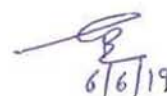



# NATIONAL INSTITUTE OF TECHNOLOGY KURUKSHETRA



**Ph.D. ORIDNANCE**  
**(w.e.f. Academic Year 2019-20)**

 6/6/19  6/6/19

## **NATIONAL INSTITUTE OF TECHNOLOGY KURUKSHETRA**

The National Institute of Technology, Kurukshetra, an “Institution of National Importance”, offers through its departments/ schools the degrees of B.Tech, M.Tech, MBA, MCA and Ph.D in the disciplines of Engineering, Sciences, Social Sciences, Business Administration and Computer Applications.

The Institute undertakes sponsored research and development projects from various industrial and other organizations in public and private sectors. The Institute encourages research in inter-disciplinary areas also, and provides opportunities for such research programs.

The National Institute of Technology, Kurukshetra (NIT KKR), formerly a Regional Engineering College was established in year 1963. It is the first Engineering Institute established in the state of Haryana. It was conferred the deemed university status on 26.6.2002, and declared an “Institute of National Importance”, on 15.08.2007. The Institute is now fully and directly funded by Central Government through the Ministry of Human Resource Development.

NIT Kurukshetra, located on Delhi–Ambala section of Northern Railway at about 160 km from Delhi, is one of the premier Institutes engaged in technical education and research.

Kurukshetra is a place of great religious significance too, where Lord Krishna is said to have delivered the divine message of Shrimad Bhagwad Gita.

### **Fees & Deposits \***

Present prescribed fee payable by Ph.D. scholars is as under

#### **Institute**

Fees (Full Time/Part Time)	Rs. 7500/- per semester
Fees (NRIs/Foreign students)	US \$ 2000/- per semester
Medical Insurance (Full Time including NRIs)	Rs. 1000/- per year


### **Hostel/Faculty House/Other Residential Place\***


Fees (Single Seated for Full Time)	Rs. 5250/- per semester
Mess Security	Rs. 10000/-

Hostel rooms shall be allotted only to the full time Ph.D. scholar subject to availability of the rooms in the hostels.

Faculty House/Other Residential Place shall be provided to the married full time Ph.D scholar subject to availability on the prescribed room rent and other charges as decided by the Institute authority.

\*Revised from time to time.

  
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### **Ph.D. Programs**


Ph.D. programs are offered by the following departments / Schools in the related areas of specializations.

- Department of Civil Engineering
- Department of Electrical Engineering
- Department of Electronics and Communication Engineering
- Department of Computer Engineering\*
- Department of Mechanical Engineering\*\*
- Department of Physics
- Department of Chemistry
- Department of Humanities and Social Sciences
- Department of Mathematics
- School of VLSI Design and Embedded Systems
- School of Renewable Energy and Efficiency
- Department of Business Administration
- Department of Computer Application

\*Also runs the program of IT

\*\* Also runs the program of Production & Industrial Engineering

  
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## Admissions to Ph.D. Program



Admissions to Ph.D. Programs (Full Time/Part Time) in the Departments/Schools of Engineering, Sciences, Social Sciences, Computer Application and Business Administration are to be made twice in an academic year (in the odd and even semesters).

### Research Areas:

Advertisement should include the details of seats as per specializations/ research areas to be offered by the respective departments/schools. Seats are to be advertised as per the slots & availability of the supervisors in the concerned research areas. These research areas are to be provided by the concerned Departmental Research committees (DRC)/School Research Committees (SRC), well before the start of any semester. These are to be finalized only after consulting the relevant academic and industrial experts. Emphasis is to be given for the research areas with experimental work. In case required, test labs may be identified where selected candidates can approach during their research. Areas should be aligned to the current research across the world. Departments /Schools are required to update list of the faculty members with details of their Ph.D. supervisions in the institute as well as outside the institute, time to time (specifically before the start of any semester).

### Admission Process:


- (a) Applications for Ph.D. programs are to be invited from Indian and foreign nationals on the prescribed format. Applications as received will be scrutinized at the central level by inviting two DRC/SRC nominees. After scrutiny, list of all eligible applicants will be uploaded on the institute website.
- (b) All eligible applicants are to appear in two objective type written tests of PG level as below:
  - Paper I: Research Methodology: 30 marks, 30 minutes duration
  - Paper II: Area of Research/ Specialization : 30 marks, 30 minutes durationQualifying marks are 50 % of the total marks (60 marks). Tests will be conducted by the respective departments. Detailed guidelines for the conduct of tests (along with tests schedule) will be provided by the Dean (Academic).
- (c) List of the qualifying candidates will be uploaded by the office of Dean (Academic) on the Institute website.
- (d) All qualified candidates will be required to appear before the respective DRC/SRC for an interview comprising of a brief presentation by the candidate related to research area. Qualified candidates may contact prospective supervisors in the departments.
- (e) DRC/SRC will evaluate the candidates and marks will be awarded out of 40 marks (15 marks for presentation, 15 marks for interview and 10 marks for academic achievements). Qualifying marks for this are 40% (16 marks).
- (f) Based upon their performance in written test and interaction/interview with DRC/SRC in totality (out of 100 marks), respective DRC/SRC will recommend the merit list of candidates by awarding marks out of 100, seat wise (as advertised) along with proposed allotted supervisor(s). Such allotment should take care of uniform distribution of full time research scholars (including candidates from other departments) among all eligible supervisors. Qualified scholars if working in the Govt./Industry sponsored project/fellowship are to be supervised by the coordinating faculty/ principal investigator, provided he/she is eligible to become supervisor. In case of tie, merit list will be prepared on the basis of following (in order of preference):
  - (i) Performance of candidate in written test
  - (ii) Percentage of marks in qualifying degree
  - (iii) Age of the candidate.
- (g) After receiving the merit list as above, Dean (Academic) will issue the admission letters to recommended candidates for joining the programs.


  
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## Contacts

The contact numbers of the offices of Dean (Academic) and Heads of Departments are as listed below:

Designation	Office
Dean (Academic)	233223
Prof-in-charge(Academic)	233225
Prof-in-charge(Examination)	233239
DR(Academic)	233227
Ph.D. Enquiry Desk, Academic section	233229
Civil Engg. Deptt.	233334
Computer Engg. Deptt.	233479
Electrical Engg. Deptt.	233371
Electronics & Communication Engg. Deptt.	233414
Mechanical Engg. Deptt.	233447
Physics Deptt.	233494
Chemistry Deptt.	233510
Humanities & Social Sciences Deptt.	233516
Mathematics Deptt.	233504
Department of Business Administration	233524
Department of Computer Application	233540
School of VLSI Design and Embedded Systems	233440
School of Renewable Energy and Efficiency	233148

  
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**NATIONAL INSTITUTE OF TECHNOLOGY  
KURUKSHETRA**

**ORDINANCE  
for the  
DEGREE OF DOCTOR OF PHILOSOPHY**

**PREAMBLE**

The National Institute of Technology, Kurukshetra offers through its Departments/Schools, postgraduate programs leading to the award of the Doctorate (Ph.D.) degree. The award of the Doctorate degree is in recognition of high academic attainments, quality research, and application of knowledge to the solution of technical and scientific problems in Science, Technology, and Humanities & Social Sciences.

The Institute undertakes sponsored research and development projects from industry and other organizations in public and private sector. The Institute also provides opportunities for research in inter-disciplinary areas through a system of co-supervision.

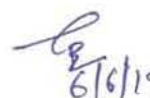

The research work is required to be an original work characterized either by the discovery of facts, or by a fresh approach towards the interpretation and application of facts, or development of equipment, making a significant and distinct advance in technology. It shall evince the scholar's capacity for critical examination and sound judgment and shall represent original contribution to the existing knowledge.

**ORDINANCE**

**1. DEFINITIONS**

- (i) **"NIT KKR"** shall mean the National Institute of Technology, Kurukshetra.
- (ii) **"Research Scholar"** shall mean a person who is registered for the Ph.D program in any department/school of NIT Kurukshetra.
- (iii) **"Part-time Research Scholar"** shall mean a research scholar who in addition to devoting his time towards discharging his employment responsibilities also devotes his time towards the pursuit of his Ph.D. research program.
- (iv) **"Full-time Research Scholar"** shall mean a research scholar devoting fulltime in a Department / School at NIT Kurukshetra towards the pursuit of his Ph.D. research program.
- (v) **"Supervisor"** shall mean a member of the academic staff of the NIT Kurukshetra, appointed by the concerned Department Research Committee (DRC) or School Research Committee (SRC) to guide/supervise the Ph.D. research/ academic work of the scholar.

**"Co-Supervisor"** shall mean additional supervisor as appointed by the DRC/SRC. The Co-supervisor(s) may be from NIT Kurukshetra itself, or a faculty from institute/university/college having NIRF ranking up to 100 (in any of the categories)/ reputed institutes/universities/colleges/organizations fully funded by state/central government and reputed R&D organization/national laboratories/industry **having sufficient facilities to carry out research at their place**. Co-supervisor from outside the Institute must have the academic and research qualifications as prescribed for a supervisor and should not be below the rank equivalent to Associate professor.


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- (vi) **“Caretaker Supervisor”** shall mean a supervisor appointed to look after the scholar’s research interests in the absence of the regular supervisor when the synopsis of the thesis has been submitted. The caretaker supervisor also must have the academic and research qualifications as prescribed for a supervisor.
- (vii) **“Educational Institute”** shall mean those institutes/colleges which run full-time Bachelor’s or higher degree programs.
- (viii) **“ORG”** shall mean a PSU / Government Department / R&D Unit.
- (ix) **“Registration Period”** shall mean the length of the time span for which a person remains a research scholar.
- (x) **“Minimum Registration Period”** shall mean the minimum period for which a scholar must remain registered to complete the requirements for degree of Ph.D.
- (xi) **“Degree”** shall mean the Degree of Doctor of Philosophy (Ph.D.) of NIT Kurukshetra.
- (xii) **“Dean”** shall mean the Dean (Academic) of NIT Kurukshetra.
- (xiii) **“HOD”** shall mean Head of Department in which Research Scholar is registered/proposes to register.
- (xiv) **“DRC/SRC”** shall mean the Department/School Research Committee of a Department/School of NIT Kurukshetra.
- (xv) **“BOS”** shall mean the Board of Studies of a Department of NIT Kurukshetra.

## 2. GENERAL

1. These ordinances / Ph.D. regulations shall be applicable to students taking admission in Ph. D. programs at NIT Kurukshetra from academic session 2019-20 and onward. All eligibility criteria must be satisfied on the last date of receipt of application, failing which application will be rejected.
2. The qualifying degree as well as University of qualifying degree must be recognized by AICTE, UGC or MHRD as the case may be. This will be verified by the Academic Section of NIT Kurukshetra and its decision in this regard will be final.
3. The applicant, if employed, must send his application through the competent authority / proper channel.
4. The date of initial registration of a scholar shall normally be the date on which the scholar formally registers and deposits the fees for the first time for the Ph.D. program; which shall also be the date of joining the program for all intents and purposes.
5. In case of change of status from full-time to part-time, the time spent as a full-time scholar will be taken into account for the purpose of minimum registration period requirement. For change of status from full time to part time, the scholar must have completed a minimum of two years as full time scholar at the institute.
6. If a scholar withdraws from Ph.D. program or his/her Ph.D. admission is terminated due to any reason (other than completing maximum period of registration), the research scholar status ceases w.e.f. the date of such act. Such a scholar cannot apply again for registration before the lapse of one year from the date of de-registration.
7. At the close of every semester, a scholar is required to submit semester progress report by 30<sup>th</sup> June for even semester and 31<sup>st</sup> December for odd Semester to the Chairman of the DRC/SRC. Semester progress report is to be submitted through research

  
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supervisor(s) with remarks of all the supervisor(s) duly recorded as satisfactory/unsatisfactory by each supervisor. The progress shall be evaluated by the DRC/SRC and the result of evaluation recorded as satisfactory/unsatisfactory on the registration form of the scholar for the subsequent semester. The registration form shall be forwarded by the Chairman, DRC/SRC to the Dean (Academic).

8. The scholar should be present in the Department when a DRC/ SRC meeting is held for evaluating his/her performance for any purpose.
9. If due to compelling adverse circumstances (as considered so by the DRC/ SRC), a scholar is not able to submit the progress report by the stipulated date, or the progress of a scholar is adjudged by the DRC/ SRC as unsatisfactory, the Research Scholar on his/her request, can be allowed an additional chance for the same. He/She is expected to improve his/her work and submit the report again at the close of the following semester (after six months). During this semester, he/she can be registered provisionally only (the normal semester fees, however, will have to be paid), and the minimum registration period requirement will automatically get extended by six months. Further, if he receives scholarship, his/her scholarship for these six months will be stopped.

If, even on having been granted extension, he/she does not submit the progress report within the stipulated time or on resubmission also, the progress is adjudged as unsatisfactory; his registration shall stand automatically cancelled. Only one such chance can be allowed to a scholar during his entire Ph.D. program.

10. A scholar must complete course work within two initial semesters from the date of registration.
11. He should submit his/her research plan proposal and pass the comprehensive examination within 12-18 months of the initial registration. If due to compelling adverse circumstances (as considered so by the DRC/SRC), a scholar is not able to submit his research plan proposal and appear in the comprehensive examination as stipulated above, or he/she is not able to pass the comprehensive examination within 12-18 months period, he/she, on his/her request, can be granted an extension of six months. During this semester, he/she can be registered provisionally only (the normal semester fees, however, will have to be paid), and minimum registration period requirement will automatically get extended by six months. Further, if he/she receives scholarship, his/her scholarship for these six months will be stopped. Only one such chance can be allowed to a scholar. If the research scholar fails to qualify the comprehensive examination after getting extension of six months his/her registration will be cancelled.
12. The scholar must request the HOD/School Coordinator well in time (at least fifteen days before the expiry of expected date), through his/her supervisor(s), about his/her plans to appear in the comprehensive examination.
13. The scholar shall be allowed to deliver his pre-synopsis seminar only after completing the course requirements and after publishing/getting acceptance for at least two research papers out of his research work in non-paid peer reviewed SCI/SCIE/Scopus Journals. The scholar must request the HOD/School Coordinator well in time (at least thirty days in advance), through his/her supervisor(s), about his plans to deliver pre-synopsis seminar.
14. A research scholar is required to complete all the requirements for the award of the Ph.D. degree within the specified period as per the regulations failing which he/she will be de-registered.
15. Every research scholar is to abide by all the regulations and the amendments made in regulations from time to time. However, the eligibility conditions for submission of thesis shall remain same as existing at the time of admission.

  
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16. It is the responsibility of the research scholar himself/herself to be in the knowledge of the amendments (if any) in the ordinances and the regulations. No scholar will be informed individually. The related circulars/amendments would be available in the office of the HOD/School Coordinator/Dean(Academic). The amendments are incorporated in the prospectus and the amended version is put on the Institute website also. He/she should maintain frequent contact with the supervisor for the purpose.
17. No TA/DA etc is admissible to any research scholar whenever he/she is to visit NIT Kurukshetra, or any other place in connection with the Ph.D. research work.
18. In case of a change in the contact telephone number / the correspondence address/e-mail, the scholar must immediately inform his supervisor, the HOD and the Dean (Academic).

## REGULATIONS

The following regulations shall apply to all categories of research scholars pursuing courses of study and research leading to the degree of Ph.D.

### R-1

#### CLASSIFICATIONS

The scholars shall be classified in the following ways

**(A) On the basis of the time devotion to the Ph.D. program**

i) Full-time (ii) Part-time

**(B) On the basis of the occupation**

i) **Teacher**, a person on the faculty of a Department of a teaching institute.

ii) **Non-teacher**

iii) **Project staff**, a person working on a project undertaken by the Institute (NIT Kurukshetra). The Ph.D. program of such a person should be related to his project work.

**(C) On the basis of the country he belongs to**

i) **Indian**

ii) **Foreign** nationals admitted through the Embassy of the respective Governments, after getting approval from the Ministry of External Affairs and 'No Objection Certificate' from the Ministry of Human Resource Development, Department of Education and Government of India or admitted under a MoU.

**(D) On the basis of the financial assistance**

i) **Self-financed** A scholar who does not receive financial help like scholarship/assistantship from Institute, or from any other source during his Ph.D. program.

ii) **Fellowship / Scholarship Awardees**

(a) A research scholar getting Institute fellowship / scholarship.

(b) A research scholar receiving fellowship / scholarship from outside organizations such as CSIR, UGC, QIP, DST, AICTE, TEQIP etc.

(c) A research scholar receiving fellowship / scholarship from ICCR, Govt. of India.



**CONSTITUTION OF DEPARTMENT/SCHOOL RESEARCH COMMITTEE**

The DRC/SRC shall consist of the following, provided each member qualifies to be a Ph.D. supervisor;

- (i) HOD/School Coordinator\*
- (ii) All Professors of the Department
- (iii) Three Associate Professors of the department by rotation. The term of an Associate Professor will be 2 years, the changeover taking effect on 1<sup>st</sup> July (every year).
- (iv) One External Expert for a tenure of two years (from panel of six experts)\*\*
- (v) Supervisors of the scholars.  
They do not, however, constitute the regular members (unless covered under (i) or (ii) or (iii)). They participate in DRC/SRC meetings only when the cases of their respective scholars are taken up.

For Applied Sciences departments/schools/MBA/MCA, if the number of total members including Chairman comes out to be less than 5, then additional members of Professor level may be nominated by the Hon'ble Director.

For Engineering departments, if total number of members including Chairman comes out to be less than 7, then additional members of Professor level may be nominated by the Hon'ble Director.

\* The HOD/School Coordinator shall be the Chairman of the DRC/ SRC. If the HOD/School Coordinator does not qualify to be a Ph. D. supervisor, the senior most qualifying faculty member of the Department will act as the Chairman of the DRC. Faculty members, qualified to be the supervisors, can only be members of DRC. If Chairman of the DRC/ SRC is not able to attend a DRC/ SRC meeting due to compelling reasons, senior most DRC/SRC member will work as Chairman, DRC/SRC.

\*\*Panel of six experts to be recommend by the respective DRC/SRC. These should be Professor or equivalent from IIT/NIT/ IIM/IISc/IISER/R&D Organizations/ Industry.

#If a Co-Supervisor of the scholar is from outside NIT Kurukshetra but from within the country, he will be invited for the DRC/SRC meeting whenever his scholar's comprehensive, pre-synopsis seminar and final examination is taken up. In all such cases, he will be paid TA/DA by the Institute as per rules.

DRC/SRC requires the approval of Director as and when required. Atleast 50% of the total members should be present during the proceeding of DRC/SRC.

Minutes of all DRC meetings will be sent to Dean (Academic).



## R-3

### ELIGIBILITY

#### R-3.1 Educational Qualifications:

An applicant possessing the prescribed qualifications shall be eligible for admission to a Ph.D. program of the institute. Degrees obtained through distance education programs shall not be considered. The course as well as University of qualifying degree must be recognized by AICTE /UGC and will be verified by Academic Section before registration.

In order to encourage the candidates for interdisciplinary research which is the state of art in today's scenario, the eligibility criteria for Ph.D. is as below:

Master's degree in respective discipline or equivalent with a minimum Cumulative Grade Point Average (CGPA) of 6.5 on a 10-point scale or equivalent as determined by the Institute wherever letter grades are awarded; or 60% marks in aggregate where marks are awarded.

OR

Bachelor's degree in Engineering/Technology with a minimum of 70% marks in aggregate or equivalent CGPA and a minimum of 10 years of work experience (at the level of Assistant Professor or equivalent) in an engineering degree level technical Institute or R&D organization/industry, and Evidence of Master's level R&D work completed.

#### R-3.2 Additional Eligibility Conditions for Part-Time Ph.D. Admission

- (i) The applicants should be professionally employed as engineers or scientists in Public Sector Undertakings or Government Departments or national level R&D organisation/national laboratories/industry, **having sufficient facilities to carry out research at their place.**
- (ii) Regular faculty of reputed Institute/University/College having **sufficient facilities to carry out research at their place in the related research area.**

All such candidates should have a minimum experience of two years at the level of Assistant Professor or equivalent as regular employee in the sponsoring institute/university/college/organisation or R & D organization / national laboratory/industry at the time of applying for admission.

Minimum qualification for these candidates is the same as for full-time candidates.

**Part-time candidates** are required to submit a "No Objection Certificate" on a proper letterhead from the appropriate authority in the organization clearly stating the following:

- The candidate is permitted to pursue studies on a part-time basis
- That his/her official duties permit him/her to devote sufficient time for research.
- Facilities for research in the candidate's field of research are available at the candidate's place of work

### R-3.3 Eligibility for Institute Scholarship#

- (i) Only GATE / NET qualified scholars shall be considered for the award of the Institute fellowship.
- (ii) Initial award of the scholarship at the time of Provisional admission to Ph.D. program 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.
- (iii) Criteria for continuing the Institute Fellowship:
  - (a) Minimum requirements

Sr. No.	Period of Regn. (Years Completed)	Period of Fellowship	Min. Requirement
1.	01	2 <sup>nd</sup> year	Successful completion of Ph.D. Course with min. 7.0/10.0 CGPA
2.	02	3 <sup>rd</sup> year	Successful completion of comprehensive examination and 01 research publication accepted/published in SCI/SCIE/Scopus indexed non-paid journal
3.	03	4 <sup>th</sup> year	02 research publications accepted/published in SCI/SCIE/Scopus indexed non-paid journal
4.	04	5 <sup>th</sup> year	---as above---

Scholarship once discontinued will be restored as and when eligibility conditions (as above) are acquired. However, this will be effective from the 1<sup>st</sup> day of the next month.

- (b) Publications must be in the relevant area of research of the scholar with affiliation to NIT Kurukshetra

*#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.*

### R-4

#### RESERVATION/ RELAXATION

##### R-4.1

Reservation in full time/regular Ph.D. seats in various categories will be made as per the norms of Government of India from time to time. Such reservations in various categories will be implemented in all departments/schools on rotational basis.



#### **R-4.2**

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.

#### **R-5**

#### **ADMISSION**

- (a) Applications for Ph.D. programs are to be invited from Indian and foreign nationals on the prescribed format. Applications as received will be scrutinized at the central level by inviting two DRC/SRC nominees. After scrutiny, list of all eligible applicants will be uploaded on the institute website.
- (b) All eligible applicants are to appear in two objective type written tests of PG level as below:
  - Paper I: Research Methodology: 30 marks, 30 minutes duration
  - Paper II: Area of Research/ Specialization : 30 marks, 30 minutes durationQualifying marks are 50 % of the total marks (60 marks). Tests will be conducted by the respective departments. Detailed guidelines for the conduct of tests (along with tests schedule) will be provided by the Dean (Academic).
- (c) List of the qualifying candidates will be uploaded by the office of Dean (Academic) on the Institute website.
- (d) All qualified candidates will be required to appear before the respective DRC/SRC for an interview comprising of a brief presentation by the candidate related to research area. Qualified candidates may contact prospective supervisors in the departments.
- (e) DRC/SRC will evaluate the candidates and marks will be awarded out of 40 marks (15 marks for presentation, 15 marks for interview and 10 marks for academic achievements). Qualifying marks for this are 40% (16 marks).
- (f) Based upon their performance in written test and interaction/interview with DRC/SRC in totality (out of 100 marks), respective DRC/SRC will recommend the merit list of candidates by awarding marks out of 100, seat wise (as advertised) along with proposed allotted supervisor(s). Such allotment should take care of uniform distribution of full time research scholars (including candidates from other departments) among all eligible supervisors. Qualified scholars if working in the Govt./Industry sponsored project/fellowship are to be supervised by the coordinating faculty/ principal investigator, provided he/she is eligible to become supervisor. In case of tie, merit list will be prepared on the basis of following (in order of preference):
  - (i) Performance of candidate in written test
  - (ii) Percentage of marks in qualifying degree
  - (iii) Age of the candidate.
- (g) After receiving the merit list as above, Dean (Academic) will issue the admission letters to recommended candidates for joining the programs.

#### **R-6**

#### **REGISTRATION**

#### **R-6.1**

A candidate is deemed to have been registered on completion of admission process for the 1<sup>st</sup> semester of the program. Every scholar is required to deposit the fees and renew the registration every semester till the submission of the thesis. The renewal of registration every semester shall be subject to the satisfactory progress in the preceding semester in his research work as recommended by the DRC/ SRC. If a



scholar's progress is adjudged as unsatisfactory, the DRC/SRC may recommend provisional registration; however, such a chance can be allowed only once during the whole period.

#### **R-6.2 Time Period Requirement for Thesis Submission**

- (a) The minimum period of registration for thesis submission shall be three years for a full-time scholar, and four years for a part-time scholar.
- (b) The maximum time for the submission of the thesis for a full-time scholar is five years, and that for a part-time scholar is six years from the date of the initial registration for the Ph.D. programme.
- (c) However, scholar may be considered for extension beyond this period only if he has published / received acceptance of at least one research paper out of his research work in non-paid peer reviewed SCI/SCIE/Scopus Journals.

On the recommendation of the DRC/SRC and the Dean (Academics), the registration of the scholar may be extended up to a maximum period of six years for full time and seven years for part time scholars by the Director.

After that the registration shall stand cancelled automatically and the candidate may re-register himself/herself as per the rule given in R-6.3.

#### **R-6.3 Re-Registration**

- (a) The scholar will request the Chairman DRC/SRC with the recommendations of his/her supervisor (s) for re-registration within a period of 3 months of cancellation of his/her registration i.e. due to the completion maximum period of registration as per R-6.2. Supervisor/Supervisors will recommend the re-registration only if the quantum of required work and publication requirements for submission of Ph.D thesis can be completed within next two years.
- (b) The application of the scholar will be forwarded/recommended through DRC/SRC and dean (Academic) to the Director and he may allow for re-registration to the scholar. If allowed, the scholar will deposit a re-registration fee of Rs. 5000/- (Rs. Five thousand only) and the date of submission of this fee will be considered as his/her date of re-registration. In addition to the registration fee, the normal semester fee of current semester will be payable, if not already paid. Semester fee for upcoming semesters will be payable as per rules.
- (c) The previous results of his/her course work and comprehensive examinations, if any, will be valid and the scholar need not repeat these steps again.
- (d) The re-registration scholar will not be permitted to submit his/her thesis before one year of his/her re-registration. The maximum period for a re-registered scholar to submit his/her thesis will be two years, beyond which the re-registration will stand cancelled automatically and no further re-registration will be possible.
- (e) The eligibility conditions (regarding publication requirements etc.) for submission of thesis shall remain same as applicable on him/her before the cancellation of his/her registration. For all other rules, the scholar is to abide by regulations and amendments made in regulations time to time.

## **R-7**

### **THESIS SUPERVISOR(s)**

#### **R-7.1**

Every registered scholar shall be assigned a research supervisor as approved by the DRC/ SRC.

#### **R-7.2**

Any regular faculty of the Institute with at least five research publications in refereed non paid journals (SCI/SCIE/Scopus) can be appointed as Supervisor and with at least three research publications in refereed non paid journals (SCI/SCIE/Scopus) can be appointed as Co-supervisor, only on recommendations of respective DRC/ SRC of concerned Schools/Departments.

Eligible faculty members, who are to retire within 3 years can be appointed only as co-supervisors.

#### **R-7.3**

Depending on the problem, a scholar may be assigned not more than three supervisors, designated as supervisor and co-supervisor(s). In no case, the number of co-supervisor shall be more than one from NIT Kurukshetra.

#### **R-7.4 Appointment of alternative Supervisor**

Internal faculty member appointed as Ph.D. supervisor is normally expected to be available to the research scholar in the institute till the thesis is submitted.

In case, supervisor proceeds on leave for a period of up to 12 months, he will continue to act as supervisor (main or co-supervisor). Otherwise, if not interested he/she inform in writing. Co-supervisor to be appointed in case he/she is sole supervisor.

In case sole supervisor moves on long leave (more than 12 months) to serve at reputed Government laboratory / reputed research organization / reputed Institutes or Universities or industries in India, DRC/SRC will appoint co-supervisor with the consent of candidate and the main supervisor. However the status of main supervisor/co-supervisor will interchange, in case main supervisor does not join the institute within 12 months.

In case of two internal supervisors, if one supervisor moves on long leave (more than 12 months) to serve at reputed Government laboratory / reputed research organization / reputed Institutes or Universities or industries in India, he/she may be allowed to act as supervisor/co-supervisor. However the status of main supervisor/co-supervisor will interchange, in case main supervisor does not join the institute within 12 months.

In case the candidate has not submitted the thesis and sole supervisor resigns, retires or expires, an alternate supervisor may be appointed by the DRC/SRC after discussion with the candidate.

In case the candidate has submitted the thesis and sole supervisor resigns, retires, or expires an alternate supervisor may be appointed by the DRC/SRC as caretaker supervisor after discussion with candidate. In case of major revision, the caretaker supervisor will provide the required help during that period and he will be automatically treated as main supervisor.



If there are two internal supervisors and one of them resign, retire or expires, then automatically other will be the main supervisor.

#### **R-7.5**

At no point of time, there shall be more than eight research scholars including scholars from outside NIT Kurukshetra being supervised by any faculty member. This number excludes the Ph. D. scholars who have submitted the Ph. D. thesis. Faculty members are required to seek the permission of Dean (Academic) for supervising the scholars registered outside the institute.

#### **R-8**

##### **COURSES AND CREDITS**

A research scholar will be required to pass at least four PG courses (minimum 13 credits) with a minimum CGPA of 7.0 out of maximum 10.0. The scholar can register for these courses after the approval of the research supervisor(s) only. The course of research methodology (with four credits) will be compulsory for all research scholars.

CGPA shall be computed on the basis of letter grades obtained in PG courses only.

The part time scholars shall have to complete the course work as full time resident scholar.

The course work is required to be completed before the comprehensive examination

#### **R-9**

##### **EVALUATION OF COMPREHENSIVE EXAMINATION**

##### **R-9.1**

Every scholar is required to submit his research plan proposal. The research plan proposal should include a brief account of the related work already reported in the literature. In the plan, the scholar should clearly spell out the investigation/work he/she intends to carry out and justify the need of the same. Subsequently, the research work should be carried out in accordance with the approved research plan. Any change in research plan can be indicated by research scholar in semester progress reports.

The following procedure is followed for conducting the comprehensive evaluation of the Ph.D. scholars.

- (a) Every scholar is required to take comprehensive examination, which will test his readiness in his/her broad field of research, and his/her academic preparation and potential to carry out the research. The comprehensive examination shall be based on a presentation in front of DRC/SRC.
- (b) Every scholar must pass the comprehensive examination within 12-18 months of his initial registration. He/she should apply at least one month in advance for comprehensive examination through his/her supervisors. In case of any justified delay beyond the specified period, candidate may request to Dean (Academic) through DRC/SRC for an extension of comprehensive examination. Such extension may be allowed for a maximum period of six months only.
- (c) Candidate should request at least one month in advance for comprehensive presentation.



### **R-9.2**

In case research plan is not approved by the DRC/ SRC, the scholar will have to improve the research plan as per the suggestions of the DRC/ SRC and get it re-evaluated.

### **R-9.3**

If due to compelling adverse circumstances (as considered so by the DRC/ SRC), a scholar is not able to submit his/her research plan proposal and appear in the comprehensive examination as stipulated above, or he/she is not able to pass the comprehensive examination within 12-18 months period, he/she, on his request, can be granted an extension of six months. During this semester, he/she can be registered provisionally only (the normal semester fees, however, will have to be paid), and minimum registration period requirement will automatically get extended by six months. Further, if he/she receives scholarship, his scholarship for these six months will be stopped.

Only one such chance can be allowed to a scholar.

### **R-9.4**

A scholar will be allowed a maximum of two attempts to pass the comprehensive evaluation, failing which his/her registration will be cancelled.

## **R-10**

### **PERFORMANCE MONITORING**

#### **R-10.1**

The academic/research progress of each scholar will be monitored by the research supervisor. For this purpose, at the end of each semester, a scholar is required to submit the semester progress report to his supervisor. The progress report should cover (i) summary of the work done before the start of the semester under consideration (ii) the goals set for this semester, (iii) the methodology used in achieving the goals, and (iv) the extent of the fulfillment of the goal. The supervisor shall record his comments and the result of his evaluation as satisfactory / unsatisfactory. After recording his evaluation result, the supervisor shall forward the progress report to Chairman, DRC/ SRC who will apprise the DRC/SRC of the same before forwarding it to Dean (Academic).

A part time scholar must submit his progress report to his supervisor personally and make himself available for necessary discussions with the supervisor.

The scholars must submit their semester progress reports latest by Dec. 31<sup>st</sup> and June 30<sup>th</sup> every year.

#### **R-10.2**

The Chairman DRC/ SRC in the Department/School will coordinate, every semester, the collection of progress reports written and signed by the scholars and forwarded by the allotted supervisor(s).

### **R-10.3**

If due to compelling adverse circumstances (as considered so by the DRC/ SRC), a scholar is not able to submit his/her progress report by the stipulated date, or the progress of a scholar is adjudged by the DRC/ SRC as unsatisfactory, he/she, on his/her request, can be allowed an additional chance for the same. He/she will improve his/her work and submit the report again at the close of the following semester (after six months). During this semester, he/she can be registered provisionally only (the normal semester fees, however, will have to be paid), and the minimum registration period requirement will automatically get extended by six months. Further, if he/she receives scholarship, his/her scholarship for these six months will be stopped.

Only one such chance can be allowed to a scholar during his entire Ph. D. program.

If, even on having been granted extension, he/she does not submit the progress report within the stipulated time or on resubmission also, the progress is adjudged as unsatisfactory by the research supervisor, his/her registration shall stand cancelled and he/she shall cease to be a research scholar of the Institute.

### **R-10.4**

The cases where some punitive action is taken will be reported to the Director.

## **R-11**

### **SEMINAR/ SYNOPSIS/ PANEL OF EXAMINERS**

#### **R-11.1**

##### **Pre-synopsis Seminar**

- (a) A research scholar will be allowed to deliver his /her pre-synopsis seminar only after getting at least a CGPA of 7.0/10.0 in course work and after publishing /getting acceptance of at least two research papers out of his research work in non-paid peer reviewed SCI/SCIE/Scopus Journals.

On research scholar's request for pre -synopsis seminar, DRC/ SRC shall evaluate the journal publications of the scholar from his/her Ph.D. work and consider his/her performance in PG courses. If found satisfactory, DRC/ SRC shall assess the scholar's work through a pre-synopsis seminar.

An expert (from panel of six experts and working in the related research area) should be invited during the pre-submission presentation by the candidate in front of DRC/ SRC. Candidate should give a request through proper channel at least one month in advance for pre-submission presentation.

- (b) The schedule of the pre-synopsis seminar shall be notified well in advance (at least three days in advance) so as to enable the interested staff members and the students to attend it.

#### **R-11.2 Synopsis**

The scholar will submit the synopsis only after the "Research Supervisor's and DRC/ SRC" satisfaction on the quality of the work. The synopsis should precisely reflect all aspects of the research work to be included in the thesis.

- (a) The scholars shall submit two hard copies and a soft copy of the synopsis in the same format as specified for the thesis to the Chairman, DRC/ SRC. The DRC/ SRC will examine the synopsis, and the Chairman DRC/ SRC shall forward the synopsis with its recommendations to the Dean (Academic) along with all prescribed documents.



- (b) The synopsis should be submitted normally within 2 months after the presentation of pre-synopsis seminar. In case the synopsis is not submitted in the specified period, the scholar may be asked to present another pre-synopsis seminar.
- (c) The scholar can submit his thesis after a gap of at least one month after submission of the synopsis. However under exceptional cases it can be relaxed on the recommendations of DRC/SRC.
- (d) The scholar shall be required to submit fresh synopsis if he fails to submit his thesis within 8 months of the submission of the earlier synopsis. However, in case a scholar fails to submit his thesis within the stipulated time and has suitable justification for the same, the Director may on recommendations of the DRC/SRC and on individual merits of each case grant him/her extension in time of not more than two months, i.e., the scholar may be allowed to submit his thesis within a period not exceeding 10 months from the date of the submission of the synopsis. However, the thesis should be submitted within the prescribed time limit as per regulations.

### **R-11.3**

#### **Panel of Examiners**

A panel of at least ten external experts, including foreign experts, and the authors of the recent papers in the references cited by the scholar in the area of his/her Ph.D. work would be suggested to the DRC/ SRC by the Supervisor. The DRC/ SRC will consider the suggested panel and will finally recommend it to the office of Dean (Academic). The panel of ten external examiners, should include five Professors/Associate Professors in Academic Institutes or equivalent from outside India (preferably from developed countries) and remaining five with same cadre from India, preferably from IITs/NITs/the Institutes of repute. The recommended panel will be considered and approved/modified by the Director.

### **R-12**

#### **BOARD OF EXAMINERS**

On receipt of the title and synopsis of the thesis, the Director will appoint a Board of Examiners for each candidate from the list approved by the DRC/ SRC. The Board of examiners will consist of two external examiners, one out of which would be from within India, and the other from abroad. These external examiners shall be chosen normally from the panel of examiners recommended by the DRC/ SRC as aforesaid. A person working in the same organization(s) / institute(s) where the research scholar is employed cannot, however, be appointed as External Examiner for that research scholar.

### **R-13**

#### **THESIS SUBMISSION**

#### **R-13.1**

The scholar will submit a soft copy of the thesis in PDF format on CD, and two unbound copies with soft covers, typed in English, one and a half spaced, printed in Times New Roman 12 pt. or Arial 11 pt. on both sides of A-4 size papers. The margins on right page shall be 1.25" –left, 1" –right, 1" –top and 1" –bottom and the margins on left page shall be 1.25" –right, 1" –left, 1" –top and 1" –bottom. The thesis shall be submitted along with the examination fee and all prescribed documents.



### **R-13.2**

The thesis shall contain a critical account of the research carried out by the scholar. It should be characterized by discovery of facts or fresh approach towards interpretation of facts and theories or significant contribution to knowledge or development or a combination of these. It should bear evidence of the scholar's capacity for analysis and judgment as well as ability to carry out independent investigation, design or development.

No part of the thesis or supplementary published work should have been submitted for the award of any other degree or diploma.

A research scholar can submit his/her thesis only on having published / acceptance of at least two research papers out of his Ph.D. research work in non-paid peer reviewed SCI/SCIE/Scopus Journals.

Thesis should be submitted along with plagiarism report as per the parameters decided by the Institute from time to time.

### **R-13.3**

A candidate can submit his thesis within the time period as stipulated in regulations provided that he/she has completed the minimum period of registration.

## **R-14**

### **THESIS EVALUATION**

All correspondence/ notifications in regard to thesis evaluation and viva-voce examination of the scholar (except where stated otherwise) shall be done by the office of the Dean(Academic). Except for the correspondence with the candidate or general circulars/ notifications, the correspondence shall be confidential.

### **R-14.1**

Each examiner will be requested to submit a detailed assessment report and his recommendation within six weeks of the date of receiving the thesis.

- i) The examiners will examine the thesis individually with a view to judge whether the thesis is a piece of research work characterized by:
  - a) The discovery of facts, or
  - b) A fresh approach towards interpretation and application of facts or theories, or
  - c) A distinct advancement in technology.
- ii) Each examiner will give his/her opinion about candidate's capacity for critical examination and sound judgment. The examiner will submit the report on the prescribed form supplied by him clearly recommending that:
  - a) The thesis is accepted as it is for the award of the Ph.D. degree.
  - b) Thesis is accepted with minor revisions to be incorporated in the thesis and are to be verified at the time of Viva-Voce examination by the Examination Committee.
  - c) The candidate be asked to resubmit his thesis in the revised form.
  - d) The thesis be rejected.

### **R-14.2**

In the event of the thesis report not being received from an examiner within a period of three months from the date of dispatch, the Director may approve alternate examiner in his place for evaluating the thesis from the approved list of examiners. Before corresponding with the alternate examiner, the original examiner must be informed of the cancellation of this appointment, stating the reason therein.

### **R-14.3**

- (a) If both the examiners recommend acceptance / rejection the thesis be accepted / rejected respectively.
- (b) If one examiner recommends acceptance and other rejection, the thesis will be sent to the third examiner. If the third examiner recommends acceptance / rejection, the thesis will be accepted / rejected respectively. If he recommends revision, the scholar shall resubmit the revised thesis. The revised thesis will be sent to all the examiners. If at least two examiners recommend acceptance, the thesis will be accepted **else** rejected.
- (c) If both the examiners recommend major revision, then a third examiner will be appointed and the revised thesis will be sent to all three examiners. If at least two examiners recommend acceptance, the thesis will be accepted **else rejected**.
- (d) In all other cases the thesis will be considered as rejected.

Any doubt arising out of the procedure laid down above shall be referred to the Director for a decision.

### **R-15**

#### **RESUBMISSION**

When a thesis is to be revised and resubmitted, the scholar should be informed about the comments of the examiners. The revised thesis is to be submitted within one year, but not earlier than three months.

The revised version of the thesis will be sent to all the examiners for their fresh recommendations.

### **R-16**

#### **VIVA-VOCE EXAMINATION**

On receipt of the thesis examination reports from the examiners, these are to be put up to the Director for decision. The Director, on the basis of the reports will decide whether the candidate should be allowed to appear in the viva-voce examination or not. The Director's decision on the thesis reports shall be communicated to the Chairman of the concerned DRC/SRC. The Chairman DRC/ SRC will form the Examination Committee for the viva-voce examination. The viva-voce examination shall be open to be attended by Members of the Department Research Committee, all faculty members of the Department, other research scholars and other interested experts/researchers of the institute.

In addition, the viva-voce examination can also be conducted on Skype or similar online tools after seeking prior approval of Hon'ble Director.



### **R-16.1**

On having been allowed to appear in the viva-voce examination, the scholar is to defend his thesis orally before the Examination Committee comprising supervisor, one DRC/ SRC nominee and one Indian external examiner. The Chairman DRC/ SRC will coordinate with all the examiners and the scholar and will fix a date for holding the viva-voce examination. The questions / queries communicated by the thesis examiners in their reports shall be intimated to the candidate through his supervisor at least one week before the date of conduct of the viva -voce examination. The schedule of the viva-voce examination shall be adequately notified so as to enable interested staff members and students to attend it.

### **R-16.2**

- (i) In case of non-availability of the Indian external examiner for conducting the viva-voce examination, the Director may appoint alternate examiner to conduct the viva-voce examination from the existing panel.

If the need be, the DRC/ SRC may suggest a fresh panel of examiners.

- (ii) The viva-voce examiner shall be provided with the reports of the thesis examiners before the viva-voce examination.
- (iii) The research supervisor shall assist the Chairman DRC/SRC in arranging the viva-voce examination of the candidate as early as possible.
- (iv) In case of the inability of the research supervisor to have the viva-voce examination conducted due to any reason whatsoever, the Director may appoint another examiner (in place of research supervisor), to conduct the viva-voce examination, from amongst the faculty of the department concerned who belongs to the particular field in consultation with Chairman DRC/ SRC. In such cases also, the Ph.D. work will be deemed to have been carried out under the guidance of the supervisor (s) only.
- (v) After the viva-voce examination, the examiners will prepare a detailed joint report giving one of the following three recommendations.
  - (a) recommended for the award of the degree
  - (b) The thesis be resubmitted after a minimum period of six months incorporating the suggestions of the examiners.
  - (c) not recommended for the award of the degreeThe report shall be sent by the Chairman DRC/ SRC in a confidential cover to the Dean(Academic).
- (vi) Any other matter not explicitly provided herein or of an exceptional nature, may be referred to the Director for his decision.

### **R-17**

#### **AWARD OF THE Ph.D. DEGREE**

On the completion of all stages of the examination, a Committee consisting of the Director, the Dean (Academic) and the Chairman of the DRC/ SRC concerned shall examine the reports of all the examiners (thesis and viva-voce) and decide as under: -

- a) that the degree be awarded;



b) that the degree shall not be awarded.

i) The thesis is to be resubmitted.

ii) The thesis is rejected on the conclusion that the thesis is not genuinely the work of the candidate.

For (b) (i) above, the Committee, if required, shall provide to the candidate a list of all corrections and modifications to be made in the thesis, including suggestions made by the examiners during the thesis evaluation, and the result of the candidate will be declared after the candidate submits two copies of the corrected thesis certified by the internal examiner that the necessary corrections and modifications have been made.

## **R-18**

### **INSTITUTE SCHOLARSHIP**

#### **R-18.1**

Those candidates who are admitted on full-time basis are considered on request, for the award of Institute scholarship of the amount as decided by the Board of Governors and directed by the Government of India from time to time. The scholar must submit a certificate to the effect that he is not in receipt of any financial aid from any other source for pursuing the Ph.D. research work. The scholars getting Institute scholarships are required to provide 8 hrs of work per week as directed by the Head of the Department/ Director.

#### **R-18.2**

In addition, the scholars will be provided contingency grant in accordance with the rules of the Institute.

It is to be noted that admission to the programs and award of scholarship are not linked. Admission to a program does not guarantee the award of scholarship. Those who are not awarded scholarship (under exceptional circumstances like not fulfilling the scholarship continuation criteria etc) can continue with the program as self-financed scholars. The Institute may provide fee waiver to the self- financed scholars subject to the final approval of Director on the recommendation of DRC/ SRC& the Dean (Academic).

## **R-19**

### **LEAVE AND ATTENDANCE**

All full-time research scholars (with or without scholarship) are required to mark their daily attendance in the attendance register maintained by the Deptt. The Chairman DRC/ SRC shall also maintain a proper leave account of each such scholar. The leave of a scholar should be recommended by his Supervisor and shall be sanctioned by the Chairman DRC/ SRC.

A full -time research scholar is entitled to avail leave as per Leave and Attendance Rules formulated and amended from time to time by the Senate. Presently these are as under:

- (i) A full-time Ph.D. scholar may avail 8 casual leaves and 2 leaves in lieu of RH. The scholar will not be entitled to mid-semester breaks/vacations, summer and winter vacation. Any absence from the institute without sanctioned leave may lead to loss of fellowship for the period of absence.

- (ii) A full time Ph.D. scholar may be allowed to proceed on long duty leave (maximum up to one year) to some organization if required for research progress. However, it should be with the due approval of competent authority.
- (iii) A full time Ph.D. scholar may avail the duty leave for attending one conference/workshop/academic event per semester.
- (iv) Any additional leave of any kind can be permitted by the Director on the recommendation of DRC/SRC.
- (v) The women research scholar will be eligible for Maternity Leave as per MHRD rules. However, the minimum registration period will be extended by the leave period only.

## **R-20**

### **CANCELLATION OF REGISTRATION**

Registration of a candidate can be cancelled in any one of the following eventualities, with due approval of the Director.

- (i) If full time scholar absents himself/ herself for a continuous period of four weeks without prior intimation/ sanction of leave.
- (ii) If a scholar resigns from the Ph.D. program.
- (iii) If a scholar fails to renew his registration within registration period as notified time to time.
- (iv) If a scholar does not submit his semester progress report by the stipulated date or his academic progress is found unsatisfactory.
- (v) If a scholar does not clear the comprehensive evaluation as stipulated.
- (vi) If a scholar is found involved in an act of misconduct and/ or indiscipline and a competent authority has recommended termination. For all purposes, the conduct/ discipline rules applicable to B.Tech. / M.Tech. Students of the Institute shall apply to Ph.D. research scholars also.
- (vii) If at any stage, information furnished by the scholar in his application is found false or incorrect.

## **R-21**

### **GENERAL**

#### **R-21.1**

Notwithstanding anything contained in these Ordinances & Regulations, all categories shall be governed by the rules and procedures framed by the Senate, and in force from time to time.

#### **R-21.2**

Any doubt or dispute about the interpretation of these Ordinances and Regulations shall be referred to the Director whose decision shall be final.

#### **R-21.3**

Eligibility for admission to Ph.D. programs in different disciplines may, from time to time, be reviewed, approved by the Senate, and implemented.

#### R-21.4

All exceptions and issues not covered above may be referred by the Director to the following committee.

(1) Dean (Academic)	Chairman
(2) Dean (R&C )	Member
(3) Head/Coordinator of the concerned department/School	Member
(4) Ph.D. supervisor concerned	Member
(5) One external subject expert from Reputed institute preferably from IITs/IISc/NITs/IIM/IISER/R & D Organizations/Industry	Member

Recommendations of the committee are to be put up to the Director for consideration and to be implemented only if approved.

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