photographs and illustrations, are to be submitted.

- Headings of sub-divisions of the text should be in lower case capitals, left aligned and bold. Sub-headings should be in lower case capitals and placed immediately next to the margin and the text should start from the next line. Further sub-heading should be lower case capitalized first letter only and placed next to the margin with colon. The matter would be in continuation of sub-heading.

- All symbols should be defined wherever they first appear and conform to the internationally accepted symbols.

- Tables should be also typed on A4 paper size. These should be numbered serially with the word 'Table' towards the left margin followed by title at the top of the table. Figure captions should be provided at the bottom of the figure.

- Reference cited in the text should be indicated by the author's name and the year of publication in parenthesis. These should not be numbered and should be typed at the end of the paper in the alphabetical order. The title of the work should be within inverted commas.

> Fan, W, Gordon, MD & Pathak, R (2000) "Personalization of search engine services for effective retrieval and knowledge management", Proc. 21st International Conference on Information Systems, 20-34

> Mukhopadhyay, A, Monica Puri Sikka and Vinay Kumar Midha (2018) 'Speciality dressings for managing difficult to heal wounds' in Advanced Textiles for Wound Care, 2nd Edition, Eds. S Rajendran, Woodhead Publishing Limited, Cambridge, 391-421

> Sikka MP, Ghosh S, Mukhopadhyay A. (2016) Mathematical modelling to predict the sub-bandage pressure on a conical limb for multi-layer bandaging. Med Eng Phys.38(9),917-21

> Terzaghi K (1943), Theoretical Soil Mechanics", John Wiley and Sons, Inc, New York,210

14.3   The RS is required to submit three copies of Ph.D. thesis (spiral bound) to the Office of Dean (Academic) through his/her supervisor(s) and the concerned HOD provided he/she has already submitted his/her synopsis.

14.4   The RS will submit a certificate from his/her research supervisor stating that the

research work undertaken has been original and has not been published/printed anywhere else for the award of any degree.

14.5 A certificate from the Accounts Section of the institute stating 'no dues pending' against RS will also be submitted along with the thesis.

14.6 Exclusion of material while checking plagiarism

A. All quoted work reproduced will require necessary permission and/ or attribution from the Journal/Author.

B. All references, bibliography, table of content, preface and acknowledgments.

C. All generic terms, laws, standard symbols and standards equations.

D. Matches up to 11 consecutive words.

E. All material (i.e. figures/images and tables) which is referred/cited from the original source.

F. Material/s published by student/supervisor from their own thesis/dissertation/self-publications/self-publications/duplication.

G. Standard experimental and theoretical methods.

Acceptance Level/reasonable duplication

A. Introduction and literature review portion up to 25%.

B. Remaining material upto10%.

At the time of submission, the report obtained from Turnitin to be attached with the Thesis/Dissertation and should be verified by the Supervisor.

15. Evaluation of thesis

15.1 The thesis shall contain account of the research work carried out by the RS leading to discovery of new facts and should give evidence of originality either in interpretation of data, development of new experimental or theoretical techniques or definite contribution to the advancement of knowledge. The thesis should give evidence regarding the capability of the RS to do independent research work.

15.2 Along with the synopsis of Ph.D. thesis submitted by the RS, the supervisor(s) shall forward a panel of eight examiners comprising off our foreign examiners and four Indian examiners (in a sealed envelope) through proper channel to Dean (Academic). Out of 04 foreign examiners, at the most, 02 can be from the same country. The foreign examiners must be an authority in the concerned area of research, i.e. sufficient number of publications must be referred in the thesis. Proposed examiner should comprise of Professor or Associate Professors/equivalent only from reputed Universities/Institute/R&D lab/Industry. Further, number of Associate Professors in the panel should not exceed 50%. The Indian Examiners must be from

IITs/NITs/CFTIs/R&D Lab/industry at a rank of Professor/equivalent. The Indian Examiners should be an authority in the concerned area of research i.e. sufficient number of publications must be referred in the thesis. In case, proposed examiners at the level of Professor are not available, then Associate Professor/equivalent with at least 07 years of teaching experience may be provided for the panel. No of Associate Professors in the panel should not exceed 50%. Out of which the Chairman, Senate, shall appoint one foreign examiner and one Indian examiner for the evaluation of Ph.D. thesis. Dean (Academic) will obtain the willingness from the appointed examiners by sending them a copy of synopsis submitted by the RS. The Chairman, Senate is empowered to amend the panel of examiners submitted by the research supervisor(s).

15.3 After getting the willingness from the appointed examiners, Dean (Academic) will send two copies of spiral bound thesis to them for detailed evaluation.

Dean (Academic) will convey to the thesis examiners that their evaluation reports should include:

i.   Definite statement as to whether the thesis is acceptable or not acceptable for the award of Ph.D. Degree.

ii. List of questions to be asked or clarifications to be sought from the RS during the viva-voce examination.

iii. The detailed statement regarding the quality of the work undertaken.

iv. Statement whether the quantity of work done is sufficient for the award of Ph.D. Degree or not.

v.   In case the examiners feel that:

- Definite Revision of the thesis is required
- Or, the thesis is not acceptable in the present form and has to be completely re-written due to insufficient quantity and/or quality of research work undertaken, it should be clearly stated.

15.4 After receiving of the examiners' reports, the Photostat copies of the reports shall be forwarded to the concerned research supervisor(s) by Dean (Academic). The research supervisor(s) shall send his/her comments to the Dean (Academic) for further action.

15.5 If one or both examiners ask for complete/partial revision of the thesis, the RS will be asked to re-submit the thesis after incorporating the necessary changes in light of the comments of the examiner(s) within a period of six months. The re-submitted thesis may be sent to the same examiner(s) again for evaluation, if required.

15.6 If one or both examiners recommend the thesis for the award of Ph.D. degree,

subject to minor changes, the RS will be asked to re-submit the thesis after incorporating the changes in light of the comments of the examiner within a period of three months. The re-submitted thesis may be sent to the same examiner(s) only if the Examiner(s) has mentioned about it in his/her report(s).

15.7 In case, both the examiners give positive/favorable reports, the thesis will be considered accepted. However, if one of the examiners gives positive/favorable report and the other rejects the thesis, then another copy of thesis shall be sent to a third examiner (same set of examiner) appointed by the Chairman, Senate from the panel already given by the research supervisor(s). If the report of the third examiner is found positive/favorable, then the thesis shall be considered accepted. In case, the third examiner rejects the thesis, then the Chairman, Senate will decide (on the basis of the reports of examiners), whether the thesis is to be rejected/or referred again to a new set of examiners for a fresh evaluation.

15.8 In all other cases, not covered by the above regulations, the matter will be referred to the RAC for consideration.

15.9 A RS whose thesis has been accepted for the award of Ph.D. degree shall be required to appear in Open House Viva Voce Examination before the following committee/panel:

   i.   Dean (Academic)
   ii.   One of the External Examiners
   iii. Head of the concerned department
   iv.   Research supervisor(s)

After satisfactory performance of the RS in the open house viva-voce examination, this committee shall forward its recommendations to the Chairman Senate for the award of Ph.D. degree to the RS. The Chairman Senate will recommend to the Senate for the award of Ph.D. degree to the successful RS.

The RS is required to submit six hardbound copies of his/her Ph.D. thesis as per the approved format alongwith a soft copy (in a CD) in PDF format. The distribution of these six copies is as follows:

a. For central library (alongwith CD)
b. For departmental library
c. For the RS
d. For one supervisor
e. For second supervisor
f. For the Office of Dean (Academic)
g. In case, there are more than two supervisors, then the number of copies to be

submitted by the RS will increased accordingly, i.e. six plus number of supervisors more than two.

h. One CD to be deposited with UGC

15.10 In case the RS fails in the open house viva-voce examination, he/she may be permitted to reappear in the open house viva-voce examination at a later date (approved by the Chairman, Senate) after the recommendation has been made by the RAC in this regard.

15.11 If the open house viva voce examination committee/panel finds that the performance of the RS is not satisfactory even on the second occasion, the matter will be referred to the Institute Senate for a decision.

15.12 **Depository**:

Digital Content Creation

Each PhD student enrolled with the Institute must be aware that he/she has to submit the electronic copy of the Thesis to the Institute library in PDF/Postscript format within two weeks of his/her defense. In this regard the following guidelines are proposed:

1. The student is notified about his/her supervisor(s) within a week of his/her enrolment.

2. Within 3 months of supervisor allotment, the student has to submit a form "Student Undertaking for Thesis Work" to the Office of Dean (Academic) forwarded through his/her supervisor and Head of Department.

3. The student will carry out his/her PhD Thesis work and other requirements of the PhD degree as per Institute regulations/ rules.

4. Before submission of the Thesis for Evaluation, if third party copyrighted matter is to be included in the Thesis, the student must have obtained a written consent from the copyrighted matter owner(s). It is the responsibility of the student to obtain the relevant consent(s) and if the student has not done so at the time of Thesis submission, such cases need to be approved by the Supervisor.

5. On successful completion of open House viva (PhD defense), the student has to submit the "Electronic Thesis Submission Form" within two weeks of Thesis Defense. Further, the student has to specify any one of the access level for his/her Thesis as per following norms: (i) Unrestricted Internet Access – It provides open and immediate digital access to the Thesis immediately for submission to National Digital Library, NDLI through IDR, Institute Digital Repository OR (ii) Access Restricted to NITJ Intranet for Limited Period – It provides restricted digital access to NITJ intranet users for specific period, up to a maximum of six months. After this period, the Thesis will be submitted to National Digital Library, NDLI through IDR, Institute Digital Repository OR (iii) Totally Restricted Access for Limited Period – It withhold access to the entire Thesis for specific period, up to a maximum of six months. After this period, the

Thesis will be submitted to National Digital Library, NDLI through IDR, Institute Digital Repository. However, due to some reason, if a student needs a further extension to withhold access to the Thesis for up to another six months, such extension will need to be approved by the Dean (Academic).

For the already existing theses the access will be restricted to NITJ Intranet users, after receiving the consent form duly signed by the student, supervisor and the head of the department. However, last three-year theses will be submitted to National Digital Library, NDLI through IDR, Institute Digital Repository after receiving the consent form duly signed by the student, supervisor and the head of the department.

15.13 **Issuance of Provisional Certificate**: On successful completion on the Open House viva after evaluation of thesis the candidate shall be issued a provisional certificate certifying to the effect that the Degree has been awarded in accordance with the provisions of UGC Regulations-2009 for Minimum Standards and Procedure for Award of Ph.D. Degree.

15.14 In case, Director NIT, Jalandhar acts as a supervisor (single/joint) of any RS at NIT Jalandhar, all the rights of Chairman Senate shall be transferred to Dean (Academic) for that particular RS.

16. Award of Degree

If the performance of the RS has been satisfactory in the open House viva-voce examination as per Clause 15, he/she will be awarded Ph.D. degree on the recommendations of the Senate and with the approval of the Board of Governors.

17. Conversion of full-time admission to part-time for RS

The RS (full-time) may be allowed to continue as RS (part-time) if he/she satisfies the following conditions:

1. The request from the RS in this regard is made to Dean (Academic) through proper channel and he/she has already passed the prescribed coursework.

2. His/her progress report by his/her supervisor(s) is found satisfactory.

3. In case, he/she has been offered a regular job in some organization, then he/she may obtain a 'no objection certificate' from his/her employer to continue his/her research work as a part-time RS at NIT, Jalandhar and enclose alongwith his/her request for the purpose.

4. The RS may be allowed to register as part-time candidate only after the recommendation of the RAC and approval of Chairman, Senate.

5. The full-time RS after conversion to part-time RS shall not be considered for any scholarship/stipend/contingency grant/ teaching assistantship as meant for full-time

RS.

6. All rules and regulations of part-time programme shall be applicable for such RS. Further, once changed to part time candidature, the concerned RS cannot revert back.

18. **Stipend cum Teaching Assistantship/Scholarship and Contingency grant**

Stipend cum Teaching Assistantship/Scholarship and Contingency grant shall be given to the admitted candidates as per the latest notification of the MHRD in this regard. However, Stipend cum Teaching Assistantship/Scholarship and Contingency grant to the candidate working under the Sponsored Projects coordinated by the faculty of the institute shall be given as per the terms and conditions of the project. However, in case of non-satisfactory report received for any Ph.D. stipend case(s) of student(s) from the concerned Supervisor/HOD, the stipend will be stopped till the Satisfactory report is received and the stipend not paid during the non-satisfactory month(s) will not be released in any case. The concerned Ph.D. student cannot claim for stipend during the period of non-satisfactory performance.

The calendar month for Stipend/Teaching Assistantship be considered from 21st of each month to the 20th of the subsequent month. Also, the Head of the Department shall ensure that all the forms for Stipend/Teaching Assistantship be forwarded to the Academic Section by 25th of every month along with the absentee report of the students/Research Scholars who have not submitted their forms.

Eligibility for Institute Scholarship

(i)   For all Engineering Departments, GATE is not mandatory for scholarship of the candidates with Master's degree in Engineering. Candidate with Master's degree in Science must have qualified in GATE/NET for scholarship. For all other Programmes, GATE/NET shall be compulsory for Institute Scholarship.

(ii)   The Research Scholars shall be provided Scholarship on the lines of the Office Memorandum No. F. No. 15-2/2019-TC dated 16.08.2019 received from MHRD i.e. JRF and SRF. Initial award of the scholarship (JRF) at the time of Provisional admission to Ph.D. programme will continue for one year from the date of the issue of the scholarship. There shall be annual assessment of the performance of the Ph.D. scholar for continuation of the scholarship and the criteria for continuing the Institute Fellowship (JRF/SRF) (Applicable to all Ph.D. students from the 2019 admitted batch onwards).

Minimum requirements

Sr. No.	Period of Registration (Years Completed)	Period of Fellowship	Minimum Requirement
1.	**01**	**2nd year**	Completion of at least 06 credit points of the Course Work
2.	**02**	**3rd year**	Successful completion of Ph.D. Course Work with minimum 7.0/10.0 CGPA and submission of Comprehensive Research Proposal.
3.	**03**	**4th year**	Successful completion of comprehensive examination and 01 research publication accepted/published in SCI/Emerging SCI/Scopus/Web of Science indexed non-paid journal
4.	**04**	**5th year**	02 research publications accepted/published in SCI/Emerging SCI/Scopus/Web of Science indexed non-paid journal out of which atleast one research publication should be in SCI/Web of Science

(a) Scholarship once discontinued will be restored as and when eligibility conditions (as above) are acquired. However, this will be effective from the 1st day of the next month. Publications must be in the relevant area of research of the scholar with affiliation to Dr B R Ambedkar National Institute of Technology, Jalandhar. #The scholars receiving scholarship from external Govt./Autonomous organizations shall be governed by the rule and regulations issued and amended by the respective Govt./Autonomous organizations.

(b) The upgradation from JRF to SRF after completion of two years shall be done through external assessment in compliance of Office Memorandum No. F. No. 15-2/2019-TC dated 16.08.2019 received from MHRD, New Delhi and the evaluation shall be carried out by a committee of the following members:

- *HoD of the respective department*
- *Concerned Supervisor(s)*
- *External member of RAC or other member as nominated by Chairman, Senate*
- *Dean (Academic)/Nominee*

The fellow may be awarded SRF after successful assessment based on the recommendations of the abovementioned Committee.

Annual Satisfactory Assessment is mandatory to continue the benefit of fellowship during SRF period as per the details mentioned in the above table.

Minimum Criteria for Conversion of a Research Scholar from JRF to SRF

(applicable from 2019 admitted Batch onwards): Successful completion of comprehensive examination and 01 research publication accepted/published in SCI/Emerging SCI/SCI-Expanded/Scopus/Web of Science indexed non-paid journal.

If declared unsuccessful, the candidate will continue to receive JRF fellowship subjected to fulfillment of other requirements. Second chance may be given to the candidate by the Assessment Committee after six months on the recommendation of Supervisor(s).

Minimum Criteria for Conversion of a Research Scholar from JRF to SRF (prior to 2019 Batch): Successful completion of comprehensive examination by the Research Scholar and performance evaluation of the work done by the candidate before the Assessment Committee. All such Research Scholars shall be eligible for enhanced rates of SRF from the date of their eligibility (i.e. after 01.01.2019 onwards).

(c) Criteria for thesis submission (Applicable from 2018 Batch onwards):

02 research publications accepted/published in SCI/Emerging SCI/Web of Science indexed non-paid journal out of which at least one research publication should be in SCI.

After completion of three years from the date of registration, extension @ 6 months for award of stipend shall be granted, if recommended by RAC based on the progress of the concerned RS. All supervisor(s) are requested to encourage the RS to submit within a time period of 04 years (maximum) from their date of registration. No scholarship/contingency shall be awarded after 05 years from the date of registration.

The annual performance of the Research Scholars shall be maintained by the Department (s) and the same shall be forwarded to the office of Dean (Academic) for smooth release of the Scholarship/Stipend. The office of Dean (Academic) shall conduct the Assessment Committee meeting for conversion of JRF to SRF.

Policy for Scholarship of Ph.D. students and adoption of Stipend/Teaching Assistantship: In case of non-satisfactory report received for any Ph.D. stipend case(s) of student(s) from the concerned Supervisor/HOD, the stipend will be stopped till the Satisfactory report is received and the stipend not paid during the non-satisfactory month(s) will not be released in any case. The concerned Ph.D. student cannot claim for stipend during the period of non-satisfactory performance. Further, 75% cumulative attendance is also mandatory for students for claim of stipend/Teaching Assistantship.

19.   Remuneration to Examiners

The remuneration payable to each examiner shall be decided by the Institute from time to time.

20.   Conduct of RAC meeting, Comprehensive and Pre-submission Examination of Ph.D. Research Scholars through Online mode. The RAC meeting, Comprehensive and Pre-submission Examination of Ph.D. Research Scholars can be conducted online and the recording of the meetings conducted through online mode is to be kept in the record. In addition to this, the senior most Professor of the respective department shall attend the RAC meeting, Comprehensive and Pre-submission Examination of Ph.D. Research Scholars on behalf of the external expert in person. However, external experts must be available online and must sign through e-mail. In case candidate is supervised by the Senior Most Faculty of the Department, faculty member next in seniority after him in the department will attend the RAC meeting, Comprehensive and Pre-submission.

21.   Senate Doctoral Programme Committee (SDPC)

21.1   Constitution of SDPC:

The Senate Doctoral Programme Committee (SDPC) shall have the following constitution:

1.	Dean, Academic	Chairperson
2.	Immediate former Chairman, SDPC, if not already a member	Member
3.	Faculty nominated by Chairman, Senate	Member
4.	Faculty nominated by Chairman, Senate	Member
5.	Faculty nominated by Chairman, Senate	Member
6.	Associate Dean (Academic-PG)	Member Secretary
7. & 8.	Two Full Time Doctoral students of SRF level (preferably one male and one female), one from Engineering Departments and one from Non-Engineering Departments to be nominated by the Dean (Academic)	Members

21.2   Functions and Jurisdiction of SDPC:

The SDPC shall have jurisdiction in the following matters concerning the Doctoral Degree Programmes of the Institute:

1. Recommending for new course(s) of instruction

2. Recommending for desirable modification of courses already approved

3. Recommending for modifying credit value of courses

4. Recommending for modification of eligibility criteria for admission

5. Recommending rules for presentation and disposal of thesis

6. Coordinating conduct of oral and written examinations

7. Periodic evaluation of academic performance of programmes

8. Periodic evaluation of research conducted

9. Recommending for grant of degrees

10. Other related matters as may be referred to it by the SENATE

The functions of the SDPC consist primarily of general policy determination, coordination and review, but the SENATE shall retain the power of the final decision. In the discharge of its responsibilities, the Committee shall make full use of the appraisals and recommendations of the various academic Departments/Centres concerned while recommending a case to the SENATE. The tenure of committee and the Chairperson, SDPC shall normally be of two years.

22. Regulations for the Admission to Ph.D. Programme and Award of Ph.D. Degree (Part-Time)

22.1 Eligibility Criteria for Admission to Ph.D. (Part-Time) programme:

22.1.1 Ph.D. for Internal Candidates:

Faculty/Technical/Scientific staff of NITJ preferably having two-years' experience and possessing the same academic qualifications as that for Ph.D. regular candidates, are eligible to apply for Ph.D. Programme (as a part-time candidate).

22.1.2 Ph.D. for External Candidates:

External candidates specified by Industry/Institute having R & D facility recognized by NITJ preferably with two-years' experience and having same academic qualifications as that for Ph.D. regular candidates are eligible to apply for Ph.D. Programme (as a part-time candidate). In–service candidates must have to submit No Objection Certificate of their employer.

22.1.3 Ph.D. for Candidate/Staff working under Sponsored Projects:

Candidate/staff working under the projects sponsored by MHRD/DST/UGC or some other government agency and coordinated by the institute faculty as Principal investigator/Coordinator shall be eligible for admission to Ph.D. programme. However, the candidate/staff should have the same academic qualifications as given in 1.1. Candidate/staff working under the projects, those having appropriate provisions for salaries and contingency grant for the required duration which are sponsored by reputed industrial organization (s) and coordinated by the institute faculty as Principal investigator/Coordinator shall also be eligible for admission to Ph.D. programme.

22.2 Duration of Programme

A RS under external/part time/faculty/staff scheme is allowed to submit his/her thesis within 03 to 4½ years from the date of registration, after which he/she shall have to request for extension for submission of thesis. The Research Advisory Committee may extend the period of submission of thesis by another 2½ year. Thus, maximum

duration for submission of thesis is limited to 07 years. However, the student is permitted to submit the thesis only after the completion of minimum three years from the date of the registration of the programme.

22.3   Stipend cum Teaching Assistantship/Scholarship and Contingency grant

No Stipend cum Teaching Assistantship/Scholarship and Contingency grant shall be given to the candidates admitted as under Part-Time Ph.D. Programme. However, Stipend cum Teaching Assistantship/Scholarship and Contingency grant to the candidate working under the Sponsored Projects coordinated by the faculty of the institute shall be given as per the terms and conditions of the project.

22.4   Other Conditions

The provision of conduct of course work during Summer vacations shall also be applied to Ph.D. (Part-Time) research scholars in line with research scholars who are admitted for Ph.D. (Part-Time) programme working under TEQIP-III sponsored Institutes. The Ph.D. (Part-Time) candidates can also opt for completion of course work through NPTEL/SWAYAM (during regular course work). For ensuring the equivalence of the NPTEL/SWAYAM courses for Ph D (Part-Time) programme, the consent of external RAC member should also be obtained. The necessary communication to the external RAC member shall be made from the office of Dean (Academic).

Only 4 Lectures can be conducted by each faculty in a day in any case. In case of a single subject, only 3 lectures can be conducted for a day. These guidelines shall be applicable to all Ph.D. (Part-Time) programme candidates inclusive of the Ph.D. candidates working under TEQIP-III sponsored Institutes.

Rest of all other rules/regulations will be same as that of regular Ph.D. Full-Time programme.

GENERAL

Notwithstanding anything contained in these Regulations, all categories shall be governed by the rules and procedures framed by the Senate, and in force from time to time. Any doubt or dispute about the interpretation of these Regulations shall be referred to the Director-cum-Chairman Senate whose decision shall be final. Eligibility for admission to Ph.D. programmes in different disciplines may, from time to time, be reviewed, approved by the Senate, and implemented.

All exceptions and issues not covered above may be referred by the Director-cum-Chairman Senate to the Senate Doctoral Programme Committee (SDPC). Recommendations of the SDPC are to be put up to the Director-cum-Chairman Senate for consideration and to be implemented only if approved.