

ORDINANCES and REGULATIONS

For Ph.D. Programme

(Applicable to 2022-23 Admission Onwards)



NATIONAL INSTITUTE OF TECHNOLOGY CALICUT
NIT Campus (P.O), Kozhikode, Kerala-673601
ORDINANCES & REGULATIONS

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ORDINANCES

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Ordinances and Regulations for Ph.D. Programme at NIT Calicut

ORDINANCES

- O.1 A candidate who has qualified for the award of Master's Degree of this institute or a recognized institute or university in the discipline as prescribed in the regulations of the Senate is eligible to apply for the PhD program of this Institute.
- O.2 A candidate who has qualified for the award of Bachelor's Degree in Engineering or Technology with good academic background from this institute or a recognized institute or university in the discipline as prescribed in the regulations of the Senate is eligible to apply for the Direct PhD program of this Institute.
- O.3 The award of the Ph.D. Degree shall be in accordance with the respective regulations of the Senate of the Institute (Senate).
- O.4 The award of the Ph.D. degree shall be made by the Institute on the recommendation of the Senate and with the approval of the Board of Governors (BoG) of the Institute.
- O.5 The Senate/BoG of the Institute has the right to modify any regulations stated from time to time.

REGULATIONS

R.1 Scheme of Admission

R.1.1. The admission to the PhD programme is available in five schemes detailed as follows.

Scheme I: Full-time registration with Institute Fellowship or other Govt. Fellowships like CSIR-UGC JRF/KSCSTE/INSPIRE/QIP etc.

Scheme II: Full-time registration under the Self-Sponsored category

Scheme III: Full-time registration for candidates sponsored from Industry or other organizations including Educational Institutions

Scheme IV: Internal Registration for regular staff employed at NITC/ Research staff employed in funded projects at NITC

Scheme V: External Registration for candidates from Industry or other organizations including Educational Institutions

R.1.2. Eligibility of Admission

The eligibility for admissions to different schemes will be notified in the information brochure for the PhD programme published by the institute in the respective academic year/academic session.

R.2 Full-time Registration

R.2.1. The full-time registrants admitted through scheme I will work on full-time basis at the institute and are eligible to receive financial assistance in the form of Institute Fellowship or other Govt. Fellowships like CSIR-UGC JRF/KSCSTE/INSPIRE/QIP etc. as applicable to the scholar. Such candidates are required to perform the teaching assistantship and other duties assigned by the department from time to time.

R.2.2. Candidates with B.E/B.Tech/B.Arch/B.Plan/B.Des degree who meet eligibility criteria (R.1.2.) can apply as a fulltime registrant for Direct PhD programme under Scheme I.

R.2.3. The full-time registrants admitted through scheme II and III will work on full-time basis at the institute and are not eligible to receive financial assistance in the form of institute fellowship. However, the candidates admitted through scheme II can avail financial assistance from other agencies, by applying through proper channels.

R.3 Internal Registration

R.3.1. The Institute offers Ph.D. Programme under Internal registration for regular employees of the Institute. They need to apply for the same at the normal time of admission with the recommendation of the Head of the Department (HoD) in which the candidate is employed in the Institute. Such candidates are required to perform the regular duties assigned by the institute from time to time.

R.3.2. Project Staff, who are working on sponsored research projects in the institute are also eligible for registration under this scheme if they apply for the same at the normal time for admission with the recommendation of the Principal Investigator, HoD and Dean (R&C). A certificate to this effect should be attached alongwith the application form. Such project staff shall register for Ph. D programme under Internal Scheme, once they successfully complete the Institute admission process for the Ph. D programme.

R.3.3. If an employee who has registered as an internal research scholar resigns from the job or is terminated upon completion of the contract/project period and leaves the Institute before successfully completing the course work, the registration shall stand automatically canceled. However, if the course work is completed, the scholar shall be allowed to continue the research work, provided the Doctoral Committee (DC) recommends the same, based on the application for conversion to external registration.

R.4 External Registration

R.4.1. The external registration is for candidates employed in Govt/Industry/R&D Organizations/Educational Institutions. The applicant must be a regular employee of the institution/organization with at least two years of experience and be engaged in professional work in the broad area to which admission is sought. A no objection cum experience certificate issued by the competent authority of parent organization shall be attached with the application.

R.4.2. Such candidates will pursue the PhD programme along with their regular job at parent institute. There is no mandatory residential requirement for these candidates, however they are required to complete the formalities such as Coursework, Semester registration, DC meetings, Comprehensive examination, open seminar, synopsis submission and Thesis submission as per the relevant sections of this regulations

R.4.3. These candidates are required to work on a PhD topic assigned by the guide. However, those external registrants having facility to carry out research work at the parent institute can be permitted by the guide to work on a research problem relevant to the parent institute.

R.5 Selection of Candidates

R.5.1. Eligible applicants will be called by the Admission Section of the institute for attending the selection process, as decided by the selection committee of the respective Department/School/Centre. Candidates shall report on the date and time notified with all relevant documents.

R.5.2. Provisional selection of the candidates will be conducted by a selection committee, which is constituted by the Dean (Academic). The selection committee will consist of:

- Head of Department (HoD) / a Professor within the Institute as Chairperson (to be decided and nominated by Dean (Academic))
- Department Ph.D. Coordinator (s)
- All prospective guides from the Department/School/Centre
- Dean (Academic) or nominee

R.5.3. The Chairperson of the selection committee of the Department/School/Centre offering Ph. D. Programme, will submit the provisional list of selected candidates to the Chairperson (PG Admissions). The final selection list will be prepared by Chairperson (PG Admissions) in consultation with Dean (Academic) and will be approved by Chairperson, Senate.

R.5.4. The approved list will be published and the admission procedure will be completed by the Chairperson (PG Admissions).

R.6 Admission

R.6.1. Candidates whose selection stands approved will be admitted to the Ph.D. Programme on payment of prescribed fees and completion of the registration formalities.

R.6.2. The fee structure applicable to Ph.D. Programme under different schemes will be decided by the Institute from time to time, in compliance with the directives, if any, from MoE, Gol.

R.6.3. All research scholars joining for Ph.D. Programme shall be governed by the relevant Institute Rules and Regulations pertaining to the particular scheme in which they are joining.

R.6.4. In case a research scholar cancels the registration for Ph.D. programme for any reason, re-registration will not be permitted normally. However, the request for re-registration may be considered under special circumstances based on the merits of the individual case and the recommendation of the concerned DC/HoD.

R.7 Guideship

R.7.1. There shall be no more than two guides from the institute for a research scholar.

R.7.2. All regular faculty members of the institute possessing Ph.D. degree who are not likely to retire from the services of the Institute or leave the Institute within 3 years are eligible to become guides for Ph.D. level research work in the Institute.

R.7.3. Research Fellows working with the Institute under programs like Inspire Faculty Fellowship, Ramanujan Fellowship etc. will be permitted to guide PhD scholars as Co-guide along with a guide as per R.7.2.

R.7.4. A permanent faculty member of the institute possessing Ph.D. degree is likely to retire from the services of the Institute or leave the Institute within 3 years can only serve as co-guide normally. In case the faculty member wishes to be the guide, it may be permitted if there is a co-guide to that research scholar as per R.7.2.

R.7.5. Academicians or researchers from other institutes / organizations possessing Ph.D. degree and having relevant contributions in the area of research can be inducted as a co-guide with the approval of Chairperson senate.

R.8 Allotment of Guides

R.8.1. Guide(s) for a research scholar will be allotted by the concerned HoD, based on the preferences of the research scholar and the prospective guides, after obtaining the consent from the supervisor(s) and the research scholar for the same, as per the stipulated institute guidelines from time to time.

R.8.2. When a faculty member who has been supervising the Ph.D. research work as a guide or co-guide retires from the services of the Institute or leaves the Institute, the faculty member may be permitted to continue as guide on written request without any financial commitment to the Institute other than TA/ DA as per rules for the journey within India to attend the synopsis meeting and the final oral examination. However, a co-guide as per R 7.2 will be appointed by the Dean (Academic) based on the recommendation of the relevant DC. In case the faculty member is not interested to continue as guide, another guide as per R 7.2 will be appointed by the Dean (Academic) based on the recommendation of the relevant DC.

R.8.3. Induction of a co-guide at a later stage may be permitted by the Dean (Academic) based on the recommendation of the relevant DC, if found essential.

R.8.4. Change of guide may be permitted by the Dean (Academic) if found very essential, based on a written request from the research scholar, and with the recommendation from the DC.

R.9 Doctoral Committee (DC)

R.9.1 The following is the composition of the Doctoral Committee:

- i) Chairperson: Professor/Associate Professor within the department /school.
- ii) Member(s): Research Guide (Convener) and co-guide, if any
- iii) Member: One faculty member of the Department/School having expertise in the concerned/related area of research
- iv) Member: One faculty member from allied Departments/Schools within the Institute.

The above members including chairperson shall be proposed by the guide, approved by the HoD and further appointed by the Dean (Academic).

In case any faculty member goes on long leave/resigns/retires from the Institute or an expert member within/outside the institute is required, the Dean (Academic) shall appoint additional member(s), based on the approval from the HoD.

R.9.2 The DC shall meet whenever required to make suitable suggestions in the research and to review/monitor the progress of the candidate.

R.9.3 The first meeting of the DC will be held normally within one month of commencement of classes for the approval of the area of research and courses to be credited by the research scholar. Research scholar shall present the proposed research topic, problem and methodology, along with the registration details. The scholar may also propose the courses to be credited (see R.10.) based on background and research area for the Ph.D. Programme. The DC will examine the research proposal and make suitable suggestions and accord the consent to proceed. The courses to be credited by the scholar shall also be finalized and approved in the first or subsequent DC meetings.

R.10 Course Work

R.10.1. The research scholars have to undergo course work required for the research. The research scholars with Post Graduate Degree in Engineering/ Technology/ Architecture/ Planning/ Medicine should successfully complete courses for a minimum total of 12 credits and those with Master's Degree in Science/Humanities /Management/Life Science shall complete courses for a minimum total of 15 credits, as prescribed by DC within the stipulated time.

R.10.2. The scholar joined under direct PhD scheme should successfully complete courses for a minimum total of 18 credits, as prescribed by the DC, within stipulated time.

R.10.3. In addition to this, every research scholar is expected to credit a mandatory course on Research Methodology.

R.10.4. Credits for meeting the above requirement can be earned by successfully completing NPTEL/SWAYAM/similar online courses also. An NPTEL/SWAYAM/similar online course of minimum 12-week duration shall be considered as equivalent to a 3 credit course for the purpose of this requirement. Grading policy of such courses will be as per the guidelines prescribed by the senate.

R.10.5. A scholar may be granted exemption up to 6 credits from the minimum course credit requirements as indicated above, by the DC, provided the Post Graduate degree is from an institute of eminence/ national importance and the year of post-graduation being not earlier than 3 years from the year of admission to PhD programme.

R.10.6. A direct PhD scholar graduated from an institute of eminence/ national importance may be granted exemption upto 3 credits in the course credit requirements, by the DC.

R.10.7. A candidate with M. Phil. degree from a recognized University may be granted exemption up to 3 credits each from the minimum course credit requirements as indicated above, by the DC, provided his/her M. Phil. degree is from a reputed institute within 3 years from the year of admission.

R.10.8. All the courses to be credited by the research scholar shall be of Ph.D. level or Postgraduate (M. Tech./ M. Plan/ M. Sc./ M. Sc. Tech./ MBA) level semester-based courses only. Approved equivalent courses of tri-semester or other types of courses can also be considered based on the approval from DC.

R.10.9. No change in courses prescribed shall be made without the approval of the DC. It shall, however, be open to the DC to prescribe additional courses, wherever found necessary.

R.10.10. Courses completed after the date of first registration will only be counted towards the requirements for the award of Ph.D. Degree.

R.10.11. Research scholars admitted to the programme shall obtain minimum 'C' grade in every individual course registered for the successful completion of the course prescribed.

R.10.12. If a research scholar obtains a grade less than 'C' for any of the courses registered, DC may permit to repeat the same course once again or to credit another relevant course as a replacement. If the research scholar still fails to obtain 'C' grade or above in these courses, the registration for the Ph.D. programme will be terminated.

R.11 Department Ph.D. Coordinator

One (or more) senior faculty member(s) in the department will be nominated by the HoD as the Ph.D. Coordinator(s) of the department. The major responsibilities of the Ph.D. Coordinator are:

- i) Assist the HoD in the selection of research scholars for the department
- ii) Coordinate the registration formalities of research scholars and keep registration records of all research scholars in the department
- iii) Coordinate the course work of all research scholars and collect the results after the end semester examinations. Results shall be verified/published and copies in the prescribed format to be submitted to the Academic Section, through the HoD.
- iv) Coordinate with the guides for the conduct of DC meetings for progress evaluations.

R.12 Progress Evaluation and Report

R.12.1.All research scholars shall appear minimum once in every year before the DC for progress evaluation. Progress evaluation meetings of the DC will be convened by the guide. Research scholars shall submit a report of work completed to the DC members prior to the meeting and make a presentation on the progress of work in the DC meeting.

R.12.2.If the progress of the research scholar is not satisfactory, the DC shall record the reasons for the same and warn the research scholar and suggest corrective measures. If the performance of the scholar is still not satisfactory in the following semester/year, DC may recommend suitable actions, including cancellation of registration.

R.12.3.The progress of the research scholar will be categorized as Very Good/Good/Satisfactory/Unsatisfactory by the Doctoral Committee and the same shall be recorded in the progress evaluation report.

R.12.4.The research scholar is free to publish the results of research work with the consent of the guide. Patents / Copyrights / Technology transfers, if any, based on the contributions shall be applied by the guide, as per the Institute rules.

R.12.5.The guide (if necessary by convening a DC) shall evaluate the progress of the scholar in the research, any time during the Programme.

R.12.6.HoD/PhD Coordinator will grant permission to the scholar for registration every semester, based on the recommendation of the guide(s)/DC.

R.13 Renewal of Registration

R.13.1.All research scholars (Full-time, External and Internal registration scheme) are required to register in each semester during the stipulated period or date notified by the academic section till submission of the thesis. Scholars have to submit the registration forms as prescribed by the academic section and progress evaluation report of the research for the previous semester, recommended by the Guide/DC.

R.13.2.Late enrolment is permitted only on valid reasons with the payment of late enrolment fee, with the recommendation of guide and approval of HoD.

R.13.3.If registration/enrollment is not done for a period of six months (one semester), the registration will be canceled administratively. Re-registration requests for such cases shall be considered and recommended by the DC, if the reasons for the delay are found satisfactory. Dean (Academic) may accord the permission for the re-registration based on the recommendations from DC and payment of full fee towards the period of absence. However, DC will reject the requests for re-registration, if the reasons for delay are not satisfactory.

R.14 Comprehensive Examination

R.14.1.All research scholars who have registered for the Ph.D. programme with the Institute must pass the comprehensive examination. A student can appear in the comprehensive examination only after the completion of the course requirements prescribed by the DC in line with R.10.

R.14.2. Full-time research scholars with Post Graduate Degree shall appear for the comprehensive examination within 18 months after joining the research programme of the Institute.

R.14.3. Full-time research scholars registered for Direct PhD shall appear for the comprehensive examination within 24 months after joining the research program of the Institute.

R.14.4. External / Internal registrants are permitted an extra duration upto 6 months over and above the normal duration mentioned in R.14.2.

R.14.5. The above time limits are excluding the period of special leaves, including maternity leave sanctioned, if any.

R.14.6. The research scholar should successfully complete (pass) the comprehensive examination to avoid cancellation of the PhD registration.

R.14.7. The objective of the Comprehensive Examination is to test the general capability of the research scholar and the breadth of knowledge related to the chosen field of research. The comprehensive examination shall have 2 parts, a written examination followed by an oral examination. Upon successful completion of the written comprehensive examination, research scholars shall appear for an oral examination in the parent department before a duly constituted expert committee.

The candidates shall have two chances each to pass written and oral examination, failing which the registration shall be canceled.

Detailed procedures for conducting these examinations shall be published by the Office of the Dean (Academic).

R.15 Cancellation of Registration

R.15.1. A candidate selected for Ph.D. Programme should join the Institute within the stipulated time specified by PG admissions, failing which the offer for admission will stand canceled.

R.15.2. The registration of a research scholar, who has not enrolled for any one semester (a period of six months), is liable to be canceled (see R.13.3).

R.15.3. A research scholar who fails to obtain 'C' grade or above in any one of the courses registered as prescribed by the DC within 2 attempts (see regulation R.10.11) and not in a position to earn the minimum credit requirement will be disqualified from continuing the Ph.D. Programme and the registration will be canceled.

R.15.4. If the performance of any research scholar in the comprehensive examination is unsatisfactory even during the second attempt, the registration will be canceled (see R.14.11).

R.15.5. If the performance or progress of the scholar is not satisfactory during two consecutive semesters, DC may recommend cancellation of registration (R.12.2).

R.15.6. The registration of a research scholar who has not submitted the thesis by the end of the extended period as provided in the regulations will be canceled administratively.

R.15.7. In all the cases, guide/HOD shall inform the scholar concerned before initiating the steps for cancellation of registration. The decision of the Chairperson, Senate shall be final and binding in all the above cases.

R.16 Change of Registration from one Scheme to another

R.16.1. Ph.D. scholars shall be permitted by the Dean (Academic) to convert from one scheme to another, based on the recommendations of the DC.

R.16.2. Scholars who join the program through Scheme I and II and get a job offer shall be permitted to continue the program by converting to Scheme V, provided they complete the course work requirements as per R10.

R.16.3. Scholars who joined the program through Scheme II shall be permitted to move to Scheme IV, provided the scholar gets an opportunity to join as a research staff in a funded project with the Guide/ Co-guide. Such scholars shall move back to Scheme II, if the research work is not

completed even after the duration of the project. However, if a scholar in Scheme II gets an external financial assistance for PhD, the registration shall be continued in Scheme II itself.

R.16.4. Scholars who joined the program through Scheme III and need to join back in the parent organization shall be permitted to move to Scheme V, provided they have completed the coursework requirements as per R10.

R.16.5. Scholars who joined the programme through Scheme IV and supported through funded projects shall be permitted to move to Scheme I, at the time of exhausting the fellowship from the funding agency, based on the availability of scholarship in the Institute at that time. In any case, a scholar shall not be eligible to receive institute financial assistance for more than five years from the date of joining the PhD Programme. In the absence of such fellowship, the scholar shall move to Scheme II.

R.16.6. Scholars who joined the program through Scheme IV and get a job offer, shall be permitted to continue the program by converting to Scheme V, provided they complete the course work requirements as per R10.

R.16.7. The scholars who convert to Scheme V for taking up a job in any organization shall submit a no objection certificate from the competent authority of the organization for granting permission to continue the research.

R.16.8. Minimum contact hours as decided by the guide shall be ensured by the scholars in any semester, even after they are relieved from the full-time programme. The renewal of their registration for every semester/year will be considered, only if the guide/DC finds the progress to be satisfactory and recommends continuance of registration.

R.17 Minimum Duration for Thesis Submission

R.17.1. The minimum period from the date of first registration for Ph.D. programme to the date of submission of Ph.D. thesis shall be 30 months (or 5 semesters) for full-time, except direct Ph.D. registration and 36 months (or 6 semesters) for the external and internal research scholars.

R.17.2. The minimum period from the date of first registration for Ph.D. Programme to the date of submission of Ph.D. thesis for Direct PhD registration will be 42 months (7 semesters).

R.18 Maximum Duration for Thesis Submission

R.18.1. All research scholars under Schemes I to IV shall submit the thesis within 5 years from the date of first registration. However, on recommendation of DC, Dean (Academic) may extend the period of submission of the thesis by not more than 2 years on valid reasons submitted by the Scholar.

R.18.2. All research scholars under Scheme V shall submit thesis within 7 years from the date of their registration. However, the Dean (Academic) may extend the period of submission of the thesis by not more than 2 years on valid reasons submitted by the Scholar and on the recommendation of the Doctoral Committee.

R.19 Leave Rules

R.19.1. A full-time research scholar is supposed to carry out research at all times on all days without any specified duty time. Scholars shall be dedicated to research work on all days during the tenure of the programme. However, leave can be granted to a research scholar (other than external / internal registrants) on emergency/essential situations based on R 19.2 to R 19.8.

R.19.2. A student may be granted casual leave up to 8 days per semester on the recommendation of the guide by HoD, subject to the condition that such leave will not be allowed for longer than 5 days at a time. The casual leave cannot be combined with any other kind of leave other than the public holidays and casual leave cannot be carried over to the next semester.

R.19.3. A student may be allowed leave (with scholarship) during any period of Institute's vacation up to a maximum of 10 days during an academic year by HoD on recommendation of the guide

R.19.4. Leave on medical grounds, duly supported by medical certificate (from a registered medical practitioner endorsed by the Institute Medical officer), may be granted to a student upto 7 days per semester, by the HoD, on recommendation of the guide.

R.19.5. Duty leave up to 60 days in a year may be granted by HoD, on recommendation of guide for data collection, testing/measurements (if facility not available within the Institute), presenting research papers in conferences, attending workshops/conferences and other similar academic activities required for research work.

R.19.6. Duty leave beyond 60 days per year for collaborative work with other premiere academic institutions / research organizations / industries in India or abroad will be permitted by the Dean (academic) based on the recommendation of DC. For availing such leave, the scholar needs to present the justification, benefit to the institute and duration of the leave in a DC meeting and obtain a favorable recommendation. The financial assistance from the institute, if any, will be continued provided the scholar does not receive any financial assistance from the visiting organization.

R.19.7. Leave more than 7 (seven) consecutive days for prolonged illness or other medical or valid reasons (other than maternity leave) may be granted without any Institute financial assistance or stipend/scholarship, up to a period of six months by the Dean (Academic) based on recommendation of guide/HoD, provided research scholar maintains registration. Scholars who avail leave on medical grounds for more than seven consecutive days shall produce Medical Fitness Certificate at the time of rejoining the Institute to continue the Programme.

R.19.8. Ph.D. scholars are eligible for Maternity/ Paternity leave as per Govt. of India norms issued from time to time at full rates of fellowship once during the tenure of their programme. Dean (Academic) shall sanction the leave based on the certification from a registered medical practitioner and the recommendation of Guide and HoD. The leave thus sanctioned should be reported to the DC. All the leave records shall be monitored and kept by the concerned department.

R.19.9. All the leave records shall be monitored and kept by the concerned department. However, the maximum eligible duration of fellowship for the scholar shall be as per the category of admission.

R.20 Open seminar and Synopsis submission

A research scholar shall be permitted by the DC to make an open seminar after the satisfactory completion of:

- (i) the prescribed credits from course work,
- (ii) the comprehensive examination,
- (iii) research work of adequate quality and quantity, and
- (iv) (a) One paper accepted in a journal present in the list of Q1 journals of Web of Science core collection in the respective subject area based on the research work carried out,

or

- (b) Two papers accepted in a journal covered by Web of Science core collection based on the research work carried out,

or

- (c) (c) One paper accepted in a journal covered by Web of Science Core Collection and two Scopus indexed journal papers accepted/two patents published based on the research work carried out.

or

(d) Three Scopus indexed journal papers accepted/three patents published based on the research work carried out.

or

(e) A Patent granted as per R.12.4 and one paper accepted in a journal covered by Web of Science core collection based on the research work carried out,

or

(f) A technology transfer as per R.12.4 successfully completed with an industry and either one paper accepted in a journal covered by Web of Science core collection or patent / Software copyright granted based on the research work carried out

R.20.1. Open seminar shall be conducted with one-week prior notice to all the faculty and students in the Institute. All DC members shall be invited. During the open seminar, research scholars shall present the work in the complete form. The scholar shall take feedback/suggestions on the work and clarify all the queries and comments from the audience. If the clarifications given by the scholar are not satisfactory, DC can decide to repeat the open seminar after incorporating the suggestions.

R.20.2. Once the open seminar is completed successfully, DC can allow the research scholar to present the synopsis in a meeting convened for the purpose attended by DC Members and Dean (Academic) or nominee. The research scholar shall hand over a copy of the synopsis to every DC member and Dean (Academic), minimum five working days before the date of the meeting which is planned for the approval of the synopsis. The DC, if it approves the work reported in the synopsis, will permit the research scholar to submit the synopsis. Once approved by DC, the scholar shall submit the synopsis (one hard copy and soft copy) in the prescribed format along with synopsis submission form, copies of published papers and other documents as indicated by the academic section. The research scholar shall submit the synopsis within three months after the open seminar. The first draft of the thesis also needs to be made before the synopsis meeting and the scholar needs to present the same in the synopsis meeting.

R.21 Panel of Examiners

The meeting convened to accept the synopsis, attended by all the DC members in addition to Dean (Academic) or nominee, shall scrutinize and approve a panel of 8-10 examiners from reputed institutes of higher learning, working in the same area of research proposed by the Guide. The examiners in the panel shall not be below the level of Associate Professor or equivalent. The panel should have a minimum of 4 examiners from reputed institutes in India and 4 from reputed institutes outside India (QS Ranking within 500 is desirable). The panel of examiners approved in the meeting shall be submitted in a sealed cover by the Chairperson, DC, along with the synopsis to the Dean (Academic). The thesis shall be referred to two examiners - by the Chairperson, Senate or his nominee from the panel of examiners.

R.22 Submission of Thesis

R.22.1. The research scholar shall, within one month of approval of the synopsis by the DC, submit a soft copy of the thesis, in the prescribed format along with other necessary documents as indicated by the academic section. However, the hard copy of the thesis needs to be submitted to the academic section on demand.

R.22.2. The thesis submitted for the Ph.D. degree as per the Institute template shall contain an account of the research work carried out by the scholar leading to the discovery of new facts or techniques or new correlation of facts already known (analytical and/or experimental and/or hardware oriented in nature), the work being of such quality that it makes a definite contribution to the advancement of knowledge. All the contributions shall be clearly listed out.

R.23 Thesis Evaluation Report

R.23.1.The examiner is expected to send the report on the thesis within two months from the date of receipt of the thesis.

R.23.2.In case of undue delay in receiving the thesis review report from any examiners, the Chairperson, Senate or nominee shall appoint another examiner for the evaluation of the thesis.

R.23.3.If one of the two thesis examiners declare the thesis as not 'recommended', the thesis shall be referred to a third examiner from the panel for the evaluation by the Chairperson, Senate or nominee. Chairperson, Senate or nominee may also instruct to submit a fresh panel of examiners with the approval of DC, if the first panel is exhausted.

R.23.4.If an examiner suggests resubmission of the thesis after incorporating the with modifications suggested, the research scholar will be allowed to resubmit the thesis after revision, within the time stipulated by the DC failing which the revised thesis will not be accepted and the registration will be canceled.

R.23.5.If two examiners, after referral to a third examiner, if necessary, report the thesis as 'rejected' the matter will be referred to the DC.

(i) DC can recommend resubmission of thesis after further research work, based on the request from the research scholar. On the recommendation and approval from Chairperson, Senate, permission will be granted by the Dean (Academic) to the research scholar to continue the registration with payment of fees. On completion of the required research work, DC may recommend for open seminar, synopsis and thesis submission as per the concerned rules indicated above, similar to that of a fresh thesis work.

(ii) In the absence of such a recommendation the registration of the scholar shall stand canceled.

R.23.6.If reports of two examiners after referral to a third examiner, if necessary, declare the thesis as 'recommended', the Dean (Academic) will consider the reports and recommend for conduct of oral examination.

R.23.7.Guide will suggest an expert within the Institute as an internal examiner for Oral Examination Board.

R.23.8.In all other cases, not covered by the above Regulations the matter will be referred to the DC for consideration.

R.24 Oral Examination

R.24.1.The following is the composition of the Oral Examination Board (OEB):

- i) Chairperson: Chairperson DC or a Professor nominated by Dean (Academic).
- ii) Member: The Examiner of the thesis from within India or an expert in the field of research topic, nominated by the Chairperson, Senate or Dean (Academic) from the panel of examiners recommended by the DC, as external examiner.
- iii) Member: Guide(s)/Co-guide
- iv) Member: An expert within the Institute, suggested by the guide and nominated by the Dean (Academic) , as Internal Examiner.

R.24.2.The oral examination board will be constituted by the Dean (Academic) and will be intimated to the guide and Chairperson, DC/HoD for arranging the oral examination. The DC members of the scholar concerned shall be invited to the Oral Examination.

R.24.3.Oral examination shall be arranged by the Department and conducted as an 'open defense' with advance invitation to all the faculty/research scholars and other students of interest in all the Departments/Centres/Schools. All present in the examination hall, other than the members of the oral examination board and the candidate are only invitees.

R.24.4. Oral examination can be conducted through video conferencing also. An email confirmation on the result of the examination is to be obtained from the Examiner after the oral examination.

R.24.5. Responsibilities of Oral Examination Board (OEB) are as follows:

- i) The OEB examines the thesis work and evaluates the performance of the scholar as satisfactory or otherwise. The scholar will be asked to make a detailed presentation on the thesis work and contributions made in the field. The OEB ensures that the scholar answers satisfactorily the questions raised by the thesis examiner(s) and successfully defends the thesis. Only if the performance of the research scholar is satisfactory and successfully defends the questions raised by the thesis examiner(s), the scholar will be considered as passed in the Oral examination.
- ii) If the report of the OEB declares the performance of the research scholar as not satisfactory, the candidate will be treated as failed in the oral examination, and the scholar may be asked to reappear for oral examination at a later date after thorough preparation (not earlier than a month and not later than six months from the date of the first oral examination). On the second occasion, the OEB will also include the members of the DC.
- iii) The OEB may also recommend revisions/modifications to be made in the final version of the thesis based on the suggestions of the examiners who evaluated the thesis and the discussions at the oral examination. Candidates shall submit the required number of hard bound copies and soft copy of thesis in the prescribed format, after incorporating all the modifications/suggestions, if any, by the examiners/the OEB to the academic section. Guide shall certify that all the revisions suggested/recommended by the examiners/OEB, if any, have been incorporated in the thesis. Candidates shall also submit a soft copy of the thesis in the final form in the prescribed format, to the Digital library of the Institute.
- iv) The Chairperson of the OEB shall forward the report of the open defense to the academic section immediately after the examination.

R.25 Award of Ph.D. Degree

If the candidate is declared as passed in the Oral Examination, the Ph.D. degree will be awarded to that candidate with effect from the date of Oral Examination, on the recommendation of the Senate and with the approval of the Board of Governors of the Institute.

R.26 Power to Modify

Notwithstanding all that has been stated above, the Senate/BoG has the right to modify any of the above Regulations from time to time.

Addendum to Ph.D. Rules and Regulations-2022

- ❖ As per the decision of the 90th meeting of the Senate the clause **R 1.1** is amended as follows:

R. 1.1 The admission to the PhD programme is available in **six schemes** detailed as follows.

Scheme I: Full-time registration with Institute Fellowship or other Govt. Fellowships like CSIR-UGC JRF/KSCSTE/INSPIRE/QIP etc.

Scheme II: Full-time registration under the Self-Sponsored category

Scheme III: Full-time registration for candidates sponsored from Industry or other organizations including Educational Institutions

Scheme IV: Internal Registration for regular staff employed at NITC/ Research staff employed in funded projects at NITC

Scheme V: External Registration for candidates from Industry or other organizations including Educational Institutions

Scheme VI: External (Part-time) Registration to Direct PhD programme for candidates working in Industry/R&D Labs/Medical Institutions who do not have a postgraduate degree, but have relevant experience in reputed Industry/R&D Labs/Medical Institutions.

- ❖ As per the decision of the 95th meeting of the Senate, **R 16** is modified by including the new clause **R 16.9** as follows:

R 16.9 Conversion of PhD registration of the scholars from Scheme-2 to Scheme-1:

Scholars who are currently enrolled for PhD program under Scheme-2 (Full-time registration under the Self-Sponsored category) and appeared for the PhD admission process of the Institute again and selected for admission to PhD program under Scheme-1 (Full-time registration with Institute Fellowship) are permitted to convert to Scheme-1 satisfying the following: The conversion is permitted with all the credentials acquired during the study in Scheme-2 (the credits earned for the course work, comprehensive viva-voce etc) with the same supervisor with whom the scholar was doing the research work. Scholars satisfying the above are eligible for the Institute fellowship only for the remaining period of study, ie. upto a maximum duration of 5 years from the date of joining in Scheme-2.

Addendum to Ph.D. Rules and Regulations-2022

As per the decision of the 99th meeting of the Senate, a new clause R.18.3 has been incorporated to the Ordinances and Regulations of the Ph D programme (applicable to 2022-'23 admission onwards) as given below:

R.18.3. All research scholars under Scheme VI shall submit the thesis within 8 years from the date of their registration. However, the Dean (Academic) may extend the period of submission of the thesis by not more than 2 years on valid reasons submitted by the Scholar and on the recommendation of the Doctoral Committee.