



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)  
ISO 9001:2015 Certified University

## Supporting Document: 3.1.1

3.1.1 The institution's Research facilities are frequently updated and there is a well defined policy for promotion of research which is uploaded on the institutional website and implemented



Assessment Period: 2016 -2021

**Indira Gandhi Delhi Technical University for Women  
(Established by Govt. of Delhi vide Act 9 of 2012)**



**Revised Ph.D Regulations-2017  
For Engineering, Applied Sciences & Humanities  
(Effective from Academic Year 2017-2018)**

**Research Wing  
Indira Gandhi Delhi Technical University for Women  
Kashmere Gate, Delhi-110006**

## TABLE OF CONTENTS

<b>S. No.</b>	<b>Description</b>	<b>Page no.</b>
1	Definitions	3-4
2	R.1 Classification of Applicants and Admission Eligibility	5-7
3	R.2 Reservation/Relaxation	7
4	R.3 Shortlisting and Selection Process	7-8
5	R.4 Financial Assistance	8-9
6	R.5 Registration	9
7	R.6 Cancellation of Registration	9-10
8	R.7 Course Work	10-11
9	R.8 Research Plan (Submission and Approval)	11-12
10	R.9 Allocation of Thesis Supervisor(s)/Co-Supervisors	12-14
11	R.10 Composition of DRC and URB	14-15
12	R.11 Eligibility for the Candidacy for the degree	15
13	R.12 Performance Monitoring	15-18
14	R.13 Minimum Registration Requirement for Thesis Submission	18
15	R.14 Pre-Ph.D Seminar and Synopsis Submission	18-19
16	R.15 Thesis Submission	19-20
17	R.16 Appointment of Examiners	20-21
18	R.17 Thesis Evaluation	21-23
19	R.18 Award of Ph.D Degree	23-24
20	R.19 General	24
21	R.20 Interpretation	24



**ANNEXURE B**

**INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN**

**REGULATIONS FOR THE PROGRAMS LEADING**

**TO DEGREE OF DOCTOR OF PHILOSOPHY**

**Short Title and Commencement:**

- (a) These regulations may be called the “**Indira Gandhi Delhi Technical University for Women (IGDTUW) Ph.D Regulations for the degree of Doctor of Philosophy (Ph.D)**”
- (b) These Regulations shall be applicable to all students admitted to the Ph.D Programme at IGDTUW.

**DEFINITIONS:**

- (i) "**Applicant**" shall mean a female who applies for admission to the Ph.D. programme of the Indira Gandhi Delhi Technical University for Women (IGDTUW) on a prescribed Application Form.
- (ii) "**Academic Year**" is a period of nearly twelve months devoted to completion of requirements specified in the Scheme of Teaching and the related examination.
- (iii) "**Candidate**" shall mean a person registered for the Ph.D. Degree and who has successfully completed the course work and submitted an approved research plan as per R.11 of the Regulations.
- (iv) "**Caretaker Supervisor**" shall mean a member of the academic staff appointed to look after the candidate's research interests in the absence of the Supervisor.
- (v) "**COE**" shall mean the Controller of Examinations of Indira Gandhi Delhi Technical University for Women.
- (vi) "**Coordinator DRC**" shall mean a member of DRC of a particular Department of the Indira Gandhi Delhi Technological University appointed by Vice Chancellor, to coordinate and convene the DRC meetings.
- (vii) "**Course Work**" shall mean courses of study prescribed by the DRC through the Supervisor to be undertaken by a student registered for the Ph.D. Degree.
- (viii) "**Dean (Examinations)**" shall mean the Dean of Examination Division of Indira Gandhi Delhi Technical University for Women.
- (ix) "**Dean (RC)**" shall mean the Dean, Research & Collaboration.
- (x) "**Degree**" shall mean the Degree of Doctor of Philosophy (Ph.D.) of IGDTUW.

- (xi) "**DRC**" shall mean Department Research Committee.
- (xii) "**Examination**" shall mean examination conducted by Indira Gandhi Delhi Technical University for Women.
- (xiii) "**Full-time Research scholar**" shall mean a person registered for the Ph.D. Degree devoting full time for completing the degree requirements.
- (xiv) "**Joint Supervisor**" shall mean an additional supervisor approved by the URB on the recommendation of DRC to help the supervisor in the accomplishment of the research work of the student/candidate.
- (xv) "**Minimum Registration Period**" shall mean the minimum period from date of final registration to submission of the thesis.
- (xvi) "**Part-time Research Scholar**" shall mean a person who is registered for the Ph.D. degree and will devote part of her time towards their pursuit and devote part of her time towards the discharge of her official obligations.
- (xvii) "**Ph.D Coordinator**" shall mean a member of academic staff of the Indira Gandhi Delhi Technological University appointed by Vice Chancellor, to supervise the admission procedure, register the research students and monitor their performances through DRCs of different departments
- (xviii) "**Registration Period**" shall mean the length of time span commencing with the date of provisional registration at the University till the completion of the programme.
- (xix) "**Residency**" shall mean the minimum period for which a student must attend the University on full-time basis.
- (xx) "**Selection Committee**" shall mean a committee duly constituted by the Vice Chancellor for conducting interview for selection of students to the Ph.D Programme.
- (xxi) "**Semester**" An Academic year is divided into two semesters of six months duration each.
- (xxii) "**Student**" shall mean a person provisionally registered for the Ph.D. degree prior to becoming a candidate.
- (xxiii) "**Supervisor**" shall mean a member of the academic staff of the University approved by URB on the recommendation of Department to guide/supervise the research/ academic work of the student/candidate.
- (xxiv) "**University**" shall mean Indira Gandhi Delhi Technical University for Women (IGDTUW).
- (xxv) "**URB**" shall mean University Research Board.

## **R.1 CLASSIFICATION OF APPLICANTS AND ADMISSION ELIGIBILITY**

### **R.1.1 Classification of Applicants**

The applicants for admission to the Ph.D. programme shall be classified under any one of the following categories:

#### **R 1.1.1 Full Time Research Scholar**

A person registered for the Ph.D Degree devoting full time for completing the degree requirements, with or without any financial assistance and satisfying the admission eligibility as defined in R1.2.1.

The persons receiving financial assistance from any sources can further be classified into the following categories:

- i. Junior Research Fellow (JRF)/Senior Research Fellow (SRF) financed by IGDTUW.
- ii. Financed by other sources like Sponsored Research Projects or various Fellowship Schemes.

#### **R1.1.2 Part-Time Research Scholars**

A person who is registered for the Ph.D degree and will devote part of her time towards their pursuit and devote part of her time towards the discharge of her official obligations and satisfying the admission eligibility as defined in R1.2.2.

### **R1.2 ADMISSION ELIGIBILITY**

**R1.2.1 The minimum entry qualifications for Full Time /Part Time Research Scholars are as follows:**

- (i) **For Engineering:** Degree in M.E. / M.Tech or equivalent from a recognized University/ Institution in the relevant discipline with minimum of 60% marks in aggregate or equivalent CGPA & B.E./B.Tech. or equivalent with minimum of 60% marks in aggregate or equivalent CGPA.
- (ii) **For Computer Application:** MCA from a recognized University/ Institution with minimum of 60% marks in aggregate or equivalent CGPA & Graduation Degree (with Sciences and Mathematics) with minimum of 60% marks in aggregate or equivalent CGPA.
- (iii) **For Sciences and Humanities :** Master Degree in the relevant discipline from a recognized University/Institution with 60% marks or equivalent CGPA & undergraduate degree in the relevant discipline with 60% marks in aggregate or equivalent CGPA.

**R 1.2.2 An applicant is eligible for Part Time Research Scholar /Full Time Research Scholar (Sponsored), provided she fulfills the following conditions:**

- (i) The Applicant possesses the minimum entry qualifications for the degree as mentioned in R.1.2.1.
- (ii) The applicant is presently employed under any of the following categories :
  - a. Applicants working in organizations which have MOU with IGDTUW.
  - b. Applicants working in regular position as Scientist in a National Level R&D Lab/ a reputed organization.

- c. Applicants working in regular position as faculty in any recognised educational institution / university.
  - d. Regular /Contractual faculty of IGDTUW.
  - e. Applicants working as professional in a PSU/Corporate/Industry registered under Company's Act organization.
- (iii) The Applicant possesses at least two years of relevant teaching/research experience in regular capacity.
- (iv) The Applicant proves to the satisfaction of the university that her official duties permit her to devote sufficient time to research.
- (v) The applicant gets an NOC from her employer.
- (vi) Facilities for research are available at the applicant's place of work in the chosen field of research

**R1.2.3** An applicant shall be eligible for Junior Research Fellowship instituted by IGDTUW provided she fulfills the following conditions:

- a. She possesses the minimum entry qualifications as in R1.2.1.
- b. She has qualified UGC-CSIR-JRF/NET examination or has or qualified GATE with a score above the minimum cut off or qualified RAT examination. A person who has appeared in the above examinations but is awaiting results may also apply. However, she shall be required to produce a valid documentary evidence of having qualified the examination at the time of interview.
- c. She is not receiving any financial assistance from any other sources.

**R1.2.4** A person who has already initiated her fellowship in some other institution /organization and is interested to have her fellowship transferred to IGDTUW, may be allowed provided she clears the Selection Process for admission to Ph.D Programme as per R3.

**R1.2.5** A student/candidate registered at IGDTUW as Full Time Research Scholar and does not have any financial assistance, may be considered for Junior Research Fellowship/Senior Research Fellowship /any other fellowship/financial assistance subject to availability of financial assistance, provided she fulfills all the eligibility conditions to avail the fellowship and her case is recommended by the DRC and approved by the Vice Chancellor.

## **R.2 RESERVATION/RELAXATION**

**R.2.1**Reservation of seats for Scheduled Caste, Scheduled Tribe, Other Backward Classes and Physically Handicapped candidates will be as per government rules.

**R.2.2**Candidates belonging to Scheduled Caste and Scheduled Tribe categories will be given 5% relaxation in the minimum entry qualifications as given in R.1.2.

### **R.3 SHORTLISTING AND SELECTION PROCESS**

**R.3.1** Admission to the Ph.D Programme may be done on the basis of Research Aptitude Test (RAT) Examination or an interview or both.

**R 3.2** Depending upon the requirement, the University may advertise for Ph.D admission twice in a year.

**R3.3** Applications for joining the Ph.D. programme shall be submitted on a prescribed Form as per the guidelines in the Admission Notification of the university.

**R3.4** The RAT examination shall be waived off for the following applicants subject to the fulfillment of eligibility for entry qualifications as in R 1.2 and such applicants shall be allowed to appear in the interview directly:

- i.** Full time female teaching staff of IGDTUW.
- ii.** Sponsored applicants from organizations having MOU with the University
- iii.** Applicants who have qualified UGC-CSIR-JRF/NET Or have qualified GATE with a score above the minimum cutoff and successfully completed the degree as in R1.2.
- iv.** Foreign students who apply through Ministry of Human Resource Development or foreign students under a Cultural Exchange Scholarship Programme of Government of India
- v.** RAT examination will be conducted only if adequate number of applications from exempted categories candidates are not received.

**R3.5** The University's Examination Division shall conduct the RAT Examination, do the evaluation and forward the Merit List along with the scores to Dean (RC).

**R 3.6** A duly constituted committee approved by VC shall prepare the list of the Shortlisted candidates to be called for interview on the University Website.

**R3.7** The interview for selection of the students shall be conducted department wise by Selection Committees each comprising of at least 5 members including The Vice Chancellor/ VC nominee, Dean(RC)/HOD of the concerned department, all university approved supervisors of the concerned department, External Expert (if required).

**R3.8** A person selected by the aforesaid Selection Committee shall be allowed Provisional Registration to the Ph.D Programme from the date of payment of prescribed fees to the University with the allocated approved supervisor(s). The registration shall be confirmed only after satisfactory completion of the course work and approval of research plan by the respective DRC.

**R 3.9** The Ph.D Coordinator shall coordinate with various departments for conduct of admissions and DRCs.

### **R.4.1 FINANCIAL ASSISTANCE**



- a. The University may provide financial assistance to few Full Time Research Scholars with good teaching skills and appoint them as Junior Research fellow (JRF) / Senior Research Fellow (SRF).
- b. These fellowships shall be distributed on the basis of need across all departments by Dean (RC) in consultation with the Vice Chancellor.
- c. The Terms and Conditions of the fellowship may be decided by the academic council and may be amended from time to time.
- d. All provisions of prevailing Ph.D. Ordinance of the University shall be applicable on the JRF/SRF and allocated supervisor(s).

#### **R.4.2 TUITION FEE**

Tuition fees will be decided by University and shall be notified in the University Admission Brochure on yearly basis. Unless stated, full fee shall be charged from student/candidate on annual basis till the candidate submits her thesis for evaluation as per R.17. Full Time Permanent Teaching Faculty of IGDTUW are eligible for a 50 % waiver in the tuition fees.

#### **R.5 REGISTRATION**

- R.5.1** Every student/candidate will be required to renew the registration every year till the submission of the thesis. The renewal of registration every year shall be subject to completion of specified number of credits/courses and/or satisfactory progress of research work as recommended by DRC.
- R.5.2** A student/candidate, who fails to register or renew her registration, may be allowed to renew her registration after obtaining approval from the Vice Chancellor.
- R 5.3** A Full Time Research Scholar who gets an employment in any organization may be eligible to convert to Part Time Research Scholar provided she has completed a minimum period of atleast one year after her Final Registration, has a No Objection Certificate from her supervisor(s) and her case is recommended by the Dean (RC).
- R 5.4** A Part Time research scholar may be allowed to convert to Full Time research scholar with due recommendation of DRC.

#### **R.6 CANCELLATION OF REGISTRATION**

- R.6.1**Registration of a student/candidate may be cancelled in any one of the following cases, after due recommendation of DRC.
  - (i) If she absents herself for a continuous period of four weeks without sanction of leave.
  - (ii) If she withdraws from the Ph.D. Programme voluntarily and the withdrawal is duly

recommended by the DRC.

- (iii) If she fails to renew her registration every year subject to the provisions contained in these Ordinances & Regulations.
- (iv) If her academic progress is found unsatisfactory and approved for cancellation of registration as per R 12.1 g.
- (v) If she is unable to pass the Course Work successfully as per R7.6.
- (vi) If she does not submit approved research plan as in R.8
- (vii) If she fails to appear for 2 consecutive progress reviews as per R 12.1b without seeking prior approval of the Dean (RC).
- (viii) If she is found involved in an act of misconduct and/or indiscipline and cancellation of registration is recommended by a competent authority.

## **R.7 COURSE WORK**

**R.7.1** Each student will be required to take Course Work as recommended by the supervisor(s) and approved by the DRC/ Academic Council. The Course Work shall comprise of:

- (i) Two Compulsory Courses viz., ‘Research Methodology’ and ‘Research Ethics & IPR’.
- (ii) Directed Courses related to the broad research area of the student recommended by the supervisor.

### **R.7.2**

- (i) Students, who are provisionally registered for the Ph.D. degree, shall be required to take minimum four courses (two Compulsory Courses and two Directed Courses) equivalent to a minimum 12 credits as per the recommendations by the concerned DRC.
- (ii) The student with MCA degree shall be required to take minimum six courses (two Compulsory Courses and four Directed Courses) equivalent to a minimum of 18 credits.
- (iii) Each course shall be of minimum three credits with three hours instructions/studies per week.
- (iv) The Directed courses shall be recommended by the supervisor preferably from the existing M.Tech courses running at IGDTUW / List of electives for Ph.D Course Work as approved by the DRC/ Academic Council.

**R.7.3** The Course Work shall be done in two Semesters and the student shall be evaluated at the end of each semester. The University shall conduct the examination.

**R 7.4** In case a student has successfully completed her course work from any other recognized University / institute and wishes to migrate to IGDTUW under an approved supervisor of IGDTUW, she shall be required to clear the Selection Process as prescribed in **R3**. The transfer of course credits may be allowed, on the recommendation of the DRC after due verification of her Marksheet/ Credits earned.

**R 7.5** The minimum passing marks for each course is 50% , failing which student may be allowed to give Supplementary Examination in that course.

**R.7.6** A student shall earn minimum 12 credits (minimum 18 credits for MCA students) including the Compulsory Courses for successful completion of Course Work. In case a student is not able to earn the requisite number of credits for successful completion of course work within one Academic Year from the date of her Provisional Registration, she shall be eligible for an extension of Provisional Registration to the Ph.D. Programme by six months or a maximum period of one year and she may be allowed to give Supplementary Examination in the courses in which she has failed as per the examination rules of the university. The Supplementary Examination for Ph.D shall be conducted once a year within three months of result declaration of the even semester.

**R.7.7** It is mandatory for the Student to successfully complete the Course Work with minimum credits requirements as per R.7.6 within a period of maximum two years from the date of her provisional registration to be eligible for being a Candidate failing which the registration of the Student shall stand cancelled.

## **R.8 RESEARCH PLAN (SUBMISSION AND APPROVAL)**

**R.8.1** Each student who has a provisional registration, and has successfully completed the Course Work shall be eligible to present her Research Plan before the DRC and the DRC shall evaluate her broad field of research, academic preparation and potential to carry out the proposed research.

**R.8.2** On the basis of the content of the Research Plan, the DRC may either recommend the case for approval of Research Plan for Final Registration as a candidate to the URB or may direct the student to revise the Research Plan.

**R.8.3** For approval of the Research Plan a student will be provided a maximum of two consecutive attempts immediately after the completion of her Course Work before the DRC. If DRC does not approve the Research Plan in maximum two attempts after completion of course work, the provisional registration of the student may be cancelled.

## **R.9 ALLOCATION OF THESIS SUPERVISOR(S)/JOINT SUPERVISORS**

**R.9.1** Supervisor(s) can be any full-time faculty member of the University with a Ph.D degree. The mandatory eligibility conditions for supervisor(s) are as follows:

- (a) Minimum two years of teaching/research/industry experience after obtaining a valid Ph.D degree from a recognized University/Institution.
- (b) Has been actively engaged in research and has published at least five research papers in refereed international journals /conferences and /or patents granted with at least two papers in reputed journals pertaining to the area of specialization.

**R9.2** Every admitted student shall be allocated a Research Supervisor(s) by the Ph.D Selection Committee depending on research interest of the student and the availability of the vacant slot with the prospective supervisor.

**R.9.3** In case of interdisciplinary or collaborative work, a Joint Supervisor either from the university or any other recognized institution /industry/research organization may be allocated to the student by DRC. The mandatory conditions for Joint Supervisor shall be same as that of Supervisor. However, condition of minimum two years of service after doing Ph.D. as in R9.1 (a) is not mandatory for being a Joint Supervisor.

#### **R 9.4**

- a. The number of maximum permissible seats for Ph.D registration shall be: Professor — 8, Associate Professor — 6, and Assistant Prof. — 4.
- b. Each University approved supervisor may be allowed to fill upto a maximum of half of the permissible seats at a time.
- c. The number of maximum permissible seats for a Joint Supervisor is 2.

**R 9.5** (i) Two students under joint supervision shall be counted against one seat for the purpose of filling the prescribed number of seats registered with a supervisor.

(ii) A part time student shall be counted against one seat for the purpose of filling the prescribed number of seats registered with a supervisor.

#### **R.9.6 Appointment of Supervisors/Joint-Supervisor in Special Cases**

A faculty member appointed as a Ph.D. supervisor is normally expected to be available to a research scholar in the University till the thesis oral defense. However, in special cases, if a supervisor is not available to the student/candidate due to unavoidable circumstances such as: long leave of more than 12 months; resignation; retirement; or death appointment of supervisor(s) will be regulated as under:

##### **i. A supervisor proceeding on long leave of more than 12 months**

- (a) Where joint-supervisor exists, the supervisor proceeding on long leave for more than 12 months can continue to be a Supervisor provided the URB/DRC is convinced of effective supervision

by the Joint-Supervisor. Where a Joint-Supervisor does not exist, the DRC shall appoint a Joint-Supervisor from the University in cases where a student has not yet submitted her thesis.

- (b) Provided further, if a supervisor proceeds on leave for a period less than 12 months initially, but later extends his/her leave beyond 12 months, the same procedure as per R9.6 i(a) will be followed.
- (c) Provided, if the synopsis of the thesis has been submitted before the supervisor proceeds on leave, he/she will continue to be the supervisor till the student submits her thesis. Further, if a major revision becomes necessary, and the sole supervisor is on leave, the sole supervisor should be asked to state specifically whether he/ she would effectively help the student carry out the major revisions within a reasonable time. In case the sole supervisor expresses his/her inability due to any reasons, a new supervisor will be appointed by the DRC and the candidate may be allowed to submit the thesis under the newly appointed supervisor.

#### **ii. Supervisor retires**

A faculty member who is due to retire within the next two years can be appointed as a Joint-Supervisor and can continue to be the Joint-Supervisor even after his/her retirement provided

- a. The DRC is convinced of his/her availability/continued guidance to the student.
- b. If the supervisor is re-employed or appointed as Emeritus Fellow.
- c. If the synopsis of the thesis has been submitted under his/her supervision.  
Appointment of another Supervisor, if necessary, will be as per R 9.6 i(a).

#### **iii. Supervisor resigns**

A new Supervisor will be appointed, if necessary and the existing supervisor could be a joint supervisor, as per R 9.6 i(a).

#### **iv. Supervisor expires**

A new Supervisor will be appointed, if necessary, on the recommendation of DRC and approval by Vice Chancellor.

### **R.10 COMPOSITION OF DRC and URB**

**R.10.1** The composition of URB will be as follows:

- i. Vice-Chancellor or VC's Nominee.
- ii. Dean , Research and Collaboration,
- iii. Chairpersons of DRCs / Deans of faculties / HODs of departments.

**R.10.2** The DRC shall be constituted for a period of two years. The minimum number of members in any DRC will be **seven**, including at least two academic staff at the level of Professors. The composition of DRC will be as follows:

- i.** Dean of faculty/Head of the Department/Eminent Academician/Eminent Scientist : Chairperson;
- ii.** Two outside expert nominated by Vice-Chancellor ;
- iii.** All Professors of the concerned Department.
- iv.** HOD of the concerned department
- v.** Two Associate Professors satisfying the eligibility requirements as per R.9.1, appointed by the Vice-Chancellor for a tenure of two years;
- vi.** Two Assistant Professors satisfying the eligibility requirements as per R.9.1 appointed by the Vice-Chancellor for a tenure of two years
- vii.** Supervisor(s) only in the cases where the progress report of the concerned candidates shall be discussed.
- viii.** Coordinator, DRC

**R.10.3** In case, any department fails to have the required minimum number of seven members in DRC as per R 10.2, or if the number of professors is less than two, a joint DRC with other department having closest academic affiliation shall be constituted by the Vice-Chancellor.

## **R.11. ELIGIBILITY FOR THE CANDIDACY FOR THE DEGREE**

A student shall be eligible for Final Registration as a candidate for the Ph.D. Degree after she has completed the following:

- (i)** She has successfully completed her Course Work with requisite credit requirements as per R 7.6.
- (ii)** She has presented her Research Plan before the DRC and her research plan is approved by the DRC and URB.

## **R.12**

### **R 12.1 PERFORMANCE MONITORING**

- a.** The terms for the research work will be as follows: **I Term:** July to December; **II Term:** January to June every year.
- b.** The academic/research progress of each student/candidate will be monitored by DRC at the end of each Term.
- c.** The DRC shall notify the schedule for submission and evaluation of progress report to the

candidates. The candidate shall submit a progress report at the end of each term duly forwarded by her supervisor(s) to the DRC.

- d.** The DRC shall evaluate the progress report of the candidate after every term.
- e.** 'S' grade is to be awarded during that term if the progress is 'satisfactory'.
- f.** If the progress is 'unsatisfactory', 'U' grade is to be awarded and appropriate action be taken. For the first appearance of 'U' grade, a warning would be issued to the candidate and in case a student/candidate is availing any fellowship, her fellowship shall be withheld.
- g.** If there are two consecutive 'U' in the progress reports and the scholar still fails to make progress to the satisfaction of the DRC, the registration of the scholar may be terminated on recommendation of DRC and approval of the Vice Chancellor.
- h.** The DRC having considered the progress report of each scholar shall recommend one of the following :
  - (i)** Continuation of Registration.
  - (ii)** Continuation of Registration and issuance of a written warning to the student/candidate and making recommendation in consultation with the supervisor(s), of steps necessary to improve her performance.
  - (iii)** Termination of Registration.
- i.** The Progress Reports of the candidates and minutes of the DRCs shall be submitted to the Dean (RC).
- j.** Submission and review of progress report shall continue till submission of thesis.

## **R 12.2 ATTENDANCE RULES**

- a.** All Full Time/Part Time/TRF students including sponsored students must attend at least 75% of classes in each course in which they are registered while pursuing Course Work.
- b.** The supervisor/course instructor shall report the shortage of attendance cases to the Ph.D Coordinator. In case, attendance of the student falls below 75% in any course during a month, she will not be paid fellowship/financial assistance for that month.
- c.** Further, if her attendance again falls short of 75% in any course in any subsequent month in that semester her fellowship will be terminated for the remaining semester.
- d.** A Full Time Research Scholar / TRF after having completed the Course Work must attend to her research work on all the working days and mark attendance except when she is on duly sanctioned leave.
- e.** The requirement of 75% attendance will apply as above on daily attendance except in the cases

where longer leave has been duly sanctioned within the leave entitlement of the student.

### **R.12.3 LEAVE RULES FOR FULL TIME PH.D STUDENTS /CANDIDATES**

- a. A proper leave account of each scholar shall be maintained by the supervisor the department concerned.
- b. A full-time Ph.D. student doing her Course Work will be entitled to avail leave for 30 days per academic year including medical leave. She will not be entitled to summer and winter vacations.
- c. Leave beyond the stipulated period in an academic year may be granted in exceptional cases, by the Head of the Department concerned, on recommendation of supervisor subject to the following conditions:
  - (i) The leave beyond 30 days will be without Fellowship; and
  - (ii) Such an extension of upto additional 30 days will be granted only once during the entire programme of the Scholar.
  - (iii) The leave may be subject to the approval of the Head of Department concerned on the recommendation of the Supervisor.
- d. The research scholars will be eligible for Maternity Leave prescribed by Govt. of NCT of Delhi. The candidates getting fellowship will be eligible for Maternity Leave with fellowship as per rules and regulations prescribed by Govt. of NCT of Delhi.
- e. The leave period shall be counted in the total period required for submission of the thesis stipulated in **R 13.1**.

### **R12.4 SEMESTER BREAK**

A student/candidate may be permitted to take a semester break on medical grounds with approval from the Dean (RC). However, such a student shall complete the minimum credit requirements for successful completion of Course Work within the maximum period of two years from her Provisional Registration.

### **R.13 MINIMUM REGISTRATION REQUIREMENT**

- R.13.1** The minimum period of Registration after which a candidate can submit her thesis shall be two years, with effect from the date of Final Registration as a candidate.
- R.13.2** The maximum period within which a candidate can submit her thesis shall be four years for Full time research scholars and five years for Part time research scholars, with effect from the date of Final Registration as a candidate.
- R13.3** An extension of one year for submission may be granted by the Vice Chancellor on recommendation of the DRC on a written request by the candidate submitted through supervisor.



## **R.14 SYNOPSIS**

**R.14.1** On completion of research work, the candidate shall submit through the supervisor(s), eight copies of the synopsis of her Ph.D thesis including the title of the thesis and reprints of all published research work done towards fulfillment of doctoral degree to the Chairperson, DRC/HOD of the concerned department for consideration /presentation in forthcoming DRC.

**R14.2** Presenting a Pre-Ph.D. seminar before the DRC and recommendation of the DRC is an essential requirement for consideration of title of thesis and submission of the thesis by the candidate. It may be attended by other faculty members and research scholars. Their feedback and comments may be suitably incorporated in the Ph.D thesis, in consultation with the supervisor.

**R14.3** A Ph.D candidate shall publish at least one first author research paper from the work carried out in his/her thesis in a refereed, indexed journal before submission of the synopsis and produce evidence for the same in the form of reviewers' comments/ an acceptance letter/ a reprint.

**R14.4** The DRC shall forward the title and synopsis of the thesis with its recommendations to the Dean (RC) along with a panel of at least six experts in the subject area of the research work in the thesis proposed by the Supervisor. The panel shall include atleast four experts from premier institutions like IITs/IISC Bangalore/ISM Dhanbad /NITs /IITs /Central universities / Foreign Universities. The DRC may add or delete any of the name(s) of the examiners proposed by the supervisor(s). The supervisor shall be responsible to provide the full contact details of the examiners.

**R.14.5** The candidate is required to submit her thesis within 3 months from the date of approval of her Pre Ph.D Seminar and submission of synopsis. In case, the candidate fails to submit her thesis within 3 months of the approval of her Pre Ph.D Seminar, the candidate shall be required to submit fresh synopsis. However, in a special case when a candidate fails to submit her thesis within the stipulated time due to some unavoidable circumstances and has suitable justification for the same, the Dean (RC), may grant extension of not more than three months to the candidate i.e. the candidate may be allowed to submit her thesis within a period not exceeding 6 months from the date of the submission of the synopsis.

**R14.6** In case of issues related to intellectual property rights, the supervisor and the candidate shall take the necessary measures to ensure to follow the university Plagiarism Policy.

## **R.15 THESIS SUBMISSION**

**R.15.1** A candidate may submit her thesis within the time period as stipulated in **R.14.5** provided that:

- (i) She has completed the minimum period of Registration as provided in **R.13.1**

- (ii) She has become a candidate for the award of Ph.D degree as provided in **R.11**
- (iii) She has presented her Pre-Ph.D seminar before DRC open to all faculty members and research students, and suitably incorporated the suggestions made
- (iv) She has obtained recommendation of the DRC for submission of thesis
- (v) She has submitted the title and synopsis of the thesis along with reprints of all published research work done towards fulfillment of doctoral degree.

**R 15.2** The thesis shall be written in English in the specific format and shall contain a critical account of the candidate's research. The thesis should well represent the discovery of facts or fresh approach towards interpretation of facts and theories or significant contribution of knowledge to development or a combination of these. It should bear evidence of the candidate's capacity for analysis and judgment as well as her ability to carry out independent investigations, design or development. The thesis may be supplemented by published work. No part of the thesis or supplementary published work shall have been submitted for the award of any other degree.

**R 15.3** The candidate shall certify that the work is free of any form of data falsification, fabrication and plagiarism and shall be solely responsible for any such dispute, or plagiarism issue arising out of the doctoral work. The certificate for such a declaration by the candidate will be available on the university website.

**R 15.4** The scholar will also be required to submit a certificate (available on the university website) duly signed by the Candidate and countersigned by the Supervisor(s) in the prescribed format that the work embodied in the thesis is original and has been carried out by the author and that it has not been submitted in full or in part for any other Diploma or Degree of this or any other University.

**R 15.5** The scholar shall also attach a Student Approval Form in the format obtained from the UGC for the grant of non-exclusive worldwide license for hosting and distributing their thesis in digital format in, “Shodhganga” or any other database designated for this purpose by the UGC.

**R 15.6** Three copies of the thesis in soft binding along with one copy on Electronic media in MS word /PDF format must be submitted to Dean (RC).

**R 15.7** The candidate shall also submit a No Dues Certificate as prescribed by the university at the time of submission of the thesis.

**R 15.8** The candidate shall also submit “Checklist of all the documents” (as available on the university website) at the time of submission of the thesis.

**R.15.9** The Dean (RC) shall send the synopsis and the thesis of the candidate along with the Panel of

Examiners as approved by DRC to the Controller of Examinations (COE)/Dean (Examinations).

## **R.16 APPOINTMENT OF EXAMINERS**

**R.16.1** The COE/Dean (Examinations) shall get the examiners appointed by the Vice Chancellor from the Panel of examiners recommended by DRC for evaluation of the thesis.

**R 16.2** The thesis shall be evaluated by two external examiners independently and anonymously. The Vice Chancellor shall choose the two examiners from the panel of examiners.

**R 16.3** An examiner cannot be from the same laboratory/institution where the scholar is employed, or from the laboratory/institution/approved research centre to which the Supervisor and/or joint Supervisor of the scholar belongs. Further, a collaborator or co-author of the scholar or his/her supervisor or joint supervisor during the tenure of the concerned Ph.D scholar cannot be an examiner.

## **R.17 THESIS EVALUATION**

**R.17.1** The Examination Division will contact the examiners appointed by the Vice Chancellor and take their consent for examining the thesis at the earliest. If the examination branch does not receive the consent from the appointed examiner within one month, approval of Vice Chancellor may be taken for appointment of another examiner from the panel. In case one or more examiners so appointed declines to examine the thesis, another examiner shall be appointed by the Vice Chancellor out of the approved panel. In case the panel gets exhausted, the Dean (RC) in consultation with DRC shall recommend additional names.

**R 17.2** The Examination Division may send all communications to the examiners, viz. request for consent, as well as subsequent sending of Ph.D thesis for evaluation and receiving report, electronically through email/fax and/or through post as appropriate and follow-up telephonically. The examination branch shall make all efforts for speedy evaluation of the Ph.D thesis. Each examiner will be requested to submit to the COE/Dean (Examinations), a detailed Assessment Report and his/her recommendations on the prescribed proforma within six weeks of the date of receiving the thesis.

**R.17.3** In the case, that the Thesis Evaluation Report is not received from an examiner within a period of four months, the Controller of Examinations/Dean (Examinations) should get another examiner appointed by the Vice Chancellor from the Panel of Examiner in R 16, in his/her place for evaluation of the thesis.

**R 17.4** The examiners shall be required to state categorically whether in their individual opinion, the thesis should be:

- a) Accepted for the award of Ph.D degree (subject to oral defense), or
- b) Referred to the candidate for resubmission in the revised form, or
- c) Rejected,

In cases b and c, the examiner shall state the reasons for recommending resubmission/rejection of the thesis. If resubmission is recommended, the examiner shall specifically indicate the modifications that need to be made in the thesis by the scholar. The COE / Dean (Examinations) shall communicate the suggested revisions to Dean (RC) for further communication to the supervisor.

**R 17.5** In case both the examiners unanimously recommend award of degree, the same shall be done after a satisfactory open viva voce test (oral defense) by one of the examiners.

**R17.6** In case the examiner(s) recommends minor corrections in the thesis, the candidate may incorporate them in consultation with the Supervisor before the viva-voce examination. The Supervisor shall certify that the corrections have been made in the thesis. This may be included with the reports of the Ph.D thesis to be sent to the Vice Chancellor for appointment of the Oral Defense Committee as in R 18.2.

**R 17.7** In case the corrections are major and resubmission/re-evaluation has been recommended; the candidate may resubmit the revised version in consultation with the Supervisor, within a period of one year from the date of communication in this regard from the COE/ Dean (Examinations). The revised thesis shall be sent for assessment to the same examiners who recommended revision. In the event of any of them declining to examine the revised thesis, additional examiner may be appointed from the approved panel, and provided with the comments of the previous examiner(s) to facilitate the evaluation of the revised thesis.

**R 17.8** In case both the examiners reject the thesis, the thesis shall be rejected and registration of the candidate shall be terminated.

**R 17.9** In case that if one of the two examiners recommend the award of degree and the second examiner recommends rejection, the thesis shall be referred to a new examiner to be selected by the Vice Chancellor from the original panel of examiners. If the new examiner recommends acceptance (may be with revision) the case may be processed as per the procedure in R 17.5 to 17.7. However, if the thesis is rejected by the new examiner, it shall not be resubmitted or marked to any further examiner and the registration of the student shall be terminated.

**R 17.10** In case if one examiner accepts and one suggests major revisions, then the candidate shall

incorporate the revisions as prescribed in R17.7 above, and the thesis shall be sent to the examiner who recommended revision. In case this examiner recommends acceptance (may be with minor revisions), the case may be processed as per the procedure in R 17.5 to 17.7. In the event of disagreement between the examiners, the Controller of Examinations/ Dean (Examinations) as a special case, shall get another examiner appointed by the Vice Chancellor from the panel of examiners in R.16, if the merit of the case so demands. The report of this examiner shall be final and the acceptance or rejection of the thesis shall be based on this report.

**R 17.11** After receiving the satisfactory evaluation reports from both the examiners, the Controller of Examinations / Dean (Examinations) shall arrange for Viva Voce Examination of the candidate before a duly constituted committee hereinafter referred to as Oral Defense Committee as per R18.2.

## **R.18 AWARD OF Ph.D. DEGREE**

**R.18.1** A candidate who has been recommended for viva-voce examination on the basis of thesis evaluation shall be required to defend her work/thesis orally before a duly constituted Oral Defense Committee (ODC) during working hours of the University.

**R.18.2** The ODC shall consist of three members: (i) VC Nominee, (ii) Supervisor/Jt. Supervisor, (iii) One external examiner selected from the two external examiners as in R.16.2. If none of the external examiners is available for the conduct of the oral defense, an alternative external examiner shall be appointed by the Vice Chancellor for this purpose only.

**R.18.3** On the completion of all stages of examination, the Oral Defense Committee shall recommend to the Controller of Examinations / Dean (Examinations) one of the following courses of action:

- (a) That the degree be awarded;
- (b) That the candidate be re-examined.

The Oral Defense Committee shall also provide to the candidate a list of all corrections and modifications in the thesis (if required) including suggestions made by the examiners during the thesis evaluation. The candidate shall incorporate all changes as suggested by examiners and submit the hard copy of the final thesis.

**R.18.4** The Degree shall be awarded by the University provided that:

- (a) The Oral Defense Committee recommends the award of the degree to the candidate;
- (b) The candidate produces a 'No Dues Certificate' in the prescribed form forwarded by the supervisor and HOD of the concerned department.
- (c) The candidate has submitted a soft copy and two hard cover copies of the thesis: one for the Department Library and one for the Central Library. The thesis should incorporate

all necessary/corrections/modifications.

- (d) The hard bound copies of the Ph.D. thesis, submitted after the viva-voce examination, must contain the copyright certificate in the beginning of the thesis :

©Indira Gandhi Delhi Technical University for Women,

Kashmere Gate, New Delhi-110006. All rights reserved

**R18.5** Following the successful completion of the evaluation process and announcement of the award of the Ph.D, the university may submit a soft copy of the thesis to Shodhganga.


**R 18.6** The Examination Division of the University may issue a Provisional Certificate of the completion of Ph.D to the candidate upon successful viva-voce examination followed by award of the final degree at the time of Convocation, along with a certificate to the effect that the Degree has been awarded in accordance with the UGC regulations.

### **R.19 GENERAL**

Notwithstanding anything contained in these Ordinances & Regulations, all categories of the students/candidates shall be governed by the rules and procedures framed by the Academic Council on their behalf, and in force from time to time.

### **R.20 INTERPRETATION**

Any case of doubt or dispute arising about the interpretation of these Ordinances and Regulations or anything not contained in the ordinance, shall be referred to the Vice Chancellor whose decision shall be final.



**Indira Gandhi Delhi Technical University for Women**  
(Established by Govt. of Delhi vide Act 9 of 2012)




**Revised Ph.D Regulations-2019  
For Engineering, Applied Sciences & Humanities  
(Effective from Academic Year 2019-2020)**

**Research Wing  
Indira Gandhi Delhi Technical University for Women  
Kashmere Gate, Delhi-110006**

## TABLE OF CONTENTS

<b>S. No.</b>	<b>Description</b>	<b>Page no.</b>
1	Definitions	3-5
2	R.1 Classification of Applicants and Admission Eligibility	5-7
3	R.2 Reservation/Relaxation	7
4	R.3 Shortlisting and Selection Process	8-9
5	R.4 Financial Assistance	9-10
6	R.5 Registration	10
7	R.6 Cancellation of Registration	10-11
8	R.7 Course Work	11-12
9	R.8 Research Plan (Submission and Approval)	12-13
10	R.9 Allocation of Thesis Supervisor(s)/Co-Supervisors	13-15
11	R.10 Composition of DRC and URB	16
12	R.11 Eligibility for the Candidacy for the degree	17
13	R.12 Performance Monitoring	17-19
14	R.13 Minimum Registration Requirement for Thesis Submission	19
15	R.14 Pre-Ph.D Seminar and Synopsis Submission	19-20
16	R.15 Thesis Submission	21-22
17	R.16 Appointment of Examiners	22
18	R.17 Thesis Evaluation	23-25
19	R.18 Award of Ph.D Degree	25-26
20	R.19 General	26
21	R.20 Interpretation	26





# INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN

## REVISED REGULATIONS FOR THE PROGRAM LEADING TO DEGREE OF DOCTOR OF PHILOSOPHY (2019)

### Short Title and Commencement:

- (a) These regulations may be called the “**Indira Gandhi Delhi Technical University for Women (IGDTUW) Ph.D Regulations for the degree of Doctor of Philosophy (Ph.D)**”
- (b) These Regulations have been approved in IX Academic Council dt. 26th October, 2018 and IX Board of Management dt. 06th May, 2019 and shall be applicable to all students admitted to the Ph.D Programme at IGDTUW from the year 2019 onwards.

### DEFINITIONS:

- (i) "**Applicant**" shall mean a female who applies for admission to the Ph.D. programme of the Indira Gandhi Delhi Technical University for Women (IGDTUW) on a prescribed Application Form.
- (ii) "**Academic Year**" is a period of nearly twelve months devoted to completion of requirements specified in the Scheme of Teaching and the related examination.
- (iii) "**Candidate**" shall mean a person registered for the Ph.D. Degree and who has successfully completed the course work and submitted an approved research plan as per R.11 of the Regulations.
- (iv) "**Caretaker Supervisor**" shall mean a member of the academic staff appointed to look after the candidate's research interests in the absence of the Supervisor.
- (v) "**COE**" shall mean the Controller of Examinations of Indira Gandhi Delhi Technical University for Women.
- (vi) "**Coordinator DRC**" shall mean a member of DRC of a particular Department of the Indira Gandhi Delhi Technological University appointed by Vice Chancellor, to coordinate and convene the DRC meetings.
- (vii) "**Course Work**" shall mean courses of study prescribed by the DRC through the Supervisor to be undertaken by a student registered for the Ph.D. Degree.
- (viii) "**Dean (Examinations)**" shall mean the Dean of Examination Division of Indira Gandhi Delhi Technical University for Women.
- (ix) "**Dean (RC)** shall mean the Dean, Research & Collaboration.

- (x) **"Degree"** shall mean the Degree of Doctor of Philosophy (Ph.D.) of IGDTUW.
- (xi) **"DRC"** shall mean Department Research Committee.
- (xii) **"Examination"** shall mean examination conducted by Indira Gandhi Delhi Technical University for Women.
- (xiii) **"Full-time Research scholar"** shall mean a person registered for the Ph.D. Degree devoting Full-Time for completing the degree requirements.
- (xiv) **"Joint Supervisor"** shall mean an additional supervisor approved by the URB on the recommendation of DRC to help the supervisor in the accomplishment of the research work of the student/candidate.
- (xv) **"Minimum Registration Period"** shall mean the minimum period from date of final registration to submission of the thesis.
- (xvi) **"Part-time Research Scholar"** shall mean a person who is registered for the Ph.D. degree and will devote part of her time towards their pursuit and devote part of her time towards the discharge of her official obligations.
- (xvii) **"Ph.D Coordinator"** shall mean a member of academic staff of the Indira Gandhi Delhi Technological University appointed by Vice Chancellor, to supervise the admission procedure, register the research students and monitor their performances through DRCs of different departments
- (xviii) **"Registration Period"** shall mean the length of time span commencing with the date of provisional registration at the University till the completion of the programme.
- (xix) **"Residency"** shall mean the minimum period for which a student must attend the University on full-time basis.
- (xx) **"Selection Committee"** shall mean a committee duly constituted by the Vice Chancellor for conducting interview for selection of students to the Ph.D Programme.
- (xxi) **"Semester"** An Academic year is divided into two semesters of six months duration each.
- (xxii) **"Student"** shall mean a person provisionally registered for the Ph.D. degree prior to becoming a candidate.
- (xxiii) **"Supervisor"** shall mean a member of the academic staff of the University approved by URB on the recommendation of Department to guide/supervise the research/ academic work of the student/candidate.
- (xxiv) **"University"** shall mean Indira Gandhi Delhi Technical University for Women (IGDTUW).

(xxv) "URB" shall mean University Research Board.

## **R.1 CLASSIFICATION OF APPLICANTS AND ADMISSION ELIGIBILITY**

### **R.1.1 Classification of Applicants**

The applicants for admission to the Ph.D. programme shall be classified under any one of the following categories:

#### **R.1.1.1 Full-Time Research Scholar (Abbreviated as FT)**

A person registered for the Ph.D Degree devoting Full-Time for completing the degree requirements, with or without any financial assistance and satisfying the admission eligibility as defined in R1.2.1.

The persons receiving financial assistance from any sources can further be classified into the following categories:

- i. Junior Research Fellow (JRF)/Senior Research Fellow (SRF) financed by IGDTUW.
- ii. Financed by other sources like Sponsored Research Projects or various Fellowship Schemes.

#### **R.1.1.2 Part-Time Research Scholars (Abbreviated as PT)**

A person who is registered for the Ph.D degree and will devote part of her time towards their pursuit and devote part of her time towards the discharge of her official obligations and satisfying the admission eligibility as defined in R1.2.2.

### **R.1.2 ADMISSION ELIGIBILITY**

#### **R.1.2.1 The minimum entry qualifications for Full-Time/Part-Time Research Scholars are as follows:**

- (i) **For Engineering:** Degree in M.E. / M.Tech or equivalent from a recognized University/ Institution in the relevant discipline with minimum of 60% marks in aggregate or its equivalent CGPA in the point scale and B.E./B.Tech. or equivalent with minimum of 60 % marks in aggregate or equivalent CGPA.
- (ii) **For Computer Applications:** MCA from a recognized University/ Institution with minimum of 60% marks in aggregate or its equivalent CGPA in the point scale and Graduation Degree (with Sciences and Mathematics) with minimum of 60% marks in aggregate or equivalent CGPA.
- (iii) **For Sciences :** Master Degree in the relevant discipline from a recognized University/Institution with 60% marks in aggregate or its equivalent CGPA in the point scale and undergraduate degree in the relevant discipline with 60% marks in aggregate or equivalent CGPA.

(iv) **For Humanities** : Master Degree in the relevant discipline from a recognized University/Institution with 55% marks in aggregate or its equivalent CGPA in the point scale and undergraduate degree in the relevant discipline with 55% marks in aggregate or equivalent CGPA.

**R.1.2.2 An applicant is eligible for Part-Time Research Scholar / Full-Time Research Scholar (Sponsored), provided she fulfils the following conditions:**

- (i) The Applicant possesses the minimum entry qualifications for the degree as mentioned in R.1.2.1.
- (ii) The applicant is presently employed under the following categories :
  - a. Applicants working in organizations which have MOU with IGDTUW.
  - b. Applicants working on Full-Time basis (regular/adhoc/contract) in a National Level R&D Lab/ a reputed organization/ recognised educational institution / university/ PSU/ Corporate/ Industry registered under Company's Act organization.
- (iii) The Applicant possesses at least two years of relevant work experience in the above categories, as at (ii) b.
- (iv) The applicant gets an NOC from her employer, at the time of provisional registration.

**R.1.2.3 An applicant shall be eligible for Junior Research Fellowship instituted by IGDTUW provided she fulfils the following conditions:**

- a. She possesses the minimum entry qualifications as in R1.2.1.
- b. She has qualified UGC-CSIR-JRF/NET examination or has or qualified GATE with a score above the minimum cut off or qualified RAT examination. A person who has appeared in the above examinations but is awaiting results may also apply. However, she shall be required to produce a valid documentary evidence of having qualified the examination at the time of interview.
- c. She is not receiving any financial assistance from any other sources.

**R.1.2.4** A person who has already initiated her fellowship in some other institution /organization and is interested to have her fellowship transferred to IGDTUW, may be allowed provided she clears the Selection Process for admission to Ph.D Programme as per R3.

**R.1.2.5** A student/candidate registered at IGDTUW as Full-Time Research Scholar and does not have any financial assistance, may be considered for Junior Research Fellowship/Senior Research Fellowship /any other fellowship/financial assistance subject to availability of financial assistance, provided she fulfills all the eligibility conditions to avail the fellowship and her case is recommended by the DRC and approved by the Vice Chancellor.

## **R.2 RESERVATION/RELAXATION**

**R.2.1** Reservation of seats for Scheduled Caste, Scheduled Tribe, Other Backward Classes and Physically Handicapped candidates will be as per government rules.

**R.2.2** Candidates belonging to Scheduled Caste, Scheduled Tribe, OBC(Non-Creamy Layer) and Differently-abled categories will be given 5% relaxation in the minimum entry qualifications as given in R.1.2.

## **R.3 SHORTLISTING AND SELECTION PROCESS**

### **R.3.1**

- (i) Admission to the Ph.D Programme may be done on the basis of Research Aptitude Test (RAT) Examination or an interview or both.
- (ii) The RAT Examination shall be qualifying with qualifying marks as 50%. A relaxation of 5% marks (from 50% to 45%) shall be allowed for SC/ST/OBC/Differently abled category in the RAT Exam.
- (iii) The syllabus of the RAT examination shall consist of 50% of Research Methodology and 50% subject specific.

**R.3.2** Depending upon the requirement, the University may advertise for Ph.D admission twice in a year.

**R.3.3** Applications for joining the Ph.D. programme shall be submitted on a prescribed Form as per the guidelines in the Admission Notification of the university.

### **R.3.4 WAIVER FROM RAT EXAMINATION**

The RAT examination shall be waived off for the following applicants subject to the fulfillment of eligibility for entry qualifications as in R 1.2 and such applicants shall be allowed to appear in the interview directly:

- i. Full-Time female teaching staff of IGDTUW.
- ii. Sponsored applicants from organizations having MOU with the University.
- iii. Applicants who have qualified UGC-CSIR-JRF/NET Or have qualified GATE with a score above the minimum cutoff and successfully completed the degree as in R1.2.
- iv. Foreign students who apply through Ministry of Human Resource Development or foreign students under a Cultural Exchange Scholarship Programme of Government of India
- v. RAT examination shall be conducted even if adequate number of applications from exempted categories candidates are received.

**R.3.5** The University's Examination Division shall conduct the RAT Examination, do the evaluation and forward the result to Dean (RC).

**R.3.6** A duly constituted committee approved by VC shall prepare the list of the Shortlisted candidates to be called for interview on the University Website.

**R.3.7** The interview for selection of the students shall be conducted department wise by Selection Committees each comprising of at least 5 members including The Vice Chancellor/ VC nominee, Dean(RC)/HOD of the concerned department, all university approved supervisors of the concerned department, External Expert (if required). The applicants shortlisted for interview are required to discuss their research interest/ area during the interview. The interview shall also consider the following aspects viz. whether :

- The person possess the competence for the proposed research
- The research work can be suitably undertaken at the university.
- The proposed area of research can contribute to new/ additional knowledge

**R.3.8** A person selected by the aforesaid Selection Committee shall be allowed Provisional Registration to the Ph.D Programme from the date of payment of prescribed fees to the University with the allocated approved supervisor(s). The registration shall be confirmed only after satisfactory completion of the course work and approval of research plan by the respective DRC.

**R.3.9** The Ph.D Coordinator shall coordinate with various departments for conduct of admissions and DRCs.

#### **R.4.1 FINANCIAL ASSISTANCE**

- a. The University may provide financial assistance to few Full-Time Research Scholars with good teaching skills and appoint them as Junior Research fellow (JRF) / Senior Research Fellow (SRF).
- b. These fellowships shall be distributed on the basis of need across all departments by Dean (RC) in consultation with the Vice Chancellor.
- c. The Terms and Conditions of the fellowship may be decided by the Academic Council and may be amended from time to time.
- d. All provisions of prevailing Ph.D. Ordinance of the University shall be applicable on the JRF/SRF and allocated supervisor(s).

#### **R.4.2 TUITION FEE**

Tuition fees will be decided by University and shall be notified in the University Admission Brochure on yearly basis. Unless stated, full fee shall be charged from student/candidate on annual basis till the candidate submits her thesis for evaluation as per R.17. Full-Time Permanent Teaching Faculty of IGDTUW are eligible for a 50 % waiver in the tuition fees.

#### **R.5 REGISTRATION**

**R.5.1** Every student/candidate will be required to renew the registration every year till the submission of the thesis. The renewal of registration every year shall be subject to completion of specified number of credits/courses and/or satisfactory progress of research work as recommended by DRC.

**R.5.2** A student/candidate, who fails to register or renew her registration, may be allowed to renew her registration after obtaining approval from the Vice Chancellor.

### **R.5.3 CONVERSION OF REGISTRATION**

- i.** A Full-Time Research Scholar who gets an employment in any organization during her Ph.D Program may be eligible to convert to Part-Time Research Scholar with due recommendation of her supervisor(s) and approval by DRC.
- ii.** In case of a genuine reason, a Full-Time Research Scholar may be eligible to convert to Part-Time Research scholar after completion of minimum period of atleast one year after her Final Registration with recommendation her supervisor(s) and approval by DRC.
- iii.** A Part-Time research scholar may be allowed to convert to Full-Time research scholar with due recommendation of her supervisor(s) and approval by DRC.

### **R.6 CANCELLATION OF REGISTRATION**

**R.6.1** Registration of a student/candidate may be cancelled in any one of the following cases, after due recommendation of DRC.

- (i)** If she absents herself for a continuous period of four weeks without sanction of leave.
- (ii)** If she withdraws from the Ph.D. Programme voluntarily and the withdrawal is duly recommended by the DRC.
- (iii)** If she fails to renew her registration every year subject to the provisions contained in these Ordinances & Regulations.
- (iv)** If her academic progress is found unsatisfactory and approved for cancellation of registration as per R 12.1 g
- (v)** If she is unable to pass the Course Work successfully as per R7.6.
- (vi)** If she does not submit approved research plan as in R.8
- (vii)** If she fails to appear for 2 consecutive progress reviews as per R 12.1b without seeking prior approval of the Dean (RC).

- (viii) If a Part-Time student/candidate fails to get another employment within six months and submit NOC from the new employer.
- (ix) If she is found involved in an act of misconduct and/or indiscipline and cancellation of registration is recommended by a competent authority.

## **R.7 COURSE WORK**

**R.7.1** Each student will be required to take Course Work as recommended by the supervisor(s) and approved by the DRC/ Academic Council. The Course Work shall comprise of:

- (i) Two Compulsory Courses viz. “Research Methodology” and “Research Ethics & IPR”.
- (ii) Directed Courses related to the broad research area of the student recommended by the supervisor.

### **R.7.2**

- (i) Students, who are provisionally registered for the Ph.D. degree, shall be required to take minimum four courses (two Compulsory Courses and two Directed Courses) equivalent to a minimum 12 credits as per the recommendations by the concerned DRC.
- (ii) The student with MCA degree shall be required to take minimum six courses (two Compulsory Courses and four Directed Courses) equivalent to a minimum of 18 credits.
- (iii) Each course shall be of minimum three credits with three hours instructions/studies per week.
- (iv) The Directed courses shall be recommended by the supervisor preferably from the existing M.Tech courses running at IGDTUW / List of electives for Ph.D Course Work as approved by the DRC/ Academic Council.

**R.7.3** The Course Work shall be done in two Semesters and the student shall be evaluated at the end of each semester. The University shall conduct the examination.

**R.7.4** In case a student has successfully completed her course work from any other recognized University / institute and wishes to migrate to IGDTUW under an approved supervisor of IGDTUW, she shall be required to clear the Selection Process as prescribed in **R3**. The transfer of course credits may be allowed, on the recommendation of the DRC after due verification of her Marksheet/ Credits earned.

**R.7.5** The minimum passing marks for each course is 55% marks in aggregate or its equivalent CGPA in the point scale, failing which student may be allowed to give Supplementary Examination in that course.

**R.7.6** A student shall earn minimum 12 credits (minimum 18 credits for MCA students) including the Compulsory Courses for successful completion of Course Work. In case a student is not able to earn the requisite number of credits for successful completion of course work within one



Academic Year from the date of her Provisional Registration, she shall be eligible for an extension of Provisional Registration to the Ph.D. Programme by six months or a maximum period of one year and she may be allowed to give Supplementary Examination in the courses in which she has failed as per the examination rules of the university. The Supplementary Examination for Ph.D shall be conducted once a year within three months of result declaration of the even semester.

**R.7. 7** It is mandatory for the Student to successfully complete the Course Work with minimum credits requirements as per R.7.6 within a period of maximum two years from the date of her provisional registration to be eligible for being a Candidate failing which the registration of the Student shall stand cancelled.

## **R.8. RESEARCH PLAN (SUBMISSION AND APPROVAL)**

**R.8.1** Each student who has a provisional registration, and has successfully completed the Course Work shall be eligible to present her Research Plan before the DRC and the DRC shall evaluate her broad field of research, academic preparation and potential to carry out the proposed research.

**R.8.2** On the basis of the content of the Research Plan, the DRC may either recommend the case for approval of Research Plan for Final Registration as a candidate to the URB or may direct the student to revise the Research Plan.

**R.8.3** For approval of the Research Plan a student will be provided a maximum of two consecutive attempts immediately after the completion of her Course Work before the DRC. If DRC does not approve the Research Plan in maximum two attempts after completion of course work, the provisional registration of the student may be cancelled.

## **R.9 ALLOCATION OF THESIS SUPERVISOR(S)/JOINT SUPERVISORS**

**R.9.1** Supervisor(s) can be any full-time faculty member of the University with a Ph.D degree who has been actively engaged in research and has published at least five research papers in refereed indexed journals /conferences out of which minimum three should be in refereed indexed international journals pertaining to the area of specialization. A faculty member of the University having patent(s) granted with at least two papers in refereed indexed international journals pertaining to the area of specialization is also eligible to be a Supervisor.

**R.9.2** Every admitted student shall be allocated a Research Supervisor(s) by the Ph.D Selection Committee depending on research interest of the student and the availability of the vacant slot with the prospective supervisor.

### **R.9.3**

(i) In case of interdisciplinary or collaborative work, a Joint Supervisor either from the university or any other recognized institution /industry/research organization may be allocated to the student by DRC.

- (ii) A Ph.D student may be allowed to have only one supervisor and one joint supervisor at any time during her research.
- (iii) A Jt. Supervisor from outside IGDTUW should possess a Ph.D Degree and have minimum 3 publications after completion of his/her Ph.D, out of which either atleast one publication should be in SCI indexed journal or 2 publications should be in SCOPUS indexed journals. Patents/ Book Chapters may be desirable. A Joint Supervisor from outside IGDTUW shall submit the proforma form for Jt. Supervisor, his/her consent to be a Jt. Supervisor along with necessary documents for being approved as a Joint supervisor for a student.
- (iv) For addition of a Jt. Supervisor, a student should give a write up to justify the role and contribution of the Jt. Supervisor leading to provision of facilities and value addition to her research work. The write up shall be duly recommended by both the supervisor and the proposed Jt. Supervisor.
- (v) Addition of joint supervisor should be permitted by DRC only upto one year after date of final registration of the student in the PhD Programme. However, this time frame for addition of Jt. Supervisor may be relaxed by the DRC in Special cases when supervisor goes on deputation / long leave due to any reasons /death / retires.

#### **R. 9.4**

- d. The number of maximum permissible seats for Ph.D registration (including inside and outside the university) at any given point of time shall be: Professor— 08 PhD Scholars, Associate Professor — 06 PhD Scholars, and Assistant Prof. — 04 PhD Scholars.
- b. Each University approved supervisor may be allowed to fill upto a maximum of half of the permissible seats at a time.

#### **R. 9.5 Counting of Seats for a supervisor**

Each student registered under Sole / Joint Supervision as Full time/Part time shall be counted against one seat for the purpose of filling the prescribed number of scholars registered with a supervisor as in R9.4.

The seat under a supervisor shall fall vacant after thesis submission of a candidate.

#### **R.9.6 Appointment of Supervisors/Joint-Supervisor in Special Cases**

A faculty member appointed as a Ph.D. Supervisor is normally expected to be available to a research scholar in the University till the thesis oral defense. However, in special cases, if a supervisor is not available to the student/candidate due to unavoidable circumstances such as: long leave of more than 12 months; resignation; retirement; or death appointment of supervisor(s) will be regulated as under:

- i. **A supervisor proceeding on long leave of more than 12 months**

- (a) Where joint-supervisor exists, the supervisor proceeding on long leave for more than 12 months can continue to be a Supervisor provided the URB/DRC is convinced of effective supervision by the Joint-Supervisor. Where a Joint-Supervisor does not exist, the DRC shall appoint a Joint-Supervisor from the University in cases where a student has not yet submitted her thesis.
- (b) Provided further, if a supervisor proceeds on leave for a period less than 12 months initially, but later extends his/her leave beyond 12 months, the same procedure as per R9.6 i(a) will be followed.
- (c) Provided, if the synopsis of the thesis has been submitted before the supervisor proceeds on leave, he/she will continue to be the supervisor till the student submits her thesis. Further, if a major revision becomes necessary, and the sole supervisor is on leave, the sole supervisor should be asked to state specifically whether he/ she would effectively help the student carry out the major revisions within a reasonable time. In case the sole supervisor expresses his/her inability due to any reasons, a new supervisor will be appointed by the DRC and the candidate may be allowed to submit the thesis under the newly appointed supervisor.

## **ii. Supervisor retires**

A faculty member who is due to retire within the next two years can be appointed as a Joint-Supervisor and can continue to be the Joint-Supervisor even after his/her retirement provided

- a. The DRC is convinced of his/her availability/continued guidance to the student.
- b. If the supervisor is re-employed or appointed as Emeritus Fellow.
- c. If the synopsis of the thesis has been submitted under his/her supervision. Appointment of another Supervisor, if necessary, will be as per R 9.6 i(a).

## **iii. Supervisor resigns**

A new Supervisor will be appointed, if necessary and the existing supervisor could be a joint supervisor, as per R 9.6 i(a).

## **iv. Supervisor expires**

A new Supervisor will be appointed, if necessary, on the recommendation of DRC and approval by Vice Chancellor.

## **R.10 COMPOSITION OF DRC and URB**

### **R.10.1 Composition of URB**

The composition of URB will be as follows:

- i. Vice-Chancellor or VC's Nominee.
- ii. Dean , Research and Collaboration,
- iii. Chairpersons of DRCs / Deans of faculties / HODs of departments.

#### **R.10.2 Composition of DRC**

The DRC shall be constituted for a period of two years. The minimum number of members in any DRC will be **seven**, including at least two academic staff at the level of Professors. The composition of DRC will be as follows:

- i. Dean of faculty/Head of the Department/Eminent Academician/Eminent Scientist : Chairperson;
- ii. Two outside expert nominated by Vice-Chancellor ;
- iii. All Professors of the concerned Department.
- iv. HOD of the concerned department
- v. Two Associate Professors satisfying the eligibility requirements as per R.9.1, appointed by the Vice-Chancellor for a tenure of two years;
- vi. Two Assistant Professors satisfying the eligibility requirements as per R.9.1 appointed by the Vice-Chancellor for a tenure of two years
- vii. Coordinator, DRC

Supervisor / Joint Supervisors shall be called as invitees during the presentation of the Research Plan and discussion of the Progress Report of their students/candidates.

**R.10.3** In case, any department fails to have the required minimum number of seven members in DRC as per R 10.2, or if the number of professors is less than two, a joint DRC with other department having closest academic affiliation shall be constituted by the Vice-Chancellor.

#### **R.11. ELIGIBILITY FOR THE CANDIDACY FOR THE DEGREE**

A student shall be eligible for Final Registration as a candidate for the Ph.D. Degree after she has completed the following:

- (i) She has successfully completed her Course Work with requisite credit requirements as per R 7.6.
- (ii) She has presented her Research Plan before the DRC and her research plan is approved by the DRC and URB.

## R.12

### R.12.1 PERFORMANCE MONITORING

- a. The terms for the research work will be as follows: **I Term:** July to December; **II Term:** January to June every year.
- b. The academic/research progress of each student/candidate shall be monitored by DRC at the end of each Term.
- c. The DRC shall notify the schedule for submission and evaluation of progress report to the candidates. The candidate shall submit a progress report at the end of each term duly forwarded by her supervisor(s) to the DRC.
- d. The DRC shall evaluate the progress report of the candidate after every term.
- e. 'S' grade is to be awarded during that term if the progress is 'satisfactory'.
- f. If the progress is 'unsatisfactory', 'U' grade is to be awarded and appropriate action be taken. For the first appearance of 'U' grade, a warning would be issued to the candidate and in case a student/candidate is availing any fellowship, her fellowship shall be withheld.
- g. If there are two consecutive 'U' in the progress reports and the scholar still fails to make progress to the satisfaction of the DRC, the registration of the scholar may be terminated on recommendation of DRC and approval of the Vice Chancellor.
- h. The DRC having considered the progress report of each scholar shall recommend one of the following :
  - (i) Continuation of Registration.
  - (ii) Continuation of Registration and issuance of a written warning to the student/candidate and making recommendation in consultation with the supervisor(s), of steps necessary to improve her performance.
  - (iii) Termination of Registration.
- i. The Progress Reports of the candidates and minutes of the DRCs shall be submitted to the Dean (RC).
- j. Submission and review of progress report shall continue till submission of thesis.

### **R.12.2 ATTENDANCE RULES**

- a.** All Full Time/Part-Time students including sponsored students must attend at least 75% of classes in each course in which they are registered while pursuing Course Work.
- b.** The supervisor/course instructor shall report the shortage of attendance cases to the Ph.D Coordinator. In case, attendance of the student falls below 75% in any course during a month, she will not be paid fellowship/financial assistance for that month.
- c.** Further, if her attendance again falls short of 75% in any course in any subsequent month in that semester her fellowship will be terminated for the remaining semester.
- d.** A Full-Time Research Scholar after having completed the Course Work must attend to her research work on all the working days and mark attendance except when she is on duly sanctioned leave.
- e.** The requirement of 75% attendance will apply as above on daily attendance except in the cases where longer leave has been duly sanctioned within the leave entitlement of the student.

### **R.12.3 LEAVE RULES FOR FULL-TIME PH.D STUDENTS /CANDIDATES**

- a.** A proper leave account of each scholar shall be maintained by the supervisor.
- b.** A full-time Ph.D. student will be entitled to avail leave for 30 days per academic year including medical leave. She will not be entitled to summer and winter vacations.
- c.** Leave beyond the stipulated period in an academic year may be granted in exceptional cases, by the DRC for additional 30 days, on recommendation of supervisor. However, such an extension shall be granted only once during the entire programme of the Scholar.
- d.** The research scholars will be eligible for Maternity Leave prescribed by Govt. of NCT of Delhi.
- e.** The leave period shall be counted in the total period required for submission of the thesis stipulated in **R 13.1**.

### **R.12.4 SEMESTER BREAK**

A student/candidate may be permitted to take a semester break on medical grounds with due recommendation of the supervisor and approval from the DRC. However, such a student shall complete the minimum credit requirements for successful completion of Course Work within the maximum period of two years from her Provisional Registration. The leave period shall be counted in the total period required for submission of the thesis stipulated in **R 13.1**.

### **R.13 MINIMUM REGISTRATION REQUIREMENT FOR THESIS SUBMISSION**

**R.13.1** The minimum period after which a candidate can submit her thesis shall be two years for a Full-Time research scholar and three years for a Part-Time research Scholar with effect from the date of Final Registration as a candidate. In the cases, where conversion from Part-Time to Full-Time or vice-versa has taken place, the minimum period of submission shall not be less than three years from the date of Final Registration.

**R.13.2** The maximum period within which a candidate can submit her thesis shall be five years for both Full-time and Part-time research scholars with effect from the date of Final Registration as a candidate.

**R.13.3** An extension of one year beyond the maximum period for submission of thesis at 13.2 may be granted on recommendation of the DRC and approval by the Vice Chancellor.

#### **R.14. PRE-PH.D. SEMINAR AND SYNOPSIS SUBMISSION**

**R.14.1** On completion of research work, the candidate shall submit through the supervisor(s), eight copies of the synopsis of her Ph.D thesis including the title of the thesis and reprints of all published research work done towards fulfilment of doctoral degree to the Chairperson, DRC/HOD of the concerned department for consideration /presentation in forthcoming DRC.

**R.14.2** Presenting a Pre-Ph.D. seminar before the DRC and recommendation of the DRC is an essential requirement for consideration of title of thesis and submission of the thesis by the candidate. It may be attended by other faculty members and research scholars. Their feedback and comments may be suitably incorporated in the Ph.D thesis, in consultation with the supervisor.

**R.14.3** A Ph.D candidate shall publish at least two first author research papers from the work carried out in her thesis in a refereed, Scopus/SCI/SCIE indexed journal and has presented atleast two papers based on her PhD work in conferences of repute before submission of the synopsis and produce evidence for the same in the form of an acceptance letter/ a reprint/paper presentation certificate.

**R.14.4** The supervisor may propose a panel of at least six experts in the subject area of the research work of the thesis along with full contact details of the examiners to the DRC. The panel shall include atleast four experts from premier institutions like IITs/IISC Bangalore/ISM Dhanbad /NITs /IIITs /Central universities / Foreign Universities. The DRC may add or delete any of the name(s) of the examiners proposed by the supervisor(s).

**R.14.5** The candidate is required to submit her thesis prepared strictly as per the PhD Thesis Preparation Guidelines within 3 months from the date of approval of her Pre Ph.D Seminar and submission of synopsis. In case, the candidate fails to submit her thesis within 3 months of the approval of her Pre Ph.D Seminar, the candidate shall be required to submit fresh synopsis. However, in a special case when a candidate fails to submit her thesis within the stipulated time due to some unavoidable circumstances and has suitable justification for the same, the DRC/Vice Chancellor may grant extension of not more than three months to the candidate on

recommendation of the supervisor i.e. the candidate may be allowed to submit her thesis within a period not exceeding 6 months from the date of the submission of the synopsis.

**R.14.6** In case of issues related to intellectual property rights, the supervisor and the candidate shall take the necessary measures to ensure to follow the university Plagiarism Policy.

## **R.15 THESIS SUBMISSION**

**R.15.1** A candidate may submit her thesis within the time period as stipulated in **R.14.5** provided that:

- (i) She has completed the minimum period of Registration as provided in **R.13.1**
- (ii) She has become a candidate for the award of Ph.D degree as provided in **R.11**
- (iii) She has presented her Pre-Ph.D seminar before DRC open to all faculty members and research students, and suitably incorporated the suggestions made
- (iv) She has obtained recommendation of the DRC for submission of thesis
- (v) She has submitted the title and synopsis of the thesis along with reprints of all published research work done towards fulfillment of doctoral degree.

**R.15.2** The thesis shall be written in English in the specific format as per the Thesis Preparation Guidelines and shall contain a critical account of the candidate's research. The thesis should well represent the discovery of facts or fresh approach towards interpretation of facts and theories or significant contribution of knowledge to development or a combination of these. It should bear evidence of the candidate's capacity for analysis and judgment as well as her ability to carry out independent investigations, design or development. The thesis may be supplemented by published work. No part of the thesis or supplementary published work shall have been submitted for the award of any other degree.

**R.15.3** The candidate shall certify that the work is free of any form of data falsification, fabrication and plagiarism and shall be solely responsible for any such dispute, or plagiarism issue arising out of the doctoral work. The certificate for such a declaration by the candidate will be available on the university website.

**R.15.4** The scholar will also be required to submit a certificate (available on the university website) duly signed by the Candidate and countersigned by the Supervisor(s) in the prescribed format that the work embodied in the thesis is original and has been carried out by the author and that it has not been submitted in full or in part for any other Diploma or Degree of this or any other University.

**R.15.5** The scholar shall also attach a Student Approval Form in the format obtained from the UGC for the grant of non-exclusive worldwide license for hosting and distributing their thesis in digital format in, “Shodhganga” or any other database designated for this purpose by the UGC.



**R.15.6** The DRC Coordinator shall forward 05 copies of synopsis and the Panel of Examiners as approved by the DRC along with three copies of hard bound thesis with one copy on Electronic media in MS word /PDF format to Dean (RC).

**R.15.7** The candidate shall also submit a No Dues Certificate as prescribed by the university at the time of submission of the thesis.

**R.15.8** The candidate shall also submit “Checklist of all the documents” (as available on the university website) at the time of submission of the thesis.

**R.15.9** The Dean (RC) shall send 05 copies of synopsis and the Panel of Examiners as approved by the DRC along with three copies of hard bound thesis with one copy on Electronic media in MS word /PDF format to the Controller of Examinations (COE)/Dean (Examinations).

## **R.16 APPOINTMENT OF EXAMINERS**

**R.16.1** The COE/Dean (Examinations) shall get the examiners appointed by the Vice Chancellor from the Panel of examiners recommended by DRC for evaluation of the thesis.

**R.16.2** The thesis shall be evaluated by atleast two external examiners independently and anonymously. The Vice Chancellor shall choose the two external examiners from the panel of examiners. A copy of the thesis shall also be sent to the Supervisor / Joint Supervisor for evaluation. However the supervisor shall not be the examiner of the thesis.

**R.16.3** An external examiner cannot be from the same laboratory/institution where the scholar is employed, or from the laboratory/institution/approved research centre to which the Supervisor and/or joint Supervisor of the scholar belongs. Further, a collaborator or co-author of the scholar or his/her supervisor or joint supervisor during the tenure of the concerned Ph.D scholar cannot be an external examiner.

## **R.17 THESIS EVALUATION**

**R.17.1** The Examination Division will contact the examiners appointed by the Vice Chancellor and take their consent for examining the thesis at the earliest. If the examination branch does not receive the consent from the appointed examiner within one month, approval of Vice Chancellor may be taken for appointment of another examiner from the panel. In case one or more examiners so appointed declines to examine the thesis, another examiner shall be appointed by the Vice Chancellor out of the approved panel. In case the panel gets exhausted, the Dean (RC) in consultation with DRC shall recommend additional names.

**R.17.2** The Examination Division may send all communications to the examiners, viz. request for consent, as well as subsequent sending of Ph.D thesis for evaluation and receiving report,

electronically through email/fax and/or through post as appropriate and follow-up telephonically. The examination branch shall make all efforts for speedy evaluation of the Ph.D thesis. Each examiner will be requested to submit to the COE/Dean (Examinations), a detailed Assessment Report and his/her recommendations on the prescribed proforma within six weeks of the date of receiving the thesis.

**R.17.3** In the case, that the Thesis Evaluation Report is not received from an examiner within a period of four months, the Controller of Examinations/Dean (Examinations) should get another examiner appointed by the Vice Chancellor from the Panel of Examiner in R 16, in his/her place for evaluation of the thesis.

**R.17.4** The examiners shall be required to state categorically whether in their individual opinion, the thesis should be:

2. Accepted for the award of Ph.D degree (subject to oral defense), or
3. Referred to the candidate for resubmission in the revised form, or
4. Rejected,

In cases b and c, the examiner shall state the reasons for recommending resubmission/rejection of the thesis. If resubmission is recommended, the examiner shall specifically indicate the modifications that need to be made in the thesis by the scholar. The COE / Dean (Examinations) shall communicate the suggested revisions to Dean (RC) for further communication to the supervisor.

**R 17.5** In case both the external examiners unanimously recommend award of degree, the same shall be done after a satisfactory open viva voce test (Oral Defense) as per R 18.2

**R17.6** In case the external examiner(s) recommends minor corrections in the thesis, the candidate may incorporate them in consultation with the Supervisor before the viva-voce examination. The Supervisor shall certify that the corrections have been made in the thesis. This may be included with the reports of the Ph.D thesis to be sent to the Vice Chancellor for appointment of the Oral Defense Committee as in R 18.2.

**R.17.7** In case the corrections are major and resubmission/re-evaluation has been recommended by the external examiners; the candidate may resubmit the revised version in consultation with the Supervisor, within a period of one year from the date of communication in this regard from the COE/ Dean (Examinations). The revised thesis shall be sent for assessment to the same external examiners who recommended revision. In the event of any of them declining to examine the revised thesis, an additional external examiner may be appointed from the approved panel, and provided with the comments of the previous examiner(s) to facilitate the evaluation of the revised thesis.

**R.17.8** In case both the external examiners reject the thesis, the thesis shall be rejected and registration of the candidate shall be terminated.

**R.17.9** In case that if one of the two external examiners recommend the award of degree and the second external examiner recommends rejection, the thesis shall be referred to a new external examiner to be selected by the Vice Chancellor from the original panel of examiners. If the new external examiner recommends acceptance (may be with revision) the case may be processed as per the procedure in R 17.5 to 17.7. However, if the thesis is rejected by the new external examiner, it shall not be resubmitted or marked to any further examiner and the registration of the student shall be terminated.

**R.17.10** In case if one external examiner accepts and one suggests major revisions, then the candidate shall incorporate the revisions as prescribed in R17.7 above, and the thesis shall be sent to the external examiner who recommended revision. In case this external examiner recommends acceptance (may be with minor revisions), the case may be processed as per the procedure in R 17.5 to 17.7. In the event of disagreement between the external examiners, the Controller of Examinations/ Dean (Examinations) as a special case, shall get another external examiner appointed by the Vice Chancellor from the panel of examiners in R.16, if the merit of the case so demands. The report of this examiner shall be final and the acceptance or rejection of the thesis shall be based on this report.

**R 17.11** After receiving the satisfactory evaluation reports from the supervisor and both the external examiners, the Controller of Examinations / Dean (Examinations) shall arrange for Viva Voce Examination of the candidate before a duly constituted committee hereinafter referred to as Oral Defense Committee as per R18.2.

## **R.18 AWARD OF Ph.D. DEGREE**

**R.18.1** A candidate who has been recommended for viva-voce examination on the basis of thesis evaluation shall be required to defend her work/thesis orally before a duly constituted Oral Defense Committee (ODC) during working hours of the University.

**R.18.2**The ODC shall consist of three members: (i) VC Nominee, (ii) Supervisor/Jt. Supervisor, (iii) One external examiner selected from the two external examiners as in R.16.2. If none of the external examiners is available for the conduct of the oral defense, an alternative external examiner shall be appointed by the Vice Chancellor for this purpose only.

**R.18.3** On the completion of all stages of examination, the Oral Defense Committee shall recommend to the Controller of Examinations / Dean (Examinations) one of the following courses of action:

(a) That the degree be awarded;

(b) That the candidate be re-examined.

The Oral Defense Committee shall also provide to the candidate a list of all corrections and modifications in the thesis (if required) including suggestions made by the examiners during

the thesis evaluation. The candidate shall incorporate all changes as suggested by examiners and submit the hard copy of the final thesis.

**R.18.4** The Degree shall be awarded by the University provided that:

- (a) The Oral Defense Committee recommends the award of the degree to the candidate;
- (b) The candidate produces a 'No Dues Certificate' in the prescribed form forwarded by the supervisor and HOD of the concerned department.
- (c) The candidate has submitted a soft copy and two hard cover copies of the thesis: one for the Department Library and one for the Central Library. The thesis should incorporate all necessary/corrections/modifications.
- (d) The hard bound copies of the Ph.D. thesis, submitted after the viva-voce examination, must contain the copyright certificate in the beginning of the thesis: **©Indira Gandhi Delhi Technical University for Women, Kashmere Gate, New Delhi-110006. All rights reserved**

**R.18.5** Following the successful completion of the evaluation process and announcement of the award of the Ph.D, the university may submit a soft copy of the thesis to Shodhganga / Inflibnet.

**R.18.6** The Examination Division of the University may issue a Provisional Certificate of the completion of Ph.D to the candidate upon successful viva-voce examination followed by award of the final degree at the time of Convocation, along with a certificate to the effect that the Degree has been awarded in accordance with the provisions of the UGC regulations 2016.

## **R.19 GENERAL**

Notwithstanding anything contained in these Ordinances & Regulations, all categories of the students/candidates shall be governed by the rules and procedures framed by the Academic Council on their behalf, and in force from time to time.

## **R.20 INTERPRETATION**

Any case of doubt or dispute arising about the interpretation of these Ordinances and Regulations or anything not contained in the ordinance, shall be referred to the Vice Chancellor whose decision shall be final.



**Indira Gandhi Delhi Technical University for Women**  
**(Established by Govt. of Delhi vide Act 9 of 2012)**  
**ISO 9001:2015 Certified University**



**Revised Ph.D Regulations-2021**  
**For Engineering, Applied Sciences & Humanities**  
**(Effective from Academic Year 2021-2022)**

**Research Wing**  
**Indira Gandhi Delhi Technical University for Women**  
**Kashmere Gate, Delhi-110006**

## TABLE OF CONTENTS

<b>S. No.</b>	<b>Description</b>	<b>Page no.</b>
1	Definitions	3-5
2	R.1 Classification of Applicants and Admission Eligibility	5-7
3	R.2 Reservation/Relaxation	7
4	R.3 Shortlisting and Selection Process	7-9
5	R.4 Financial Assistance	9
6	R.5 Registration	9-10
7	R.6 Cancellation of Registration	10
8	R.7 Course Work	11-12
9	R.8 Research Plan (Submission and Approval)	12
10	R.9 Allocation of Thesis Supervisor(s)/Co-Supervisors	12-15
11	R.10 Composition of DRC and URB	15-16
12	R.11 Eligibility for the Candidacy for the degree	16
13	R.12 Performance Monitoring	16-18
14	R.13 Minimum Registration Requirement for Thesis Submission	18-19
15	R.14 Pre-Ph.D Seminar and Synopsis Submission	19-20
16	R.15 Thesis Submission	20-21
17	R.16 Appointment of Examiners	21
18	R.17 Thesis Evaluation	21-24
19	R.18 Award of Ph.D Degree	24-25
20	R.19 General	25
21	R.20 Interpretation	25

*Rhad*

## **REVISED REGULATIONS FOR THE PROGRAM LEADING TO DEGREE OF DOCTOR OF PHILOSOPHY (2021)**

### **Short Title and Commencement:**

(c) These regulations may be called the “**Indira Gandhi Delhi Technical University for Women (IGDTUW) Ph.D Regulations for the degree of Doctor of Philosophy (Ph.D) 2021**”

(d) These Regulations have been approved in VI University Research Board dt. 10<sup>th</sup> February, 2021, 14<sup>th</sup> Academic Council dt. 23<sup>rd</sup> June, 2021 and 14<sup>th</sup> Board of Management dt. 12<sup>th</sup> July, 2021 shall be applicable to all students admitted to the Ph.D Programme at IGDTUW from the year 2021 onwards.

### **DEFINITIONS:**

(xiii) “**Applicant**” shall mean a female who applies for admission to the Ph.D. Programme of the Indira Gandhi Delhi Technical University for Women (IGDTUW) on a prescribed Application Form.

(xiv) “**Academic Year**” is a period of nearly twelve months devoted to completion of requirements specified in the Scheme of Teaching and the related examination.

(xv) “**Candidate**” shall mean a person registered for the Ph.D. Degree and who has successfully completed the course work and submitted an approved research plan as per R.11 of the Regulations.

(xvi) “**Caretaker Supervisor**” shall mean a member of the academic staff appointed to look after the candidate's research interests in the absence of the Supervisor.

(xvii) “**COE**” shall mean the Controller of Examinations of Indira Gandhi Delhi Technical University for Women.

(xviii) “**Coordinator DRC**” shall mean a member of DRC of a particular Department of the Indira Gandhi Delhi Technological University appointed by Vice Chancellor, to coordinate and convene the DRC meetings.

(xix) “**Course Work**” shall mean courses of study prescribed by the DRC through the Supervisor to be undertaken by a student registered for the Ph.D. Degree.

(xx) “**Dean (Examinations)**” shall mean the Dean of Examination Division of Indira Gandhi Delhi Technical University for Women.

(xxi) “**Dean (R&C)** shall mean the Dean, Research & Collaboration.

(xxii) “**Degree**” shall mean the Degree of Doctor of Philosophy (Ph.D.) of IGDTUW.

- (xxiii) **"DRC"** shall mean Department Research Committee.
- (xxiv) **"Examination"** shall mean examination conducted by Indira Gandhi Delhi Technical University for Women.
- (xvii) **"Full-time Research scholar"** shall mean a person registered for the Ph.D Degree devoting Full-Time for completing the degree requirements.
- (xviii) **"Co- Supervisor"** shall mean an additional supervisor approved by the URB on the recommendation of DRC to help the supervisor in the accomplishment of the research work of the student/candidate.
- (xix) **"Minimum Registration Period"** shall mean the minimum period from date of final registration to submission of the thesis.
- (xx) **"Part-time Research Scholar"** shall mean a person who is registered for the Ph.D. degree and will devote part of her time towards their pursuit and devote part of her time towards the discharge of her official obligations.
- (xvii) **"Ph.D Coordinator"** shall mean a member of academic staff of the Indira Gandhi Delhi Technological University appointed by Vice Chancellor, to supervise the admission procedure, register the research students and monitor their performances through DRCs of different departments
- (xxii) **"Registration Period"** shall mean the length of time span commencing with the date of provisional registration at the University till the completion of the programme.
- (xxiii) **"Residency"** shall mean the minimum period for which a student must attend the University on full-time basis.
- (xxiv) **"Selection Committee"** shall mean a committee duly constituted by the Vice Chancellor for conducting interview for selection of students to the Ph.D Programme.
- (xxv) **"Semester"** An Academic year is divided into two semesters of six months duration each.
- (xxii) **"Student"** shall mean a person provisionally registered for the Ph.D. degree prior to becoming a candidate.
- (xxvi) **"Supervisor"** shall mean a member of the academic staff of the University approved by URB on the recommendation of Department to guide/supervise the research/ academic work of the student/candidate.
- (xxvii) **"University"** shall mean Indira Gandhi Delhi Technical University for Women(IGDTUW).
- (xxviii) **"URB"** shall mean University Research Board.



## **R.1 CLASSIFICATION OF APPLICANTS AND ADMISSION ELIGIBILITY**

### **R.1.1 Classification of Applicants**

The applicants for admission to the Ph.D. programme shall be classified under any one of the following categories:

#### **R.1.1.1 Full-Time Research Scholar (Abbreviated as FT)**

A person registered for the Ph.D Degree devoting Full-Time for completing the degree requirements, with financial assistance and satisfying the admission eligibility as defined in R1.2.1.

The persons receiving financial assistance from any sources can further be classified into the following categories:

- iii. Full time applicant shall be eligible for monthly stipend instituted by IGDTUW.
- iv. Junior Research Fellow(JRF)/Senior Research Fellow (SRF) financed by IGDTUW.
- v. Financed by other sources like Sponsored Research Projects or various Fellowship Schemes.

#### **R.1.1.2 Part-Time Research Scholars (Abbreviated as PT)**

- B person who is registered for the Ph.D degree and will devote part of her time towards their pursuit and devote part of her time towards the discharge of her official obligations and satisfying the admission eligibility as defined in R1.2.2.

## **R.1.2 ADMISSION ELIGIBILITY**

**R.1.2.1 The minimum entry qualifications for Full-Time/Part-Time Research Scholars are as follows:**

- (ii) *For Engineering: Degree in M.E. / M.Tech or equivalent from a recognized University/ Institution in the relevant discipline with minimum of 60% marks in aggregate or its equivalent CGPA in the point scale and B.E./B.Tech. or equivalent with minimum of 60 % marks in aggregate or equivalent CGPA.*
- (v) *For Computer Applications: MCA from a recognized University/ Institution with minimum of 60% marks in aggregate or its equivalent CGPA in the point scale and Graduation Degree (with Sciences and Mathematics) with minimum of 60% marks in aggregate or equivalent CGPA.*

(vi) **For Sciences** : Master Degree in the relevant discipline from a recognized University/Institution with 60% marks in aggregate or its equivalent CGPA in the point scale and undergraduate degree in the relevant discipline with 60% marks in aggregate or equivalent CGPA.

(vii) **For Humanities** : Master Degree in the relevant discipline from a recognized University/Institution with 55% marks in aggregate or its equivalent CGPA in the point scale and undergraduate degree in the relevant discipline with 55% marks in aggregate or equivalent CGPA.

**R.1.2.2 An applicant is eligible for Part-Time Research Scholar /Full-Time Research Scholar (Sponsored), provided she fulfils the following conditions:**

(ii) The Applicant possesses the minimum entry qualifications for the degree as mentioned in R.1.2.1.

(v) The applicant is presently employed under the following categories :

a. Applicants working in organizations which have MOU with IGDTUW.

b. Applicants working on Full-Time basis (regular/adhoc/contract) in a National Level R&D Lab/ a reputed organization/ recognised educational institution / university/ PSU/ Corporate/ Industry registered under Company's Act organization.

(vi) The Applicant possesses at least two years of relevant work experience in the above categories, as at (ii) b.

(vii) The applicant gets an NOC from her employer, at the time of provisional registration.

**R.1.2.3 An applicant shall be eligible for Junior Research Fellowship instituted by IGDTUW provided she fulfils the following conditions:**

i. She possesses the minimum entry qualifications as in R1.2.1.

ii. She has qualified UGC-CSIR-JRF/NET examination or has or qualified GATE with a score above the minimum cut off or qualified RAT examination. A person who has appeared in the above examinations but is awaiting results may also apply. However, she shall be required to produce a valid documentary evidence of having qualified the examination at the time of interview.

iii. She is not receiving any financial assistance from any other sources.

**R.1.2.4** A person, who has already initiated her fellowship in some other institution/organization and is interested to have her fellowship transferred to IGDTUW, may be allowed provided she clears the Selection Process for admission to Ph.D Programme as per R3.

**R 1.2.5-** A student/candidate registered at IGDTUW as Full-Time Research Scholar may be considered for Junior Research Fellowship/Senior Research Fellowship /any other fellowship provided (i) she fulfils all the eligibility conditions to avail the fellowship and her case is recommended by the DRC and approved by the Vice Chancellor. (ii) The selected JRF/SRF shall not avail any other fellowship/financial assistance.

## **R.2 RESERVATION/RELAXATION**

**R.2.1**Reservation of seats for Scheduled Caste, Scheduled Tribe, Other Backward Classes and Physically Handicapped candidates will be as per government rules.

**R.2.2**Candidates belonging to Scheduled Caste, Scheduled Tribe, OBC (Non-Creamy Layer)and Differently-abled categories will be given 5% relaxation in the minimum entry qualifications as given in R.1.2.

## **R.3 SHORTLISTING AND SELECTION PROCESS**

### **R.3.1**

- (i) Admission to the Ph.D Programme may be done on the basis of Research Aptitude Test (RAT) Examination or an interview or both.
- (ii) The RAT Examination shall be qualifying with qualifying marks as 50%. A relaxation of 5% marks (from 50% to 45%) shall be allowed for SC/ST/OBC/Differently abled category in the RAT Exam.
- (iii) The syllabus of the RAT examination shall consist of 50% of Research Methodology and 50% subject specific.

**R.3.2** Depending upon the requirement, the University may advertise for Ph.D admission twice in a year.

**R.3.3** Applications for joining the Ph.D. programme shall be submitted on a prescribed Form as per the guidelines in the Admission Notification of the university.

### **R.3.4 WAIVER FROM RAT EXAMINATION**

The RAT examination shall be waived off for the following applicants subject to the fulfilment of eligibility for entry qualifications as in R 1.2 and such applicants shall be allowed to appear in the interview directly:

- (i) Full-Time female teaching staff of IGDTUW.
- (ii) Sponsored applicants from organizations having MOU with the University.
- (iii) Applicants who have qualified UGC-CSIR-JRF/NET Or have qualified GATE with a score above the minimum cut off and successfully completed the degree as in R1.2.
- (iv) Foreign students who apply through Ministry of Human Resource Development or foreign students under a Cultural Exchange Scholarship Programme of Government of India
- (v) RAT examination shall be conducted even if adequate number of applications from exempted categories candidates are received.

**R.3.5** The University's Examination Division shall conduct the RAT Examination, do the evaluation and forward the result to Dean (R&C).

**R.3.6** A duly constituted committee approved by VC shall prepare the list of the Shortlisted candidates to be called for interview on the University Website.

**R.3.7** The interview for selection of the students shall be conducted department wise by Selection Committees each comprising of at least 5 members including The Vice Chancellor/ VC nominee, Dean (R&C)/HOD of the concerned department, all university approved supervisors of the concerned department, External Expert (if required). The applicants shortlisted for interview are required to discuss their research interest/ area during the interview. The interview shall also consider the following aspects viz. whether:

- The person possess the competence for the proposed research
- The research work can be suitably undertaken at the university.
- The proposed area of research can contribute to new/ additional knowledge

**R.3.8** A person selected by the aforesaid Selection Committee shall be allowed Provisional Registration to the Ph.D Programme from the date of payment of prescribed fees to the University with the allocated approved supervisor(s). The registration shall be confirmed only after satisfactory completion of the course work and approval of research plan by the respective DRC.

**R.3.9** The Ph.D Coordinator shall coordinate with various departments for conduct of admissions and DRCs.

#### **R.4.1 FINANCIAL ASSISTANCE**

- a. A stipend of Rs 10,000/- per month will be given to all Full-time Research Scholars for a maximum period of five years or till completion of their Ph.D., whichever is less. The Research Scholars would also assist in Academic/Administrative works in their respective Departments apart from their Research work. The scheme shall be introduced from Academic Year 2021-22.
- b. The University may provide financial assistance to few Full-Time Research Scholars with good teaching skills and appoint them as Junior Research Fellow (JRF) / Senior Research Fellow (SRF).
  - i. These fellowships shall be distributed on the basis of need across all departments by Dean (R&C) in consultation with the Vice Chancellor.
  - ii. The Terms and Conditions of the fellowship may be decided by the Academic Council and may be amended from time to time.
  - iii. All provisions of the prevailing Ph.D. Ordinance of the University shall be applicable on the JRF/SRF and allocated Supervisor(s).

#### **R.4.2 TUITION FEE**

Tuition fees will be decided by University and shall be notified in the University Admission Brochure on yearly basis. Unless stated, full fee shall be charged from student/candidate on annual basis till the candidate submits her thesis for evaluation as per R.17. Full-Time Permanent Teaching Faculty of IGDTUW are eligible for a 50 % waiver in the tuition fees.

## **R.5 REGISTRATION**

**R.5.1** Every student/candidate will be required to renew the registration every year till the submission of the thesis. The renewal of registration every year shall be subject to completion of specified number of credits/courses and/or satisfactory progress of research work as recommended by DRC.

**R.5.2** A student/candidate, who fails to register or renew her registration, may be allowed to renew her registration after obtaining approval from the Vice Chancellor.

### **R.5.3 CONVERSION OF REGISTRATION**

- i. A Full-Time Research Scholar who gets an employment in any organization during her Ph.D Program may be eligible to convert to Part-Time Research Scholar with due recommendation of her supervisor(s) and approval by DRC.
- ii. In case of a genuine reason, a Full-Time Research Scholar may be eligible to convert to Part-Time Research scholar after completion of minimum period of at least one year after her Final Registration with recommendation her supervisor(s) and approval by DRC.
- iii. A Part-Time research scholar may be allowed to convert to Full-Time research scholar with due recommendation of her supervisor(s) and approval by DRC.

## **R.6 CANCELLATION OF REGISTRATION**

**R.6.1** Registration of a student/candidate may be cancelled in any one of the following cases, after due recommendation of DRC.

- i. If she absents herself for a continuous period of four weeks without sanction of leave.
- ii. If she withdraws from the Ph.D. Programme voluntarily and the withdrawal is duly recommended by the DRC.
- iii. If she fails to renew her registration every year subject to the provisions contained in these Ordinances & Regulations.
- iv. If her academic progress is found unsatisfactory and approved for cancellation of registration as per R 12.1 g
- v. If she is unable to pass the Course Work successfully as per R7.6.
- vi. If she does not submit approved research plan as in R.8

- vii. If she fails to appear for 2 consecutive progress reviews as per R 12.1b without seeking prior approval of the Dean (R&C).
- viii. If a Part-Time student/candidate fails to get another employment within six months and submit NOC from the new employer.
- ix. If she is found involved in an act of misconduct and/or indiscipline and cancellation of registration is recommended by a competent authority.

## **R.7 COURSE WORK**

**R.7.1** Each student will be required to take Course Work as recommended by the supervisor(s) and approved by the DRC/ Academic Council. The Course Work shall comprise of:

- i. Two Compulsory Courses viz. “Research Methodology” and “Research and Publication Ethics.
- ii. Directed Courses related to the broad research area of the student recommended by the supervisor.

### **R.7.2**

- i. Students, who are provisionally registered for the Ph.D. degree, shall be required to take minimum four courses (two Compulsory Courses and two Directed Courses) equivalent to a minimum 12 credits as per the recommendations by the concerned DRC.
- ii. The student with MCA degree shall be required to take minimum six courses (two Compulsory Courses and four Directed Courses) equivalent to a minimum of 18 credits.
- iii. Each course shall be of minimum three credits with three hours instructions/studies per week.
- iv. The Directed courses shall be recommended by the supervisor preferably from the existing M.Tech courses running at IGDTUW / List of electives for Ph.D Course Work as approved by the DRC/ Academic Council.

**R.7.3** The Course Work shall be done within the first two Semesters and the student shall be evaluated at the end of each semester. However, the minimum duration to complete the course work could be one semester after which the student shall be eligible to present her Research Plan before the DRC. The University shall conduct the examination for all the courses.

**R.7.4** In case a student has successfully completed her course work from any other recognized University / institute and wishes to migrate to IGDTUW under an approved supervisor of IGDTUW, she shall be required to clear the Selection Process as prescribed in **R3**. The transfer of course credits may be allowed, on the recommendation of the DRC after due verification of her Marksheet/ Credits earned.

**R.7.5** The minimum passing marks for each course is 55% marks in aggregate or its equivalent CGPA in the point scale, failing which student may be allowed to give Supplementary Examination in that course.

**R.7.6** A student shall earn minimum 12 credits (minimum 18 credits for MCA students) including the Compulsory Courses for successful completion of Course Work. In case a student is not able to earn the requisite number of credits for successful completion of course work within one Academic Year from the date of her Provisional Registration, she shall be eligible for an extension of Provisional Registration to the Ph.D. Programme by six months or a maximum period of one year and she may be allowed to give Supplementary Examination in the courses in which she has failed as per the examination rules of the university. The Supplementary Examination for Ph.D shall be conducted once a year within three months of result declaration of the even semester.

**R.7.7** It is mandatory for the Student to successfully complete the Course Work with minimum credits requirements as per R.7.6 within a period of maximum two years from the date of her provisional registration to be eligible for being a Candidate failing which the registration of the Student shall stand cancelled.

## **R.8 RESEARCH PLAN (SUBMISSION AND APPROVAL)**

**R.8.1** Each student who has a provisional registration, and has successfully completed the Course Work shall be eligible to present her Research Plan before the DRC and the DRC shall evaluate her broad field of research, academic preparation and potential to carry out the proposed research.

**R.8.2** On the basis of the content of the Research Plan, the DRC may either recommend the case for approval of Research Plan for Final Registration as a candidate to the URB or may direct the student to revise the Research Plan.

**R.8.3** For approval of the Research Plan a student will be provided a maximum of two consecutive attempts immediately after the completion of her Course Work before the DRC. If DRC does not approve the Research Plan in maximum two attempts after completion of course work, the provisional registration of the student may be cancelled.

## **R.9 ALLOCATION OF THESIS SUPERVISOR(S)/CO- SUPERVISORS**

**R.9.1** Supervisor(s) can be any full-time faculty member of the University with a Ph.D degree who has been actively engaged in research and has published at least five research papers in refereed indexed journals out of which either two publications should be in SCI/SCIE/SSCI indexed journals or three publications should be in SCOPUS/ESCI indexed journals pertaining to the area of specialization. A faculty member of the University having patent(s) granted with at least two papers in refereed indexed international journals pertaining to the area of specialization is also eligible to be a Supervisor.

**R.9.2** Every admitted student shall be allocated a Research Supervisor(s) by the Ph.D Selection Committee depending on research interest of the student and the availability of the vacant slot with the prospective supervisor.

**R.9.3**

- i. In case of interdisciplinary or collaborative work, a Co-Supervisor either from the university or any other recognized institution /industry/research organization may be allocated to the student by DRC.
- ii. A Ph.D student may be allowed to have only one supervisor and one Co-Supervisor at any time during her research.
- iii. A Co-Supervisor from outside IGDTUW should possess a Ph.D Degree and have minimum five publications after completion of his/her Ph.D, out of which at least four publications should be in SCI/SCIE/SSCI indexed journals. Patents/ Book Chapters may be desirable. A Co-Supervisor from outside IGDTUW shall submit the Performa form for Co-Supervisor, his/her consent to be a Co-Supervisor along with necessary documents for being approved as a Co-supervisor for a student.
- iv. For addition of a Co-Supervisor, a student should give a write up to justify the role and contribution of the Co-Supervisor leading to provision of facilities and value addition to her research work. The write up shall be duly justified by both the supervisor and the proposed Co-Supervisor.
- v. Addition of Co-supervisor should be permitted by DRC only up to one year after date of final registration of the student in the PhD Programme. However, this time frame for addition of Co-Supervisor may be relaxed by the DRC in Special cases when supervisor goes on deputation / long leave due to any reasons /death / retires.

#### **R. 9.4**

- a. The number of maximum permissible seats for Ph.D registration (including inside and outside the university) at any given point of time shall be: Professor— 08 PhD Scholars, Associate Professor — 06 PhD Scholars, and Assistant Prof. — 04 PhD Scholars.
  - b. Each University approved supervisor may be allowed to fill upto a maximum of half of the permissible seats at a time.

#### **R. 9.5 Counting of Seats for a supervisor**

Each student registered under Sole / Co-Supervision as Full time/Part time shall be counted against one seat for the purpose of filling the prescribed number of scholars registered with a supervisor as in R9.4. The seat under a supervisor shall fall vacant after thesis submission of a candidate.

#### **R.9.6 Appointment of Supervisors/Co-Supervisor in Special Cases**

A faculty member appointed as a Ph.D. Supervisor is normally expected to be available to a research scholar in the University till the thesis oral defence. However, in special cases, if a supervisor is not available to the student/candidate due to unavoidable circumstances such as: long leave of more than 12 months; resignation; retirement; or death appointment of supervisor(s) will be regulated as under:



**ii. A supervisor proceeding on long leave of more than 12 months**

- (a) Where Co-supervisor exists, the supervisor proceeding on long leave for more than 12 months can continue to be a Supervisor provided the URB/DRC is convinced of effective supervision by the Co-Supervisor. Where a Joint-Supervisor does not exist, the DRC shall appoint a Co-Supervisor from the University in cases where a student has not yet submitted her thesis.
- (b) Provided further, if a supervisor proceeds on leave for a period less than 12 months initially, but later extends his/her leave beyond 12 months, the same procedure as per R9.6 i(a) will be followed.
- (c) Provided, if the synopsis of the thesis has been submitted before the supervisor proceeds on leave, he/she will continue to be the supervisor till the student submits her thesis. Further, if a major revision becomes necessary, and the sole supervisor is on leave, the sole supervisor should be asked to state specifically whether he/ she would effectively help the student carry out the major revisions within a reasonable time. In case the sole supervisor expresses his/her inability due to any reasons, a new supervisor will be appointed by the DRC and the candidate may be allowed to submit the thesis under the newly appointed supervisor.

**jj. Supervisor retires**

A faculty member who is due to retire within the next two years can be appointed as a Co-Supervisor and can continue to be the Co-Supervisor even after his/her retirement provided

- a. The DRC is convinced of his/her availability/continued guidance to the student.
- b. If the supervisor is re-employed or appointed as Emeritus Fellow.
- c. If the synopsis of the thesis has been submitted under his/her supervision. Appointment of another Supervisor, if necessary, will be as per R 9.6 i(a).

**v. Supervisor resigns**

A new Supervisor will be appointed, if necessary and the existing supervisor could be a Co-supervisor, as per R 9.6 i (a).

**vi. Supervisor expires**

A new Supervisor will be appointed, if necessary, on the recommendation of DRC and approval by Vice Chancellor.

**R.10 COMPOSITION OF DRC and URB**

### **R.10.1 Composition of URB**

The composition of URB will be as follows:

- iv. Vice-Chancellor or VC's Nominee.
- v. Dean , Research and Collaboration,
- vi. Chairpersons of DRCs / Deans of faculties / HODs of departments.

### **R.10.2 Composition of DRC**

The DRC shall be constituted for a period of two years. The minimum number of members in any DRC will be **seven**, including at least two academic staff at the level of Professors. The composition of DRC will be as follows:

- v. Dean of faculty/Head of the Department/Eminent Academician/Eminent Scientist : Chairperson;
- vi. Two outside expert nominated by Vice-Chancellor ;
- vii. All Professors of the concerned Department.
- viii. HOD of the concerned department
- viii. Two Associate Professors satisfying the eligibility requirements as per R.9.1, appointed by the Vice-Chancellor for a tenure of two years;
- ix. Two Assistant Professors satisfying the eligibility requirements as per R.9.1 appointed by the Vice-Chancellor for a tenure of two years
- x. Coordinator, DRC

Supervisor / Co-Supervisors shall be called as invitees during the presentation of the Research Plan and discussion of the Progress Report of their students/candidates.

**R.10.3** In case, any department fails to have the required minimum number of seven members in DRC as per R 10.2, or if the number of professors is less than two, a joint DRC with other department having closest academic affiliation shall be constituted by the Vice-Chancellor.

## **R.11. ELIGIBILITY FOR THE CANDIDACY FOR THE DEGREE**

A student shall be eligible for Final Registration as a candidate for the Ph.D. Degree after she has completed the following:

- (iii) She has successfully completed her Course Work with requisite credit requirements as per R 7.6.
- (iv) She has presented her Research Plan before the DRC and her research plan is approved by the DRC and URB.

## **R.12**

### **R.12.1 PERFORMANCE MONITORING**

- e. The terms for the research work will be as follows: **I Term:** July to December; **II Term:** January to June every year.
- f. The academic/research progress of each student/candidate shall be monitored by DRC at the end of each Term.
- g. The DRC shall notify the schedule for submission and evaluation of progress report to the candidates. The candidate shall submit a progress report at the end of each term duly forwarded by her supervisor(s) to the DRC.
- h. The DRC shall evaluate the progress report of the candidate after every term.
  - (vi) 'S' grade is to be awarded during that term if the progress is 'satisfactory'.
  - (vii) If the progress is 'unsatisfactory', 'U' grade is to be awarded and appropriate action be taken. For the first appearance of 'U' grade, a warning would be issued to the candidate and in case a student/candidate is availing any fellowship, her fellowship shall be withheld.
  - (viii) If there are two consecutive 'U' in the progress reports and the scholar still fails to make progress to the satisfaction of the DRC, the registration of the scholar may be terminated on recommendation of DRC and approval of the Vice Chancellor.
  - (ix) The DRC having considered the progress report of each scholar shall recommend one of the following :
    - a. Continuation of Registration.
    - b. Continuation of Registration and issuance of a written warning to the student/candidate and making recommendation in consultation with the supervisor(s), of steps necessary to improve her performance.
    - c. Termination of Registration.
  - (x) The Progress Reports of the candidates and minutes of the DRCs shall be submitted to the Dean (R&C).

- (xi) Submission and review of progress report shall continue till submission of thesis.

### **R.12.2 ATTENDANCE RULES**

- e. All Full Time/Part-Time students including sponsored students must attend at least 75% of classes in each course in which they are registered while pursuing Course Work.
- f. The supervisor/course instructor shall report the shortage of attendance cases to the Ph.D Coordinator. In case, attendance of the student falls below 75% in any course during a month, she will not be paid fellowship/financial assistance for that month.
- g. Further, if her attendance again falls short of 75% in any course in any subsequent month in that semester her fellowship will be terminated for the remaining semester.
- h. A Full-Time Research Scholar after having completed the Course Work must attend to her research work on all the working days and mark attendance except when she is on duly sanctioned leave.
- f. The requirement of 75% attendance will apply as above on daily attendance except in the cases where longer leave has been duly sanctioned within the leave entitlement of the student.

### **R.12.3 LEAVE RULES FOR FULL-TIME PH.D STUDENTS /CANDIDATES**

- d. A proper leave account of each scholar shall be maintained by the supervisor.
- e. A full-time Ph.D. student will be entitled to avail leave for 30 days per academic year including medical leave. She will not be entitled to summer and winter vacations.
- f. Leave beyond the stipulated period in an academic year may be granted in exceptional cases, by the DRC for additional 30 days, on recommendation of supervisor. However, such an extension shall be granted only once during the entire programme of the Scholar.
- f. The research scholars will be eligible for Maternity Leave prescribed by Govt. of NCT of Delhi.
- g. The leave period shall be counted in the total period required for submission of the thesis stipulated in **R 13.1**. However, the Maternity leave period shall be excluded from the total period required for submission of the thesis.

### **R.12.4 SEMESTER BREAK**

A student/candidate may be permitted to take a semester break on medical grounds with due recommendation of the supervisor and approval from the DRC. However, such a student shall complete the minimum credit requirements for successful completion of Course Work within the maximum period of two years from her Provisional Registration. The leave period shall be counted in the total period required for submission of the thesis stipulated in **R 13.1**.

### **R.13 MINIMUM REGISTRATION REQUIREMENT FOR THESIS SUBMISSION**

- R.13.1** The minimum period after which a candidate can submit her thesis shall be two years for a Full-Time research scholar and three years for a Part-Time research Scholar with effect from the date of Final Registration as a candidate. In the cases, where conversion from Part-Time to Full-Time or vice-versa has taken place, the minimum period of submission shall not be less than three years from the date of Final Registration.
- R.13.2** The maximum period within which a candidate can submit her thesis shall be five years for both Full-time and Part-time research scholars with effect from the date of Final Registration as a candidate.
- R.13.3** An extension of one year beyond the maximum period for submission of thesis at 13.2 may be granted on recommendation of the DRC and approval by the Vice Chancellor.

### **R.14. PRE-PH.D. SEMINAR AND SYNOPSIS SUBMISSION**

- R.14.1** On completion of research work, the candidate shall submit through the supervisor(s), eight copies of the synopsis of her Ph.D thesis including the title of the thesis and reprints of all published research work done towards fulfilment of doctoral degree to the Chairperson, DRC/HOD of the concerned department for consideration /presentation in forthcoming DRC.
- R.14.2** Presenting a Pre-Ph.D. seminar before the DRC and recommendation of the DRC is an essential requirement for consideration of title of thesis and submission of the thesis by the candidate. It may be attended by other faculty members and research scholars. Their feedback and comments may be suitably incorporated in the Ph.D thesis, in consultation with the supervisor.
- R.14.3** A Ph.D candidate shall publish at least two first author research papers in refereed journals from the work carried out in her thesis, out of which at least one publication should be in SCI/SCIE/SSCI or both publications in SCOPUS/ESCI indexed journals and has presented at least two papers based on her Ph.D work in the conferences of repute before submission of the synopsis and produce evidence for the same in the form of an acceptance letter/ a reprint/paper presentation certificate.
- R.14.4** The supervisor may propose a panel of at least eight experts in the subject area of the research work of the thesis along with full contact details of the examiners to the DRC. The panel shall include at least two experts from Foreign Institutions and two experts from premier institutions of India-like IITs/IISC Bangalore/ISM Dhanbad /NITs /IITs /State & Central

Universities/State and Central R&D laboratories etc. The DRC may add or delete any of the name(s) of the examiners proposed by the supervisor(s).

**R.14.5** The candidate is required to submit her thesis prepared strictly as per the PhD Thesis Preparation Guidelines within 3 months from the date of approval of her Pre Ph.D Seminar and submission of synopsis. In case, the candidate fails to submit her thesis within 3 months of the approval of her Pre Ph.D Seminar, the candidate shall be required to submit fresh synopsis. However, in a special case when a candidate fails to submit her thesis within the stipulated time due to some unavoidable circumstances and has suitable justification for the same, the DRC/Vice Chancellor may grant extension of not more than three months to the candidate on recommendation of the supervisor i.e. the candidate may be allowed to submit her thesis within a period not exceeding 6 months from the date of the submission of the synopsis.

**R.14.6** In case of issues related to intellectual property rights, the supervisor and the candidate shall take the necessary measures to ensure to follow the university Plagiarism Policy.

## **R.15 THESIS SUBMISSION**

**R.15.1** A candidate may submit her thesis within the time period as stipulated in **R.14.5** provided that:

- (vi) She has completed the minimum period of Registration as provided in **R.13.1**
- (vii) She has become a candidate for the award of Ph.D degree as provided in **R.11**
- (viii) She has presented her Pre-Ph.D seminar before DRC open to all faculty members and research students, and suitably incorporated the suggestions made
- (ix) She has obtained recommendation of the DRC for submission of thesis
- (x) She has submitted the title and synopsis of the thesis along with reprints of all published research work done towards fulfilment of doctoral degree.

**R.15.2** The thesis shall be written in English in the specific format as per the Thesis Preparation Guidelines and shall contain a critical account of the candidate's research. The thesis should well represent the discovery of facts or fresh approach towards interpretation of facts and theories or significant contribution of knowledge to development or a combination of these. It should bear evidence of the candidate's capacity for analysis and judgment as well as her ability to carry out independent investigations, design or development. The thesis may be supplemented by published work. No part of the thesis or supplementary published work shall have been submitted for the award of any other degree.

**R.15.3** (i) the candidate shall certify that the work is free of any form of data falsification, fabrication and plagiarism and shall be solely responsible for any such dispute, or plagiarism issue arising out of the doctoral work. The certificate for such a declaration by the candidate will be available on the university website.

(ii) Regarding Self Plagiarism or cases where published work of the student is shown as Plagiarism in the check, a certificate (Plagiarism Self Exclusion Certificate, available on the university website) has to be issued by the Supervisor specifying and attaching the articles that have been published by the student from thesis work. Only these articles should be excluded from the check. No other article of the Supervisor or the student should be excluded from the check. Similarity in the Ph.D thesis up to 15% may be permitted.

The exclusion at the time of performing the check should be limited to the following:

- A. Quotes
- B. Bibliography
- C. Phrases
- D. Small matches up to 14 words
- E. Small similarity less than 1%
- F. Mathematical Formula
- G. Name of Institutions, Departments etc
- H. Own published work

**R.15.4** The scholar will also be required to submit a certificate (available on the university website) duly signed by the Candidate and countersigned by the Supervisor(s) in the prescribed format that the work embodied in the thesis is original and has been carried out by the author and that it has not been submitted in full or in part for any other Diploma or Degree of this or any other University.

**R.15.5** The scholar shall also attach a Student Approval Form in the format obtained from the UGC for the grant of non-exclusive worldwide license for hosting and distributing their thesis in digital format in, “Shodhganga” or any other database designated for this purpose by the UGC.

**R.15.6** The DRC Coordinator shall forward 05 copies of synopsis and the Panel of Examiners as approved by the DRC along with three copies of hard bound thesis with one copy on Electronic media in MS word /PDF format to Dean (R&C).

**R.15.7** The candidate shall also submit a No Dues Certificate as prescribed by the university at the time of submission of the thesis.

**R.15.8** The candidate shall also submit “Checklist of all the documents”(as available on the university website) at the time of submission of the thesis.

**R.15.9** The Dean (R&C) shall send 05 copies of synopsis and the Panel of Examiners as approved by the DRC along with three copies of hard bound thesis with one copy on Electronic media in MS word /PDF format to the Controller of Examinations (COE)/Dean (Examinations).

## **R.16 APPOINTMENT OF EXAMINERS**

**R.16.1** The COE/Dean (Examinations) shall get the examiners appointed by the Vice Chancellor from the Panel of examiners recommended by DRC for evaluation of the thesis.

**R.16.2** The thesis shall be evaluated by at least two external examiners independently and anonymously. The Vice Chancellor shall choose the two external examiners from the panel of examiners. A copy of the thesis shall also be sent to the Supervisor / Co-Supervisor for evaluation. However the supervisor shall not be the examiner of the thesis.

**R.16.3** An external examiner cannot be from the same laboratory/institution where the scholar is employed, or from the laboratory/institution/approved research centre to which the Supervisor and/or Co-Supervisor of the scholar belongs. Further, a collaborator or co-author of the scholar or his/her supervisor or Co-supervisor during the tenure of the concerned Ph.D scholar cannot be an external examiner.

## **R.17 THESIS EVALUATION**

**R.17.1** The Examination Division will contact the examiners appointed by the Vice Chancellor and take their consent for examining the thesis at the earliest. If the examination branch does not receive the consent from the appointed examiner within one month, approval of Vice Chancellor may be taken for appointment of another examiner from the panel. In case one or more examiners so appointed declines to examine the thesis, another examiner shall be appointed by the Vice Chancellor out of the approved panel. In case the panel gets exhausted, the Dean (R&C) in consultation with DRC shall recommend additional names.

**R.17.2** The Examination Division may send all communications to the examiners, viz. request for consent, as well as subsequent sending of Ph.D thesis for evaluation and receiving report, electronically through email/fax and/or through post as appropriate and follow-up telephonically. The examination branch shall make all efforts for speedy evaluation of the Ph.D thesis. Each examiner will be requested to submit to the COE/Dean (Examinations), a detailed Assessment Report and his/her recommendations on the prescribed Performa within six weeks of the date of receiving the thesis.

**R.17.3** In the case, that the Thesis Evaluation Report is not received from an examiner within a period of four months, the Controller of Examinations/Dean (Examinations) should get another examiner appointed by the Vice Chancellor from the Panel of Examiner in R 16, in his/her place for evaluation of the thesis.

**R.17.4** The examiners shall be required to state categorically whether in their individual opinion, the thesis should be:

5. Accepted for the award of Ph.D degree (subject to oral defence), or
6. Referred to the candidate for resubmission in the revised form, or
7. Rejected,

In cases b and c, the examiner shall state the reasons for recommending resubmission/rejection of the thesis. If resubmission is recommended, the examiner shall specifically indicate the modifications that need to be made in the thesis by the scholar. The COE / Dean (Examinations) shall communicate the suggested revisions to Dean (R&C) for further communication to the supervisor.



- R.17.5** In case both the external examiners unanimously recommend award of degree, the same shall be done after a satisfactory open viva voce test (Oral Defence) as per R 18.2
- R.17.6** In case the external examiner(s) recommends minor corrections in the thesis, the candidate may incorporate them in consultation with the Supervisor before the viva-voce examination. The Supervisor shall certify that the corrections have been made in the thesis. This may be included with the reports of the Ph.D thesis to be sent to the Vice Chancellor for appointment of the Oral Defence Committee as in R 18.2.
- R.17.7** In case the corrections are major and resubmission/re-evaluation has been recommended by the external examiners; the candidate may resubmit the revised version in consultation with the Supervisor, within a period of one year from the date of communication in this regard from the COE/ Dean (Examinations). The revised thesis shall be sent for assessment to the same external examiners who recommended revision. In the event of any of them declining to examine the revised thesis, an additional external examiner may be appointed from the approved panel, and provided with the comments of the previous examiner(s) to facilitate the evaluation of the revised thesis.
- R.17.8** In case both the external examiners reject the thesis, the thesis shall be rejected and registration of the candidate shall be terminated.
- R.17.9** In case that if one of the two external examiners recommend the award of degree and the second external examiner recommends rejection, the thesis shall be referred to a new external examiner to be selected by the Vice Chancellor from the original panel of examiners. If the new external examiner recommends acceptance (may be with revision) the case may be processed as per the procedure in R 17.5 to 17.7. However, if the thesis is rejected by the new external examiner, it shall not be resubmitted or marked to any further examiner and the registration of the student shall be terminated.
- R.17.10** In case if one external examiner accepts and one suggests major revisions, then the candidate shall incorporate the revisions as prescribed in R17.7 above, and the thesis shall be sent to the external examiner who recommended revision. In case this external examiner recommends acceptance (may be with minor revisions), the case may be processed as per the procedure in R 17.5 to 17.7. In the event of disagreement between the external examiners, the Controller of Examinations/ Dean (Examinations) as a special case, shall get another external examiner appointed by the Vice Chancellor from the panel of examiners in R.16, if the merit of the case so demands. The report of this examiner shall be final and the acceptance or rejection of the thesis shall be based on this report.
- R 17.11** After receiving the satisfactory evaluation reports from the supervisor and both the external examiners, the Controller of Examinations / Dean (Examinations) shall arrange for Viva Voce Examination of the candidate before a duly constituted committee hereinafter referred to as Oral Defence Committee as per R18.2.

## **R.18 AWARD OF Ph.D. DEGREE**

**R.18.1** A candidate who has been recommended for viva-voce examination on the basis of thesis evaluation shall be required to defend her work/thesis orally before a duly constituted Oral Defence Committee (ODC) during working hours of the University.

**R.18.2** The ODC shall consist of three members: (i) VC Nominee, (ii) Supervisor/Co-Supervisor, (iii) One external examiner selected from the two external examiners as in R.16.2. If none of the external examiners is available for the conduct of the oral defence, an alternative external examiner shall be appointed by the Vice Chancellor for this purpose only.

**R.18.3** On the completion of all stages of examination, the Oral Defence Committee shall recommend to the Controller of Examinations / Dean (Examinations) one of the following courses of action:

(c) That the degree be awarded;

(d) That the candidate be re-examined.

The Oral Defence Committee shall also provide to the candidate a list of all corrections and modifications in the thesis (if required) including suggestions made by the examiners during the thesis evaluation. The candidate shall incorporate all changes as suggested by examiners and submit the hard copy of the final thesis.

**R.18.4** The Degree shall be awarded by the University provided that:

(e) The Oral Defence Committee recommends the award of the degree to the candidate;

(f) The candidate produces a 'No Dues Certificate' in the prescribed form forwarded by the supervisor and HOD of the concerned department.

(g) The candidate has submitted a soft copy and two hard cover copies of the thesis: one for the Department Library and one for the Central Library. The thesis should incorporate all necessary/corrections/modifications.

(h) The hard bound copies of the Ph.D. thesis, submitted after the viva-voce examination, must contain the copyright certificate in the beginning of the thesis: ©**Indira Gandhi Delhi Technical University for Women, Kashmere Gate, New Delhi-110006. All rights reserved**

**R.18.5** Following the successful completion of the evaluation process and announcement of the award of the Ph.D, the university may submit a soft copy of the thesis to Shodhganga/Inflibnet.

**R.18.6** The Examination Division of the University may issue a Provisional Certificate of the completion of Ph.D to the candidate upon successful viva-voce examination followed by award of the final degree at the time of Convocation, along with a certificate to the effect that the Degree has been awarded in accordance with the provisions of the UGC regulations 2016.

## **R.19 GENERAL**

Notwithstanding anything contained in these Ordinances & Regulations, all categories of the students/candidates shall be governed by the rules and procedures framed by the Academic Council on their behalf, and in force from time to time.

**R.20 INTERPRETATION**

Any case of doubt or dispute arising about the interpretation of these Ordinances and Regulations or anything not contained in the ordinance, shall be referred to the Vice Chancellor whose decision shall be final.

A handwritten signature in blue ink, appearing to read 'Rhad', with a horizontal line underneath.



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)  
ISO 9001:2015 Certified University

## Supporting Document: 3.1.1

3.1.1 The institution's Research facilities are frequently updated and there is a well defined policy for promotion of research which is uploaded on the institutional website and implemented



Assessment Period: 2016 -2021



**Indira Gandhi Delhi Technical University For Women**  
(Established by Govt. of Delhi vide Act 09 of 2012)  
ISO 9001:2015 Certified University

**List of Ph.D Students 2016-2017**

S. No	Enrolment No.	Name	FT/PT / JRF	E-mail	Supervisor	Area of Specialization/ Title
<b>Department of Electronics &amp; Communication Engineering</b>						
1	00305022016	RUPAL SHUKLA	FT	shuklarupal3011@gmail.com	Prof. Ashwni Kumar Co-Supervisor- Dr. Vandana Nirranjan	Energy Efficiency Optimization and Performance Analysis through Cluster based Routing Protocols in WSN.
2	00405022016	SHIKHA SONI	FT	soni.20shikha@gmail.com	Prof. Ashwni Kumar Co-Supervisor- Dr. Vandana Nirranjan	Low Power High Speed CMOS Amplifiers
<b>Department of Mechanical &amp; Automation Engineering</b>						
1	00405042016	TULSI CHOUHAN	PT	tulsihchouhan@gmail.com	Dr. Manoj Soni	Micro Ceramic Nano Silica Reinforced Hybrid Aluminium Matrix Based Composites for High Strain Rate Applications
<b>Department of Applied Sciences &amp; Humanities</b>						
<b>Physics</b>						
1	00105122016	RASHMI CHAURASIYA	FT	rashmichaurasiya783@gmail.com	Dr. Dinesh Ganotra	Reflection removable in images with deep learning neural networks
2	00205122016	RITU GOEL	FT	goelritu1991@gmail.com	Dr. Chhaya Ravi Kant & Prof. Ranjana Jha	Enhancement of Photocatalytic and Electro catalytic Properties of Nio for Solar Photovoltaics
<b>Mathematics</b>						
1	00105112016	DEEBA NAQVI	PT	dzmh19@gmail.com	Dr.Geeta Sachdev & Dr. Abha Aggarwal, USBAS, GGSIPU	On Some Multiobjective Programme Problems under Fuzzy Environment



**Indira Gandhi Delhi Technical University For Women**  
**(Established by Govt. of Delhi vide Act 09 of 2012)**  
**ISO 9001:2015 Certified University**

**List of Ph.D Students 2017-2018**

<b>S. No</b>	<b>Enrolment No.</b>	<b>Name</b>	<b>FT/P T/ JRF</b>	<b>Email Id</b>	<b>Proposed Supervisor &amp; co-supervisor</b>	<b>Area of Specialization/Title</b>
<b>Department of Computer Science and Engineering</b>						
1	00105012017	Smita	FT	26.smita@gmail.com	Prof. Ela Kumar	Persistent Storage and Query of Ontology in Relational Database
2	00305012017	Tanu Gupta	PT	tanu92gupta@gmail.com	Prof. Ela Kumar	Natural Language Processing
3	00405012017	Nazme Zehra Naqvi	PT	nznaqvi.igit@gmail.com	Dr. Seeja K.R.	Image Mining
4	00605012017	Manasi Mishra	FT	manasimishra10@gmail.com	Prof. S.R.N. Reddy	IOT Protocols
<b>Department of Information Technology</b>						
1	00105032017	Charu Gupta	Part Time	charugupta@igdtuw.ac.in	Prof. R.K. Singh & Dr. A.K. Mohapatra	Enhancing Software Security using Security Patterns
<b>Department of Electronics &amp; Communication Engineering</b>						
1	00205022017	Pooja Pandey	Full Time	pan_pooja19@yahoo.co.in	Dr. Nidhi Goel & Dr. Rashmi Gupta (Co-supervisor), AIACR	Image Enhancement Method for Foggy Image
2	00305022017	Pushpanjali Kumari	Full Time	20PUSHPA@GMAIL.COM	Dr. Richa Yadav & Prof. S.R.N Reddy	Integrated, Configurable Internet of Things (IOT) test bed framework design and development
3	00405022017	Priya Singh	Full Time	priyasingh020890@gmail.com	Prof. Ashwini Kumar & Dr. Vandana Niranjan	Performance improvement of CMOS transimpedance Amplifier (TIA)
<b>Department of Mechanical &amp; Automation Engineering</b>						
1	00105042017	Farheen Jahan	FT	jahan.farheen5273@gmail.com	Dr. Manoj Soni	High strain rate impact response of multi functional sandwich composites
2	00205042017	Aparna Jha	SRF	jhaaparna1006@gmail.com	Dr. Manoj Soni & Prof. Mohd. Suhaib, ME deptt.m JMI	Intelligent grip control for MYOElectric upper limb prosthesis
<b>Department of Applied Sciences &amp; Humanities</b>						
<b>Physics</b>						

1	00105122017	Ritu Chaudhari	JRF	tewatia.ritu6@gmail.com	Dr. Chhaya Ravi Kant & Dr. Alka Garg, Associate Prof., Gargi College	Synthesis of Polymer-Bismuth Tri-iodide Composites and their applications in Radiation detection at room temperature.
2	00205122017	Neha Goel	FT	neha.goel22oct@gmail.com	Dr. Dinesh Ganotra	Study of wavefront aberration using Zernike polynomials
3	00305122017	Pooja Singh	Part Time	pujasingh0409@gmail.com	Dr. Dinesh Ganotra	Resolution Enhancement and clustering using Fourier Domain and k-means
<b>Mathematics</b>						
1	00105112017	Bharti Seth	FT	bhartikalra.iitd@gmail.com	Dr. Shalini Arora & Dr. Punita saxena, Associate Prof., Shaheed Rajguru College of Applied Sciences for Women, University of Delhi	Analytical study of the Indian Transport Sector using Data Envelopment Analysis
<b>English</b>						
1	00105162017	Himani Sharma	SRF	<a href="mailto:hmshrm07@gmail.com">hmshrm07@gmail.com</a>	Dr. Bhavya	A Comparative Study of Postmillennial fiction by Select SAARC writers





**Indira Gandhi Delhi Technical University For Women**  
**(Established by Govt. of Delhi vide Act 09 of 2012)**  
**ISO 9001:2015 Certified University**

**List of Ph.D Students 2018-2019**

S. No	Enrolment No.	Name	FT/PT	Email Id	Proposed Supervisor & co-supervisor	Area of Specialization/ Title
<b>Department of Computer Science and Engineering</b>						
1	00105012018	Alina Banerjee	PT	alina.chak@gmail.com	Prof. Ela Kumar, Joint Supervisor: Dr. M. Ravinder	Artificial Intelligence Inspired Framework for Content Based Multimedia Retrieval
2	00205012018	Kavya Gupta	FT	gupta.kavya12@gmail.com	Prof. D.K. Tayal	Data Fusion in IoT using Soft Computing Techniques
3	00305012018	Divya Arora	FT	divya.nasa.jul@gmail.com	Prof. D.K. Tayal Joint Supervisor: Dr. Sumit Kr. Yadav	Solving Uncertainty for Sentiment Analysis using Approximation Theories
4	00405012018	Anu Yadav	PT	noor4anisha@gmail.com	Prof. Ela Kumar	Object Classification and Localization Based on Deep Learning
<b>Department of Information Technology</b>						
1	00105032018	PRITI BHARDWAJ	PT	<a href="mailto:pribhardwaj2020@gmail.com">pribhardwaj2020@gmail.com</a>	Dr. Niyati Baliyan	Personalized treatment recommender system
2	00205032018	Garima Jaiswal	SRF IGDTU W	GARIMA121@GMAIL.COM	Dr. Arun Sharma, Joint Supervisor: Dr. Sumit Kr. Yadav	Efficient classification approach for large datasets
3	00305032018	Garima	JRF IGDTU W	gari.software.eng@gmail.com	Prof. R. K. Singh	Improvement in Quality of Service for Passive optical Network
4	00405032018	Saumya Bansal	SRF (UGC)	saumya.mcs.du.2015@gmail.com	Dr. Niyati Baliyan	Recommender System for Large Scale Data
5	00505032018	Kanika Gupta	PT	kanikagupta_728@yahoo.in	Dr. Arun Sharma, Joint Supervisor: Dr. A.K. Mohapatra	Speech Based Gender and Age Classification
<b>Department of Electronics &amp; Communication Engineering</b>						



1	00105022018	Vidhi Bishnoi	SRF IGDTU W	vidhibishnoi@gmail.com	Dr. Nidhi Goel, Joint supervisor Dr. Akash Tayal	Medical Image Processing
2	00205022018	Harshita Prasad	FT	itsmeharshिता@gmail.com	Prof. Ashwni Kumar	Performance improvement of amplifiers for biomedical applications
3	00305022018	Ragini Sharma	PT	ragini.mits@gmail.com	Dr. Vandana Niranjana	Antenna Design
4	00505022018	Swati	PT	siddhu.swati@gmail.com	Dr. Jasdeep Kaur Dhanoa	VLSI
5	00605022018	Pragya Srivastava	PT	pragyasrivastava.19jun@gmail.com	Dr. Richa Yadav & Dr. Richa Srivastava, ECE, KIET, Ghaziabad	Low Power Digital Circuits with Enhanced Performance at Nanoscale
6	00705022018	Reshma Sinha	PT	reshma.sinha16@gmail.com	Dr. Jasdeep Kaur Dhanoa	VLSI in Biomedical Applications
7	00905022018	Ritu Kandari	SRF IGDTU W	RITUKANDARI_ARIES@YAHOO.COM	Prof. Ashwni Kumar, Joint supervisor Dr. Pankaj Gupta	Power Systems
8	01005022018	Shraddha Sood	PT	<a href="mailto:miniash22@rediffmail.com">miniash22@rediffmail.com</a>	Dr. Vandana Niranjana	Filter Design using substrate Integrated Circuits
9	01105022018	Annu Dabas	PT	annudabas1988@gmail.com	Dr. Richa Yadav	VLSI
10	01205022018	Manik	FT	mjatyan48@gmail.com	Prof. Ashwni Kumar, Joint supervisor Dr. Pankaj Gupta	VLSI
11	01505022018	Annu Dagar	PT	annudagar@msit.in	Dr. Vandana Niranjana, Joint supervisor Dr. Pankaj Gupta	Power System
12	01605022018	Jigyasa Nayak	PT	jigyasa2201@rediffmail.com	Dr. Jasdeep Kaur Dhanoa, Joint supervisor Dr. Akash Tayal	Digital Signal Processing
13	01705022018	Garima	PT	1592garima@gmail.com	Dr. Nidhi Goel	Medical Image Processing

### Department of Mechanical & Automation Engineering

1	00105042018	Shikha Parashar	PT	parasharshikha99@gmail.com	Dr. Pankaj Tomar	Study and analysis of physical properties for kenaf and Coir based hybrid composite
2	00205042018	Tanvi Saxena	PT	tanvisaxena1@gmail.com	Dr. Pankaj Tomar	Study and evaluation of physical properties for banana and rubber based hybrid

						composite
3	00405042018	Divya Chandra	PT	divya.chand@gmail.com	Dr. N. R. Chauhan	Evaluation of Mechanical And Tribological Properties of Developed Ceramic Coating on Magnesium AZ31 Alloy
4	00505042018	Sonali Panda	PT	sonalee301@gmail.com	Dr. Manoj Soni	Study on Porous Titanium for Weight Reduction of Structural Members
5	00605042018	Payal Sharma	PT	payal_sharma91@hotmail.com	Dr. N.R.Chauhan	Experimental Investigation of Alumina Nanoparticle Blended with Diesel and Alcohol based Biodiesel as an Alternative Fuel for IC Engine

### Department of Applied Sciences & Humanities

#### Physics

1	00105122018	Deepa Kumari	JRF IGDTU W	<a href="mailto:deepaahirwar633@gmail.com">deepaahirwar633@gmail.com</a>	Dr. Chhaya Ravi Kant & Dr. Ravinder Pal, Scientist G, DRDO Delhi	Study of biosensing properties of metal oxide and carbon based nanostructures
---	-------------	--------------	-------------	--	--	---

#### Chemistry

1	00105132018	Roopa Kumari	PT	roopa.duchem@gmail.com	Dr. Ranu Gadi	Synthesis of metal organic frameworks (MOFs)- derived nano structures and their applications for sensing and removal of volatile organic compounds from indoor air
---	-------------	--------------	----	------------------------	---------------	--

#### English

1	00105162018	Komal	JRF IGDTU W	<a href="mailto:komalrana0519@gmail.com">komalrana0519@gmail.com</a>	Dr. Bhavya	A Comparative Study of Partition fiction: Experienced v/s Heard
---	-------------	-------	-------------	--	------------	---





**Indira Gandhi Delhi Technical University For Women**  
**(Established by Govt. of Delhi vide Act 09 of 2012)**  
**ISO 9001:2015 Certified University**

**List of Ph.D Students 2019-2020**

S. No	Enrollment No.	Name of the Student	FT/PT/IGDTU W JRF	Email id	Name of Supervisor	Area of Specialization/ Title
<b>Department of Computer Science and Engineering</b>						
1	00105012019	Vaishali Gupta	PT	<a href="mailto:vaishaliagraw@gmail.com">vaishaliagraw@gmail.com</a>	Prof. Ela Kumar	An Enhanced Machine Learning Framework For India's Trade Intelligence
2	00205012019	Nidhi Aggarwal	FT	<a href="mailto:nidhiagarwal82@gmail.com">nidhiagarwal82@gmail.com</a>	Dr. Devendra K. Tayal	Multi Criteria Decision Making Approaches and Hybrid Ensemble Techniques for improving quality of education
3	00305012019	Rishika Anand	JRF	<a href="mailto:rishikaanand30@gmail.com">rishikaanand30@gmail.com</a>	Dr. SRN Reddy	Early Detection of Congenital Heart Diseases In Rural Areas using Machine Learning & Deep Learning
4	00405012019	Deepika Suhag	FT	<a href="mailto:deepikasuhag08@gmail.com">deepikasuhag08@gmail.com</a>	Dr. Vivekanand Jha	Approach towards Privacy Preserving Task Allocation and Quality Aware Incentive Mechanism for Mobile Crowdsensing Systems
<b>Department of Information Technology</b>						
1	00105032019	Pooja Gambhir	IGDTUW JRF	<a href="mailto:poojagambhir01@gmail.com">poojagambhir01@gmail.com</a>	Dr. Amita Dev	Speech recognition and speaker identification for Hindi Language using Deep Learning
2	00305032019	Ruchika Bala	PT	<a href="mailto:ruchikabala@gmail.com">ruchikabala@gmail.com</a>	Dr. Arun Sharma	Early Detection of diabetic retinopathy using Machine Learning
3	00405032019	Dimple Sethi	IGDTUW JRF	<a href="mailto:dimple9203@gmail.com">dimple9203@gmail.com</a>	Dr. Sourabh Bharti	Gait Analysis

## Department of Electronics & Communication Engineering

1	00105022019	Jasmine Chhikara	PT	<a href="mailto:jasmine.chhikara@gmail.com">jasmine.chhikara@gmail.com</a>	Dr. Nidhi Goel	Medical Image Analysis for Diagnosis of Cancer
2	00205022019	Monika Kaushik	PT	<a href="mailto:kaushikmonika52@gmail.com">kaushikmonika52@gmail.com</a>	Dr. Jasdeep Kaur	Implementation of Wideband MIMO Antenna for Sub-6 GHz Applications
3	00305022019	M. Tirupathamma Mudavath	PT	<a href="mailto:tirupathamma.jntu@gmail.com">tirupathamma.jntu@gmail.com</a>	Dr. Vandana Niranjan	Analysis and Recognition of Thermal Images in Adverse Weather Conditions
4	00405022019	Shashibala Agarwal	PT	<a href="mailto:shashibala.agarwal@gmail.com">shashibala.agarwal@gmail.com</a>	Dr. Maria Jamal	Modeling, Propagation and Identification of Mental Stress
5	00505022019	Manjari Gautam	PT	<a href="mailto:manjari.bsnl@gmail.com">manjari.bsnl@gmail.com</a>	Dr. Maria Jamal	Enhanced Performance Analysis of PV Module under various shading conditions
6	00605022019	Ruby Mann	PT	<a href="mailto:rubymann1610@gmail.com">rubymann1610@gmail.com</a>	Dr. Shobha Sharma	Modeling, Simulation, Characterization of High Electron-Mobility Transistor (HEMT)
7	00705022019	Neeraj	FT	deepakyadavdmrc@gmail.com	Dr. Pankaj Gupta	Data Driven Approach for Resilient Operation of Microgrid
8	00805022019	Supriya Sharma	PT	<a href="mailto:ssharma0026@gmail.com">ssharma0026@gmail.com</a>	Dr. Pankaj Gupta	Dynamic Energy Management of Grid Tied Microgrid
9	00905022019	Isha Malhotra	FT	<a href="mailto:ece09220.sbit@gmail.com">ece09220.sbit@gmail.com</a>	Dr. Akash Tayal	Dynamics of infectious Diseases- Modeling and Impact
10	01005022019	Shilpa Garg	PT	<a href="mailto:Shilpa.sharma@jagannath.org">Shilpa.sharma@jagannath.org</a>	Dr. Richa Yadav	Optimal Designing of Digital Fractional order systems

## Department of Applied Sciences & Humanities

### Chemistry

1	00105132019	Shobhna Shankar	IGDTUW JRF	<a href="mailto:shobhnashankar11@gmail.com">shobhnashankar11@gmail.com</a>	Dr. Ranu Gadi	Studies on Chemical and Morphological Characteristics of ambient aerosols over the NCR of India
2	00205132019	Aishwarya Singh	IGDTUW JRF	<a href="mailto:kamalkala316@gmail.com">kamalkala316@gmail.com</a>	Dr, Bhavani Prasad	Synthesis of Graphitic carbon nitride (g-C <sub>3</sub> N <sub>4</sub> )/ Metal/ metal hydroxide Nanocomposites and studies on Photocatalytic and antimicrobial applications
<b>Mathematics</b>						
1	00105112019	Aakanksha Singh	PT	<a href="mailto:AAKANKSHA.SINGH1101@GMAIL.COM">AAKANKSHA.SINGH1101@GMAIL.COM</a>	Dr. Shalini Arora	On finding solution for various types of transportation problems





**Indira Gandhi Delhi Technical University For Women**  
(Established by Govt. of Delhi vide Act 09 of 2012)  
ISO 9001:2015 Certified University

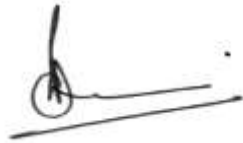
**List of Ph.D Students Winter Session 2019-2020**

S. No	Enrollment No.	Name of the Student	FT/PT/IGDT UW JRF	Email id	Name of Supervisor	Area of Specialization/Title
<b>Department of Computer Science and Engineering</b>						
1	05105012019	Divanshi Priyadarshi Wangoo	IGDTUW JRF	<a href="mailto:divanshi.wangoo@gmail.com">divanshi.wangoo@gmail.com</a>	Prof. S.R.N. Reddy	An Integrated Framework For An Intelligent Multimodal and Multisensing Learning Analytics For Cognitive Assessment
2	05205012019	Divya Joshi	IGDTUW JRF	<a href="mailto:divya.joshi82@gmail.com">divya.joshi82@gmail.com</a>	Dr. Vivekanand Jha	Exploiting Sink Mobility Management for Energy Efficient Wireless Sensor Networks
3	05305012019	Arti Ranjan	PT	<a href="mailto:arti.ranja@gmail.com">arti.ranja@gmail.com</a>	Dr. Ravinder M	Development of an Optimized System for Indoor and Outdoor Blurred Images
4	05405012019	Kiran Malik	PT	<a href="mailto:kiranmalik0401@gmail.com">kiranmalik0401@gmail.com</a>	Dr. Ravinder M	Designing Imperceptible High Payload Capacity Steganography Framework in Post Quantum Encrypted Domain using Deep Hierarchical Feature Learning
<b>Department of Information Technology</b>						
1	05105032019	Shweta	IGDTUW JRF	<a href="mailto:mittalshwetaofficial@gmail.com">mittalshwetaofficial@gmail.com</a>	Dr. Mohona Ghosh	Security Aspects of Blockchain in Healthcare domain
2	05205032019	Monalisa Panigrahi	IGDTUW JRF	<a href="mailto:saytomona@gmail.com">saytomona@gmail.com</a>	Dr. Sourabh Bharti	Edge-Enabled Federated Learning
<b>Department of Electronics &amp; Communication Engineering</b>						
1	05105022019	Surbhi Bharti	FT	<a href="mailto:surbhibharti6440@gmail.com">surbhibharti6440@gmail.com</a>	Prof. Ashwni Kumar	Improvement of Quality of Service Parameters of Memories for Multimedia Applications
2	05205022019	Neha Vaish	PT	<a href="mailto:nehavaish6@gmail.com">nehavaish6@gmail.com</a>	Dr. Nidhi Goel	Aspect based Sentiment Analysis using Machine Learning

3	05305022019	Anushree	PT	<a href="mailto:anushree.ece@gmail.com">anushree.ece@gmail.com</a>	Dr. Jasdeep Kaur	Designing and Performance Improvement of bandgap reference circuit
4	05405022019	Neeraj	PT	<a href="mailto:s.neerumalik@gmail.com">s.neerumalik@gmail.com</a>	Dr. Shobha Sharma	Modeling and Simulation Characterization of nanowire (GAA) Field Effect Transistor
5	05505022019	Geetanjali Ralh Singh	FT	<a href="mailto:geetanjali.ralhsingh@gmail.com">geetanjali.ralhsingh@gmail.com</a>	Dr. Shobha Sharma	Reliability Assessment and health monitoring of electronic components using Machine Learning

### Department of Mechanical & Automation Engineering

1	05105042019	Ekta Yadav	FT	<a href="mailto:ektabhinda@gmail.com">ektabhinda@gmail.com</a>	Dr. Vivek Chawla	Development and Assessment of Grewia Optiva Reinforced Polyurethane Composite
2	05205042019	Kanika Gupta	FT	<a href="mailto:guptakanika86@gmail.com">guptakanika86@gmail.com</a>	Dr. N. R. Chauhan	A Study on Pre-Fault Detection in Rotating Elements by Using Advanced Techniques and their Analysis





**Indira Gandhi Delhi Technical University For Women**  
(Established by Govt. of Delhi vide Act 09 of 2012)  
ISO 9001:2015 Certified University

**List of Ph.D Students 2020-2021**

**Department of Computer Science and Engineering**

S. No	Application No.	Name of the Student	FT/PT/JRF	Email id	Name of Supervisor	Area of Specialization/Title
1	00205012020	Rajni Sharma	IGDTUW JRF	rajnisharma.hp@gmail.com	Dr. Ravindra M.	Design and Development of Intelligent Multidimensional Image Enhancement Techniques
2	00305012020	Yashima Hooda	FT	yashimahooda1997@gmail.com	Prof. Devendra.K Tayal	Personalised Query expansion in Information retrieval using hybrid data sources
3	00405012020	Kavita Sharma	IGDTUW JRF	kavita11235@gmail.com	Prof. S.R. N Reddy	Design and Development of Integrated RTOS Framework for Customizable IoT Applications
4	00705012020	Neha Srivastava	PT	nehasrivastava012329@gmail.com	Prof. Devendra Tayal	Microarray Data Analysis Using Machine Learning

**Department of Information Technology**

1	00105032020	Surbhi Khurana	IGDTUW JRF	surbhikhurana04@gmail.com	Prof. Amita Dev	Human Speech Emotion Recognition and Classification using deep Neural Network
2	00205032020	Yogita Bansal	IGDTUW JRF	yogitabansal11@gmail.com	Dr. Niyati Baliyan & Dr. Mohona Ghosh	Analysis Security aspect of blockchain based online social network using machine learning based techniques

**Department of Electronics & Communication Engineering**

1	00105022020	Aakanksha Gupta	PT	<a href="mailto:akanksha001p hd20@igdtuw.ac.in">akanksha001p hd20@igdtuw.ac.in</a>	Prof. Ashwni Kumar	Efficient techniques/methods for lung disease detection and its classification
2	00405022020	Neha Kataria Kapoor	PT	nehakapoor@igdtuw.ac.in	Dr. Nidhi Goel	Design and modelling of hybrid renewable energy systems
3	00505022020	Shraddha Maurya	FT	mauryashraddha09@gmail.com	Dr. Maria Jamal	Design of Control Strategies for Multiphase Induction Motor Drive
4	00605022020	Jagrati Gupta	PT	jagrati.gupta.91@gmail.com	Dr. Shobha sharma	Design and Analysis of efficient and high performance VLSI based data processing systems

*Rhad*





**Indira Gandhi Delhi Technical University For Women**  
**(Established by Govt. of Delhi vide Act 09 of 2012)**  
**ISO 9001:2015 Certified University**

**List of Ph.D Students Winter Session 2020-2021**

**Department of Information Technology**

S. No.	Enrollment No.	Name of the Applicant	IGDTUW JRF/ Full Time/Part Time	Email Id	Supervisor
1	05105032020	Anubha	Part Time	amitkhanna1991a@gmail.com	Prof. A.K. Mohapatra
2	05205032020	Megha Khandelwal	Part Time	meghaworld29@gmail.com	Prof. Arun Sharma
3	05305032020	Nandini Sethi	(IGDTUW-JRF)	nandinisethi2104@gmail.com	Dr. Amita Dev
4	05405032020	Rashmi Raj	Full Time	rashmiraj292@gmail.com	Dr. Mohona Ghosh
5	05505032020	Sapna Yadav (LEFT)	Part Time	<a href="mailto:sapyadav21@gmail.com">sapyadav21@gmail.com</a>	Dr Kalpana Yadav
6	05605032020	Surbhi Prakash	Part Time	prakashsurbhi09@gmail.com	Prof. A.K. Mohapatra

**Department of Computer Science & Engineering**

S. No.	Enrollment No.	Name of the Applicant	IGDTUW JRF/ Full Time/Part Time	Email Id	Supervisor
1.	05105012020	Hunny Gaur	Part Time	gaurhunny20@gmail.com	Prof. Devendra Tayal
2.	05205012020	Juli Kumari	Full Time	send2juli@gmail.com	Prof. Ela Kumar
3.	05305012020	Purna Sharma	Full Time	sharma.purna.13spt@gmail.com	Prof. Seeja K.R
4.	05405012020	Shilpi Gupta	Part Time	shilpig.2710@gmail.com	Prof. Seeja K.R

**Department of Electronics & Communication Engineering**

S. No.	Enrollment No.	Name of the Applicant	IGDTUW JRF/ Full Time/ Part Time	Email Id	Supervisor
1	05105022020	Astha Sharma	Full Time	asthasharma092@gmail.com	Prof. Ashwni Kumar
2	05205022020	Komal duggal	Full Time	kommalduggal@gmail.com	Prof. Vandana Niranjana
3	05305022020	Megha Dua	Full Time	Meghadua.1993@gmail.com	Dr. Pankaj Gupta
4	05405022020	Shalu Garg	Part Time	Er.shalugarg@gmail.com	Prof. Jasdeep

					Kaur
<b>Department of Mechanical &amp; Automation Engineering</b>					
S. No.	Enrollment No.	Name of the Applicant	IGDTUW JRF/ Full Time/Part Time	Email Id	Supervisor
1	05105042020	Dhanishta	Full Time	mechanicalpathshala08@gmail.com	Dr. Shipra Aggarwal
2	05205042020	Priya Singh	Full Time	thakuralpriya30@gmail.com	Dr. Vivek Chawla
3	05305042020	Ranjana Mishra	Full Time	pankaj0743@gmail.com	Dr Pooja Bhati
4	05405042020	Santwana Mishra	FULL Time	mesantwana10@gmail.com	Dr. Shipra Aggarwal
<b>Department of Applied Sciences &amp; Humanities</b>					
<b>Physics</b>					
S. No.	Enrollment No.	Name of the Applicant	IGDTUW JRF/ Full Time/Part Time	Email Id	Supervisor
1	05105122020	Rita Kumari	(IGDTUW-JRF)	Reetanain001@gmail.com	Prof. Chhaya Ravi Kant
<b>Chemistry</b>					
S. No.	Enrollment No.	Name of the Applicant	IGDTUW JRF/ Full Time/Part Time	Email Id	Supervisor
1	05105132020	Saumya	Full Time (IGDTUW-JRF)	dwivedisaumya06@gmail.com	Dr. N. Bhavani Prasad
<b>English</b>					
S. No.	Enrollment No.	Name of the Applicant	IGDTUW JRF/ Full Time/Part Time	Email Id	Supervisor
1	05105152020	Swati Basu	Part Time	sb08.kolkata@gmail.com	Dr. Bhavya

*Rhad*



**Indira Gandhi Delhi Technical University For Women**  
(Established by Govt. of Delhi vide Act 09 of 2012)  
ISO 9001:2015 Certified University

**List of Ph.D Students 2021-2022**

S. No	Enrollment No.	Name of the Student	FT/ PT/ IGDTU W JRF	Email ID	Proposed Supervisor
<b>Department of Computer Science and Engineering</b>					
1	00105012021	Aditi Sabharwal	FT	<a href="mailto:aditi001phd21@igdtuw.ac.in">aditi001phd21@igdtuw.ac.in</a>	Prof. S.R.N Reddy
2	00205012021	Juhi Pruthi	PT	<a href="mailto:juhi.pruthi@gmail.com">juhi.pruthi@gmail.com</a>	Prof. Seeja K.R.
3	00305012021	Rekha Baghel	PT	<a href="mailto:rekha_cs46@rediffmail.com">rekha_cs46@rediffmail.com</a>	Prof. Ela Kumar
4	00405012021	Yamini Ratawal	PT	<a href="mailto:yaminiratawal26@gmail.com">yaminiratawal26@gmail.com</a>	Prof. Ela Kumar
<b>Department of Information Technology</b>					
1	00305032021	Harshita	PT	<a href="mailto:deoneha36@gmail.com">deoneha36@gmail.com</a>	Prof. R.K. Singh
2	00105032021	Akanksha Dhamija	PT	<a href="mailto:akankshadhamija@bpitindia.com">akankshadhamija@bpitindia.com</a>	Prof. Arun Sharma
3	00205032021	Deepti Aggarwal	FT	<a href="mailto:deepti937@gmail.com">deepti937@gmail.com</a>	Prof. Arun Sharma
4	00405032021	Ipsita Pattnaik	PT	<a href="mailto:ipsitaworkprofile@gmail.com">ipsitaworkprofile@gmail.com</a>	Prof. A.K. Mohapatra
5	00505032021	Manu shree	FT	<a href="mailto:manushree31071994@gmail.com">manushree31071994@gmail.com</a>	Prof. A.K. Mohapatra
<b>Department of Electronics &amp; Communication Engineering</b>					
1	00405022021	Vaishali Kikan	IGDTUW JRF	<a href="mailto:vaishali.kikan@kiet.edu">vaishali.kikan@kiet.edu</a>	Prof. Ashwni Kumar
2	00105022021	Diksha Singh	PT	<a href="mailto:dikshasingh0011@gmail.com">dikshasingh0011@gmail.com</a>	Prof. Nidhi Goel
3	00205022021	Nirma Peter	PT	<a href="mailto:nirmapeters@gmail.com">nirmapeters@gmail.com</a>	Prof. Nidhi Goel
4	00305022021	Ramsha Suhail	IGDTUW JRF	<a href="mailto:suhailramsha100@gmail.com">suhailramsha100@gmail.com</a>	Dr. Richa Yadav
<b>Department of Mechanical &amp; Automation Engineering</b>					
1	00105042021	Akanksha Tiwari	FT	<a href="mailto:akanksha.svsu@gmail.com">akanksha.svsu@gmail.com</a>	Prof. N.R. Chauhan
2	00205042021	Ekta	FT	<a href="mailto:ekta.svsu@gmail.com">ekta.svsu@gmail.com</a>	Dr. Pooja Bhati
<b>Department of Applied Sciences &amp; Humanities</b>					

Physics					
1	00205122021	Megha Prajapati	IGDTUW JRF	<a href="mailto:2018phs1013@iitrpr.ac.in">2018phs1013@iitrpr.ac.in</a>	Prof. Chhaya Ravikant
2	00105122021	Jaya Singh	PT	<a href="mailto:jayasingh007@gmail.com">jayasingh007@gmail.com</a>	Dr. Dinesh Ganotra



**Indira Gandhi Delhi Technical University For Women**  
(Established by Govt. of Delhi vide Act 09 of 2012)  
ISO 9001:2015 Certified University

List of Ph.D Students Winter Session 2021-2022					
S. No.	Enrollment No.	Name of the Student	FT/PT/IGD TUW JRF	Email ID	Proposed Supervisor
<b>Department of Mechanical &amp; Automation Engineering</b>					
1	5105042021	Priyanka Singh	FT	<a href="mailto:priyavp047@gmail.com">priyavp047@gmail.com</a>	Prof. N.R. Chauhan
2	5205042021	Soumya Raj	FT	<a href="mailto:soumyaraj.me@gmail.com">soumyaraj.me@gmail.com</a>	Dr. O. K. Singh
<b>Department of Applied Sciences &amp; Humanities</b>					
1	5105132021	Narmada	FT	<a href="mailto:narmadasharma123@gmail.com">narmadasharma123@gmail.com</a>	Prof. Ranu Gadi, Co-Supervisor: Dr. Pankaj Kumar Sharma, Scientist 'D', DRDO
2	5205112021	Sakshi Dhruv	FT	<a href="mailto:sakshidhruv32@gmail.com">sakshidhruv32@gmail.com</a>	Prof. Shalini Arora
3	5305112021	Sarita	FT (CSIR-UGC-NET JRF)	<a href="mailto:sarita92773@gmail.com">sarita92773@gmail.com</a>	Prof. Shalini Arora Co-supervisor: Dr. Geeta Sachdev
4	5105112021	Ritu	IGDTUW JRF	<a href="mailto:ritu19abc@gmail.com">ritu19abc@gmail.com</a>	Dr. Geeta Sachdev

*Rhad*



**Indira Gandhi Delhi Technical University For Women**  
(Established by Govt. of Delhi vide Act 09 of 2012)  
ISO 9001:2015 Certified University

**List of Ph.D Students 2022-2023**

S.No.	Enrollment No.	Name	FT/PT	Email ID	Supervisor/Co-Supervisor
<b>Department of Information Technology</b>					
1	'00105032022	Aditi kaushik	FT	vasishtaaditi92@gmail.com	Dr. Nonita Sharma Co-supervisor: Dr. Niyati Baliyan
2	'00205032022	Bala Shiwangi	FT	Balashivangi62@gmail.com	Dr. S. Kamble Co-Supervisor: Prof. Brijesh Singh
3	'00305032022	Bhawna Singh	PT	bhawna.jadaun2022@gmail.com	Dr. Nonita Sharma Co-supervisor: Dr. Deepak Kumar Sharma
4	'00405032022	Garima Rathi	PT	GARIMARATHI1801@GMAIL.COM	Dr. Niyati Baliyan
5	'00505032022	Jyoti Sharma	FT	vyotisharma116789@gmail.com	Dr. Rishabh Kaushal Co-supervisor: Dr. Kalpana Yadav
6	'00605032022	Kanika Chauhan	FT	kanikac961@gmail.com	Dr. Deepak Kumar Sharma Co-supervisor: Dr. Nonita Sharma
7	'00705032022	Manisha Gupta	FT	guptamg444@gmail.com	Prof. Amita Dev Co-supervisor: Prof. Poonam Bansal
8	'00805032022	Monica Malik	PT	monicamalik17@gmail.com	Dr. Bhawna Narwal Co-supervisor: Prof. A.K. Mohapatra
9	'00905032022	Priyanka Vashistha	FT	priyankavashistha29@gmail.com	Dr. Bhawna Narwal Co-supervisor: Prof. A.K. Mohapatra
10	'01005032022	Priyanka Tomar	FT	Priyankamanu5@gmail.com	Dr. S. Kamble Co-supervisor: Dr. Nonita Sharma
11	'01105032022	Priyanka Behera	FT	priyankabehera.edu@gmail.com	Prof. A.K. Mohapatra Co-supervisor: Prof. Brijesh Singh

12	'01205032022	Rishita Verma	FT	rishitaverma@gmail.com	Dr. Gaurav Indra
13	'01305032022	Rupali Ahuja	PT	rupaliahuja99@gmail.com	Dr. Gaurav Indra Co-supervisor: Dr. Arunima Jaiswal
14	'01405032022	Suhani	FT	suhanisingh2398@gmail.com	Prof. Amita Dev Co-supervisor: Prof. Poonam Bansal
15	'01505032022	Urmila Samariya	FT	urmilasamaria@yahoo.com	Dr. S. Kamble Co-Supervisor: Dr. Subash Singh
16	'01605032022	Vartika Tyagi	FT	vartikatyagi400@gmail.com	Prof. Amita Dev Co-supervisor: Prof. Poonam Bansal
17	'01705032022	Preeti Vats	FT	preeti.3vats@gmail.com	Dr. Nonita Sharma Co-Supervisor: Dr. Deepak Kumar Sharma
18	'01805032022	Seema	PT	seema.cs@bcas.du.ac.in	Dr. Gaurav Indra Co-Supervisor: Dr. Arunima Jaiswal
19	'01905032022	Vaishali Meena	FT	vaishali.meena1008@gmail.com	Dr. Gaurav Indra Co-Supervisor: Dr. Bhawna Narwal

### Department of Computer Science & Engineering

1	'00105012022	Anjani Gupta	PT	anjani.gupta@imsec.ac.in	Dr. Arunima Jaiswal Co-supervisor: Dr. Gaurav Indra
2	'00205012022	Debleena Mitra	PT	mitra.debleena@gmail.com	Prof. Devendra Tayal
3	'00305012022	Jyoti Gupta	FT	jjyotigt790@gmail.com	Prof. Seeja K.R.
4	'00405012022	Sapna Vats	FT	thakursapna188@gmail.com	Dr. Arunima Jaiswal Co-supervisor: Dr. Ravinder M.
5	'00505012022	Richa Raj	FT	richa5raj@gmail.com	Dr. Arunima Jaiswal Co-Supervisor: Dr. Gaurav Indra
6	'00605012022	Vinita Panwar	FT	vinni.biet@gmail.com	Prof. Devendra Tayal

### Department of Electronics & Communication Engineering

1	00105022022	Mohini Preetam Singh	PT	mohinisingh2008@gmail.com	Prof. Nidhi Goel
2	00205022022	Shipra Srivastava	PT	bel.shipra@gmail.com	Dr. Kanchan Sharma
3	00305022022	Sonam Yadav	FT	yadav.sonam8498@gmail.com	Prof. Ashwni Kumar

4	00505022022	Vidhi Goswami	PT	gswmvidhi@gmail.com	Dr. Richa Yadav Co-supervisor: Prof. Brijesh Kumar
5	00405022022	Shambhavi Tiwari	FT	shambhavitiwari.2498@gmail.com	Dr. Kanchan Sharma

### Department of Applied Sciences & Humanities

#### Chemistry

1	00105132022	Bhumika Sharma	FT	sbhumika28@gmail.com	Prof. Ranu Gadi Co-Supervisor: Dr. S. Mary Celin, Scientist 'F', DRDO, Delhi
2	00305132022	Preeti joshi	FT	gaurigupta637@gmail.com	Dr. N. Bhavani Prasad

#### Physics

1	00205122022	Parul	FT	kumari.parul0402@gmail.com	Dr. Dinesh Ganotra
2	00405122022	Simran Malik	FT	simranmalik7896@gmail.com	Dr. Dinesh Ganotra

### Department of Architecture & Planning

1	00105142022	Charu Arora Mathur	PT	charu.arkitect@gmail.com	Prof. Rashmi Ashtt
2	00205142022	Meenakshi Tyagi	PT	meenakshityagi.india@gmail.com	Prof. Rashmi Ashtt
3	00302142022	Ruby	PT	rubykajal1990@gmail.com	Prof. Rashmi Ashtt
4	00405142022	Shivani Goel	FT	gcad10230@gmail.com	Prof. Rashmi Ashtt
5	00505142022	Kanwar Dimple	FT	ar.dimple05gmail.com	Prof. Rashmi Ashtt
6	00605142022	Mahak Swami	FT	swami.mahak9@gmail.com	Prof. Rashmi Ashtt

*Rhad*



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)  
ISO 9001:2015 Certified University

## Supporting Document: 3.1.1

3.1.1 The institution's Research facilities are frequently updated and there is a well defined policy for promotion of research which is uploaded on the institutional website and implemented



Assessment Period: 2016 -2021





**Indira Gandhi Delhi Technical University For Women**  
(Established by Govt. of Delhi vide Act 9 of 2012)  
ISO 9001:2015 Certified University



**Revised Guidelines For Pre-Ph.D Seminar/Synopsis**  
**And**  
**Ph. D Thesis Submission**  
(Effective from Academic Year 2021-2022)

**Research Wing**  
**Indira Gandhi Delhi Technical University for Women**  
**Kashmere Gate, Delhi-110006**



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)  
ISO 9001:2015 Certified University

## TABLE OF CONTENTS

Page No.

### Introduction

### Part-A- Pre-Ph.D Seminar/Synopsis Submission Framework

A.1 Registration Requirements for Pre-Ph.D Seminar/Synopsis Submission.....	1
A.2 Pre-Ph.D Seminar/Synopsis Format .....	2
A.3 Guidelines for Pre-Ph.D Seminar/Synopsis Submission.....	2-3
• Annexure A-I Proforma for Pre-Ph.D Synopsis Submission .....	4-5
• Annexure A-II Checklist for Pre-Ph.D Synopsis Submission .....	6
• Annexure A-III Proforma for Committee Recommendation on Pre-Ph.D Seminar/Synopsis.....	7
• Annexure A-IV Format of Pre-Ph.D Synopsis Cover Page .....	8
• Annexure A-V Student Undertaking .....	9
• Annexure A-VI Publication Details (Attached copy of Publications).....	10
• Annexure A-VII Proforma for Research Progress Evaluation.....	11

### Part-B- Thesis Submission Framework

B.1 Guidelines for Thesis Preparation.....	12
B.2 Ph.D Thesis Format.....	13
2.1 Thesis Text.....	13
2.2 Size and Margins.....	13
2.3 Page Numbering.....	14
2.4 Line Spacing.....	14
2.5 Tables, Figures and Equations.....	14
2.6 Binding.....	15
B.3 Guidelines for Structuring Contents.....	15
3.1 Sequence of Contents.....	15-16
3.2 Structure of Contents (Abstract, Table of Contents, Thesis Content, Format of References, Appendices) .....	16-18
• Annexure B.I Proforma for Thesis Submission.....	19-20
• Annexure B-II (Checklist for Ph.D Thesis Submission).....	21
• Annexure B.III Format of Cover Page (Thesis to be Submitted for Evaluation).....	22
• Annexure B.IV Format of Cover Page of Final Thesis (For thesis to be submitted after final VIVA VOCE).....	23
• Annexure B.V (Template for Thesis Text).....	24
• Annexure B-VI (Candidate's Declaration).....	25
• Annexure B.VII (Certificate by Supervisors).....	26
• Annexure B.VIII (Copyright Transfer Certificate).....	27
• Annexure B.IX (Supervisor's Certificate for Exclusion of Self-Published work).....	28
• Annexure B.X (Plagiarism Certificate).....	29
• Annexure B.XI (Certificate for Thesis Revision).....	30
• Annexure B.XII (Publication Details Summary).....	31

*Rhad*



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)  
ISO 9001:2015 Certified University

## INTRODUCTION

This document, herein after referred to as the “Guidelines for Pre-Ph.D Seminar/Synopsis and Ph. D Thesis Submission” lists the general and specific requirements governing the Pre-PhD Synopsis and Ph.D thesis preparation including guidelines for structuring the contents.

The students and their thesis supervisors should ensure that the “Guidelines for Pre-Ph.D Seminar/Synopsis and Ph.D Thesis Submission” have been adhered to.

## PART- A

### PRE-PH.D SEMINAR/SYNOPSIS SUBMISSION FRAMEWORK

On completion of research work, presenting a Pre-Ph.D. seminar/synopsis before the DRC and recommendation of the DRC is an essential requirement for consideration of the title of the thesis and submission of the thesis by the candidate.

Prior approval of Hon'ble VC for consideration of cases for the Pre-Ph.D seminar/synopsis submission is required.

#### A.1 REGISTRATION REQUIREMENTS FOR PRE-PH.D SEMINAR/SYNOPSIS SUBMISSION

##### **1.1 Minimum Requirements for Pre-PhD Seminar/Synopsis Submission**

The candidate shall fulfill certain minimum requirements for submission of Pre-Ph.D Seminar/Synopsis:

➤ **For Ph.D Students Admitted From 2014 to 2018.**

- (i) **Minimum Registration Period:** Two years, with effect from the date of Final Registration for both Full Time to Part time candidates.
- (ii) **Maximum Registration Period:** Four years for Full time research scholars and five years for Part time research scholars, with effect from the date of Final Registration.
- (iii) **Minimum Publications Requirements :** Published at least one first author research paper from the work carried out in her thesis in a refereed, indexed journal.( (As per R.14.3in IGDTUW Ph.D Regulations 2017)

➤ **For Ph.D Students Admitted 2019 Onwards.**



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)  
ISO 9001:2015 Certified University

- (i) **Minimum Registration Period:** Two years for a Full-Time research scholar and three years for a Part-Time research Scholar with effect from the date of Final Registration.
- (ii) **Maximum Registration Period:** Five years for both Full-time and Part-time research scholars with effect from the date of Final Registration.
- (iii) **Minimum Publications Requirements:** Published at least two first author research papers from the work carried out in her thesis in a refereed, indexed journal. (As per R.14.3in IGDTUW Ph.D Regulations 2019)

## **A.2 PRE-PH.D SEMINAR/SYNOPSIS FORMAT**

2.1 The Contents of the synopsis shall be as follows:-

- i. Cover Page Format at Annexure- A.IV
- ii. Student Undertaking at Annexure-A.V
- iii. Publication Details Summary at Annexure-A.VI
- iv. Synopsis of Research Work (Details at A.2.2)

2.2 The synopsis should be around 8-10 pages presenting a concise summary of the research work, under following sub-heads:-

- i. Introduction (Including Chapter wise demarcation of thesis)
- ii. Research Objectives
- iii. Details of Research work and methodology
- iv. Conclusion
- v. References

2.3 The Pre-Ph.D seminar/synopsis should be typed in Time New Roman, Font Size 12, Double line spacing, and should be spiral bound.

2.4 The top, bottom and right side margins should be 20 mm, whereas the left side margin should be 25 mm for both textual and non-textual (e.g., figures, tables) pages.

2

## **A.3 GUIDELINES FOR PRE-PH.D SUBMISSION**

3.1 The candidate shall submit request through “Proforma for Pre-Ph.D Seminar/Synopsis submission” (Annexure A.I) to the DRC Coordinator for consideration of Pre-Ph.D Seminar/Synopsis submission in the forthcoming DRC.



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)  
ISO 9001:2015 Certified University

3.2 After recommendation of DRC the candidate shall prepare Five copies of the Synopsis of the PhD work prepared as per the approved format for Pre-PhD Seminar/Synopsis including the title of the thesis and reprints of all published research work.

The candidate should submit the following:-

- i. Checklist at Annexure A-II
- ii. Proforma for Committee Recommendation on Pre-Ph.D Seminar/Synopsis at Annexure A-III
- iii. 05 Copies of Synopsis

3.4 The DRC Coordinator shall seek approval (Through Dean RC) from Vice Chancellor for consideration of the case for the conduct of Special DRC for the Pre-Ph.D Seminar submitting duly filled “Proforma for Research Progress Evaluation” Annexure A-VII and 05 copies of synopsis subsequent to which the DRC Coordinator shall conduct a special DRC for the seminar of the case.

3.5 A Special DRC shall be conducted for the evaluation of Pre-PhD Seminar of the PhD candidate.

Two external subject experts in the domain of research work of the thesis shall be invited in addition to the DRC members for Pre-Ph.D Synopsis evaluation.

3.6 The DRC Coordinator shall submit the Minutes of the Meeting of Special DRC along with 01 copy of synopsis including “Committee Recommendation Form- Annexure A-III” duly signed by all members of Special DRC and Panel of Examiners (in sealed envelope) to Dean (RC).

3.7 After approval of Hon’ble Vice Chancellor, a copy of approved MOM of Special DRC with 05 copies of synopsis to be submitted to Dean (RC) forwarding to Dean (Examination)

3.8 Student shall submit to the 03 copies of Thesis to Dean (RC) through DRC Coordinator within 03 months from date of Pre-Ph.D Seminar along with a copy of approval of Pre-Ph.D Seminar and letter of extension (if applicable)

3.9 Dean (RC) shall forward the three copies of thesis with supporting documents to Dean (Examination) for evaluation.



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

## PROFORMA FOR PRE-Ph.D SYNOPSIS SUBMISSION

Annexure  
A.I

### 1. Details of the Research Scholar

- (a) Name of Research Scholar : .....
- (b) Enrollment No. : .....
- (c) Full Time/ Part Time : .....
- (d) E-mail ID : .....
- (e) Contact Number : .....
- (f) Department : .....

2. Thesis Title: .....

### 3. Annual Fee Payment Details (Enclosed Copies Fee Receipts):

Month and Year						
Amount Paid						
Receipt No.						

### 4. Course Work Details:

Course Code	Course Title	Credits	Core Course/ Elective/ Special Elective	Marks
Research Plan Evaluation				Approved/ Not Approved

### 5. Research Publications (Please attach Photo copy of the papers and proof for impact factor):

#### (a) Number of Papers published in Journals :

Paper Published in	Number of Paper Published
<b>i) Journal</b>	
National	
International	
<b>ii) Conference</b>	
National	
International	



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

**ISO 9001:2015 Certified University**

**(b) Publication Details:**

<b>i) Journals (Please add as many rows as required)</b>				
Sr. No	Details of Publications in IEEE Format	SCI/ESCI/SCOPUS/ Web of Science/ others	Impact factor (if any)	Date of publication/ acceptance

<b>ii) Conference (Please add as many rows as required)</b>				
Sr. No	Details of Publications in IEEE Format	SCI/ESCI/SCOPUS/ Web of Science/ others	Impact factor (if any)	Date of publication /presentation

**6. Date of Confirmation**

Particulars	Dates/Period	Remarks
Date of Provisional Registration		
Date of Final Registration (Letter of Final Registration Enclosed)		
Duration of Registration Period including any extension		Extension from ..... to ..... Vide letter no. ....
Course work (copy of certificate enclosed)		
Pre-Ph.D Seminar/Synopsis		..... Yrs..... Months after date of Final Registration
Synopsis Submission		..... Months ..... days after the submission of synopsis

Certify that the information furnished above are true and correct to the best of my knowledge.

**Signature of Student**

<b>Signature of Joint Supervisor</b>
Name:
Date:

<b>Signature of Supervisor</b>
Name:
Date:

**Note:** (Font Times New Roman, Font Size 12)

(For Office use only)

**Date of the Receipt in the DRC office:**

**Signature of the DRC with Date**



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

Annexure  
A.II

## CHECKLIST FOR PRE Ph.D SYNOPSIS SUBMISSION

- |  |        |
|--|--------|
| 1. Proforma for submission of Synopsis   | YES/NO |
| 2. Five (05) copies of the Synopsis along with Soft copy as per the norms of the IGDTUW Regulations.   | YES/NO |
| 3. Panel of Examiners (both Indian & Foreign) with complete and correct postal address including Phone No, Mobile No, Fax No (if available) and correct E-mail ID (typed only) in a closed cover | YES/NO |
| 4. Copy of the Final Registration order  | YES/NO |
| 5. Copy of the Fee Receipt   | YES/NO |
| 6. Whether Synopsis submitted within the time duration   | YES/NO |
| a) If No, Extension of time obtained   | YES/NO |
| b) Copy of the Extension order enclosed, if applicable   | YES/NO |
| 7. Contact Phone No, Mobile No, and E-mail ID of the Supervisor  | YES/NO |
| 8. Covering letter duly signed by the supervisor and forwarded through the HOD   | YES/NO |

Signature of Student

Checked and found correct

Signature of the DRC Coordinator

Signature of the Supervisor





# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

For official use

Annexure  
A.III

## Proforma for Committee Recommendation on Pre-Ph.D Seminar/Synopsis

Name:

Enrolment Number:

Department:

Category of Ph.D Registration (FT/PT/JRF/SRF):

Title of PhD:

- Pre-Ph.D Seminar/Synopsis is approved for thesis submission
- Pre-Ph.D Seminar/Synopsis is approved with minor changes for thesis submission
- Pre-Ph.D Seminar/Synopsis rejected. Suggested major revisions and resubmission.

Signatures of the External Experts and DRC Members

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

Date:

**Note:** (Font Times New Roman, Font Size 12)



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

Annexure  
A.IV

## TITLE OF THE PRE-Ph.D SYNOPSIS

*(Times New Roman, Font Size 18, Bold)*

Pre-Ph.D Synopsis Submitted in  
Partial Fulfillment of the Requirements for the Degree of

*(Times New Roman, Font Size 14)*

## DOCTOR OF PHILOSOPHY

*(Times New Roman, Font Size 16, Bold)*



By

**NAME OF STUDENT** *(Times New Roman, Font Size 16, Bold)*

Under the supervision of *(Times New Roman, Font Size 14)*  
(Name of Supervisor/s)

DEPARTMENT OF.....

*(Times New Roman, Font Size 14)*

INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN Kashmere  
Gate, Delhi-110006 *(Times New Roman, Font Size 14)*

Month, Year (First Submission date)

*(Times New Roman, Font Size 14)*



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

Annexure  
A.V

## STUDENT UNDERTAKING

*(Times New Roman, Font Size 16 pts, Bold)*

I, ....., Enrolment No. ....Department of  
.....certify that:

- i. I have completed the minimum period of Registration for thesis submission as per the IGDTUW Ph.D Regulations for the degree of Doctor of Philosophy Ph.D.
- ii. I have published/presented the following papers:
  - a) .....
  - b) .....
  - c) .....
  - d) .....
  - e) .....
- iii. I fulfill the eligibility for Pre-Ph.D Seminar/Synopsis submission as per the IGDTUW Ph.D Regulations for the degree of Doctor of Philosophy Ph.D.

**Date:** .....

**Name and signature of Student  
Department**

**Signature of Joint Supervisor**

**Name:**

**Date:**

**Signature of Supervisor**

**Name:**

**Date:**

**Note:** *(Font Times New Roman, Font Size 12)*



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

## PUBLICATION DETAILS

Annexure  
A.VI

### 1. Details of the Research Scholar

- (a) Name of Research Scholar : .....
- (b) Enrollment No. : .....
- (c) Full Time/ Part Time : .....
- (d) E-mail ID : .....
- (e) Contact Number : .....
- (f) Department : .....

2. Thesis Title: .....

### 3. Research Publications (Please attach Photo copy of the papers and proof for impact factor):

#### (a) Number of Papers published in Journals:

Paper Published in	Number of Paper Published
<b>i) Journal</b>	
National	
International	
<b>ii) Conference</b>	
National	
International	

#### (b) Publication Details:

<b>i) Journals (Please add as many rows as required)</b>				
Sr. No	Details of Publications in IEEE Format	SCI/ESCI/SCOPUS/ Web of Science/ others	Impact factor (if any)	Date of publication/ acceptance

<b>ii) Conference (Please add as many rows as required)</b>				
Sr. No	Details of Publications in IEEE Format	SCI/ESCI/SCOPUS/ Web of Science/ others	Impact factor (if any)	Date of publication /presentation

Signature of Student

Signature of Joint Supervisor

Name:

Date:

Signature of Supervisor

Name:

Date:



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

## PROFORMA FOR RESEARCH PROGRESS EVALUATION

(To be filled by DRC Coordinator)

Annexure  
A.VII

### 1. Details of the Research Scholar

- (a) Name of Research Scholar : .....
- (b) Enrollment No. : .....
- (c) Full Time/ Part Time : .....
- (d) Department : .....

2. **Thesis Title:** .....

.....

### 3. Date of Confirmation

Particulars	Dates/Period	Remarks
Date of Provisional Registration		
Date of Final Registration		
Duration of Registration Period including any extension		Extension from ..... to ..... ..... Vide letter no. ....

### 4. Course Work Details:

Course Code	Course Title	Credits
Total Credit		

### 5. Date of Approval of Research Plan:

### 6. Progress Report Details

Period	Jan-Jun/Yr	Jul-Dec/Yr	Jan-Jun/Yr	Jul-Dec/Yr	Jan-Jun/Yr	Jul-Dec/Yr	Jan-Jun/Yr	Jul-Dec/Yr
Date of Submission								
Comments of DRC (Satisfactory / Not Satisfactory)								

Signature of DRC Coordinator

Name:

Date:



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

## PART-B

### Ph.D THESIS SUBMISSION FRAMEWORK

#### B.1 GUIDELINES FOR Ph.D THESIS SUBMISSION

1.1 After presentation of Pre-Ph.D Seminar and due recommendation of special DRC, the candidate shall fill in the “Proforma for Thesis Submission” at Annexure B-I and submit three copies of thesis prepared strictly as per the Guidelines for Thesis Preparation within stipulated time frame as mentioned in the IGDTUW Ph.D Regulations to the Dean (Research & Consultancy) that shall be further forwarded to Dean (Examinations) for thesis evaluation.

#### 1.2 Plagiarism Check

The Ph.D thesis must undergo a Plagiarism check and the similarity index should be less than 10%. The similarity checks for plagiarism should exclude the following:-

- i. All quoted work reproduced with all necessary permission and/or attribution.
- ii. All references, bibliography, table of content, preface and acknowledgements.
- iii. All generic terms, laws, standard symbols and standards equations.
- iv. A common knowledge or coincidental terms, up to fourteen (14) consecutive words.
- v. Small similarity matches less than 1%.

1.3 While submitting the thesis, every student is required to provide the Dean (Research & Consultancy) a signed checklist as per the format in Annexure B-II.

1.4 The Dean (Examinations) shall conduct the Final Viva –Voce of the candidate before the Oral Defence Committee (ODC) after which the candidate is required to incorporate all revisions as suggested by the Thesis Examiners in the Final Thesis and submit three copies of hard bound Final thesis to the Dean (Examination): one for the Research Wing, one for the Department and one for the Central Library. A certificate for thesis revision as per Annexure B-XI shall be attached by the candidate along with the Final thesis.



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

## **B.2 Ph.D THESIS FORMAT**

### **2.1 Preparation of Thesis Text**

- 2.1.1 The format of cover page of thesis to be submitted for evaluation and after Final Viva Voce are placed at Annexure B-III & B-IV respectively.
- 2.1.2 The thesis needs to be prepared using a standard text processing software and must be printed in black text (colour for images, if necessary) using a laser printer or letter quality printer in standard typeface (Times New Roman Font as per Annexure B-V).
- 2.1.3 The thesis must be printed or photocopied on both sides of white paper. All copies of thesis pages must be clear, sharp and even, with uniform size and uniformly spaced characters, lines and margins on every page of good quality white Bond paper of 75 gsm or more.
- 2.1.4 Thesis should be free from typographical errors.

### **2.2 Size and Margins**

- 2.2.1 A4 is the recommended thesis size.
- 2.2.2 The top, bottom and right side margins should be 25 mm, whereas the left side margin should be 35 mm for both textual and non-textual (e.g., figures, tables) pages.
- 2.2.3 Content should not extend beyond the bottom margin except for completing a footnote, last line of chapter/subdivision, or figure/table caption.
- 2.2.4 A sub-head at the bottom of the page should have at least two full lines of content below it. If the sub-head is too short to allow this, it should begin on the next page.
- 2.2.5 All the tables and figures should conform to the same requirements as text. Color may be used for figures. If tables and figures are large, they may be reduced to the standard size (provided the reduced area is not less than 50% of the original) and /or folded just once to flush with the thesis margin.
- 2.2.6 Students shall submit printed thesis copies in the standard size (as in 2.2.1) and also as a soft copy (PDF) for storage and archival.



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

## 2.3 Page Numbering

- 2.3.1 Beginning with the first page of the text in the thesis (chapter 1), all pages should be numbered consecutively and consistently in Arabic numerals through the appendices.
- 2.3.2 Page numbers prior to Chapter 1 should be in lower case Roman numerals. The title page is considered to be page (i) but the number is not printed.
- 2.3.3 All page numbers should be placed in the centre at the bottom of the page, 12 mm below the last line in the bottom margin.

## 2.4 Line Spacing

The general text of the manuscript should be in double spacing (3 lines per inch). Long tables, quotations, footnotes, multi-line captions and bibliographic entries (references) should be in single spacing (6 lines per inch), with text size in 11 points.

## 2.5 Tables, Figures and Equations

- 2.5.1 All tables (tabulated data) and figures (charts, graphs, maps, images, diagrams, etc.) should be prepared, wherever possible, on the same paper used to type the text and conform to the specifications outlined earlier. They should be inserted as close to the textual reference as possible.
- 2.5.2 Tables, figures and equations should be numbered sequentially chapter-wise using Arabic numerals with first numeral depicting the chapter no. They are referred to in the body of the text capitalizing the first letter of the word and number, as for instance, Table 5.3, Figure 5.11, Equation (4.16), depict Table 3 in Chapter 5, Figure 11 in Chapter 3 and Equation 16 in Chapter 4 respectively
- 2.5.3 If tables and figures are of only half a page or less, they may appear on the same page as text but separated above and below by triple line spacing. Font size for text should be the same as for the general text.
- 2.5.4 Good quality Line Drawings/figures must be drawn using standard software that provides vector rather than bit-map graphics. Figures must be scalable.
- 2.5.5 Images, Photographs, etc. must be scanned in resolution exceeding 200dpi with 256 greyscales for the monochrome images and 24 bit per pixel for the color images.





# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

## 2.6 Binding

### 2.6.1 Thesis to be submitted for evaluation

The student should submit **three copies** of the thesis in hard bound form and one soft copy in pdf format for Ph.D thesis evaluation to Dean (RC) through DRC Coordinator within 03 months from date of Pre-Ph.D Seminar along with a copy of approval of Pre-Ph.D Seminar and letter of extension (if applicable)

### 2.6.2 Thesis to be submitted after incorporating revisions

The students should submit **one copy** of the revised thesis in hard bound form alongwith the duly filled certificate for thesis revision (Annexure B.XI) to the COE/Dean (Examination Affairs).

### 2.6.3 Thesis to be submitted after conduct of Final Viva-voce Examination.

The front cover should **dark maroon** in colour with **Golden font** for all Ph.D thesis submission. The front cover of the bound copy should be the same as the title page of the thesis (Annexure B.IV). The front cover should have printing on the side to include the author's name, degree, department, and the year.

## **B.3 GUIDELINES FOR STRUCTURING CONTENTS**

### 3.1 Sequence of Contents

The following sequence for the thesis organization should be followed:

- (i) Preliminaries
  - Cover Page (Format of as per at the time of submission of Thesis Evaluation, Annexure B-III)
  - Cover Page (Format of as per at the time of Final Thesis submission after Viva voce, Annexure B-IV)
  - Candidate Declaration (Format at Annexure B-VI)
  - Certificate of Supervisor (s) (Format at Annexure B-VII)
  - Copyright Transfer (Format at Annexure B-VIII)



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

**ISO 9001:2015 Certified University**

Supervisor's Certificate for Exclusion of Self-Published work (Format at Annexure B-IX)

Plagiarism Verification (Format at Annexure B-X) (Enclosed Plagiarism Report)

Certificate For Thesis Revision (To be attached in Final Thesis after Viva voce, Annexure B-XI)

Publication Details (Annexure B-XII)

Acknowledgement and/ or Dedication (where included)

Abstract/Synopsis

Table of Contents

List of Figures, Tables, Illustrations, Symbols, etc (wherever applicable)

- (ii) Text of Thesis Introduction, the body of the thesis, summary and conclusions  
(As per Annexure B-V)
- (iii) List of References, Bibliography (where included)
- (iv) Appendices (If any)
- (v) Copy of Publications
- (vi) Brief CV of student

All the headings (capitalized) are left aligned (without punctuation) 25mm down the top edge of the page (only for heading, remaining pages should start exactly below the margin). The subsequent type-setting begins two spaces below the heading. Chapter number, chapter name and title heads should have a font size of 17pts, section heading, subsection heading should have 14pts and further subsections should have 12pts and all should be bold.

## **3.2 Structure of Contents**

### **3.2.1 Abstract**

- (i) A Ph.D. thesis should contain an abstract not exceeding 1000 words (about four pages) in double spacing giving a brief summary of the research work embodied in the thesis.



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

- (ii) The abstract shall be printed in double space with the heading “**ABSTRACT**” in uppercase.
- (iii) Abstract should be self-complete and contain no citations for which the thesis has to be referred.

### 3.2.2 Table of contents

- (i) The table of contents lists all material that follows it. No preceding material is listed. Chapter titles, sections, first and second order sub-divisions, etc must be listed in it.
- (ii) Tables, figures, nomenclature, if used in the thesis, are listed under separate headings.

### 3.2.3 Thesis Content

#### (i) Introduction

Introduction may be the first chapter of the thesis and should contain a brief statement of the problem investigated. It should outline the scope, aim, general character of the research and the reasons for the student’s interest in the problem.

#### (ii) The body of Thesis

This is the substance of the research work inclusive of all data, results, tables, figure etc for the dissertation.

#### (iii) Conclusions

If required, the last chapter gives summary and conclusions of the results and the chapter may be concluded by a final sub-division titled “Scope for Further Work”.

### 3.2.4 Format of References

The list of references should appear as a consolidated list with references listed sequentially or alphabetically as they appear in the text of the thesis. If pertinent works have been consulted but not specifically cited, they should be listed as Bibliography or General References. Spacing and font size should be consistent inside a single reference, and there should be double spacing between two different references (see Section 2.5).



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

## Reference Format

For referencing an article in a scientific journal the suggested format should contain the following information: authors, title, name of journal, volume number, page numbers and year.

For referencing an article published in a book, the suggested format should contain, authors, the title of the book, editors, publisher, year, page number of the article in the book being referred to.

For referencing a thesis the suggested format should contain, author, the title of thesis, where thesis was submitted or awarded year.

For referencing a thesis in Management / Humanities /Communication, the MLA style or the APA style as a standard may be followed.

A few examples of formats of references are given below and the student should be consistent in following the style.

### ***Journals***

Exner H.E., “Physical and Chemical Nature of Cemented Carbides,” *International Metals Review*, v. 24, pp. 149-173,1979.

Spriggs G.E., “The Importance of Atmosphere Control in Hard Metal Production,” *Powder Metallurgy*, v. 13, n. 26, pp. 369-393,1970.

### ***Books***

German R.M. , Powder Injection Molding, Metal Powder Industries Federation, Princeton, NJ, USA, 1990.

### ***Thesis***

Johnson J.L., “Densification, Microstructural Evolution, and Thermal Properties of Liquid Phase Sintered Composites,” Ph.D. Thesis, The Pennsylvania State University, University Park, PA, USA, 1994.



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

## *Technical Reports*

Zukas E.G., Rogers P.S.Z., and Rogers R.S., “Experimental Evidence for Spheroid Growth Mechanisms in the Liquid Phase Sintered Tungsten Based Composites,” Informal Report: Los Alamos Scientific laboratory, USA, pp. 1-35,1976.

## *Patents*

Oenning V. and Clark I. S. R., U. S. Patent No. 4988386, 1991.

## *Journals in Non-English Language*

Weihong L. and Xiuren T., “Tungsten Matrix in Cu-W Contact Materials by Impregnation Process,” *Powder Metallurgy Technology*, v. 6, n. 8, pp. 1-4. (in Chinese),1988

### **3.2.5 Appendices**

- (i) Supplementary illustrative material, original data, and quotations too lengthy for inclusion in the text or which is not immediately essential to an understanding of the subject can be presented in Appendix or Appendices (as Appendix A , Appendix B, etc.)
- (ii) Each appendix with its title should be listed separately in the table of contents. Likewise, tables and figures contained in the Appendices are to be included in the lists of tables and figures, respectively.



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

Annexure  
B.I

## PROFORMA FOR THESIS SUBMISSION

### 1. Details of the Research Scholar

- (a) Name of Research Scholar : .....
- (b) Enrollment No. : .....
- (c) Full Time/ Part Time : .....
- (d) E-mail ID : .....
- (e) Contact Number : .....
- (f) Department : .....

2. Thesis Title: .....

.....

### 3. Annual Fee Payment Details(Enclosed Copies Fee Receipts)

Month and Year						
Amount Paid						
Receipt No.						

4. Thesis Evaluation Fee Receipt Details (Enclosed copy): Amount .....Receipt No. ....  
..... Month..... Year.....

5. No Dues Certificate : .....Yes/No

### 6. Research Publications (Please attach Photo copy of the papers and proof for impact factor):

#### (a) Number of Papers published in Journals :

Paper Published in	Number of Paper Published
<b>i. Journal</b>	
National	
International	
<b>ii. Conference</b>	
National	
International	

#### (b) Publication Details:

i. Journals (Please add as many rows as required)				
Sr. No	Details of Publications in IEEE Format	SCI/ESCI/SCOPUS/ Web of Science/ others	Impact factor (if any)	Date of publication / acceptance



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

**ISO 9001:2015 Certified University**

<b>ii. Conference (Please add as many rows as required)</b>				
Sr. No	Details of Publications in IEEE Format	SCI/ESCI/SCOPUS/ Web of Science/ others	Impact factor (if any)	Date of publication /presentation

**7. Date of Confirmation**

Particulars	Dates/Period	Remarks
Date of Provisional Registration		
Date of Final Registration (Letter of Final Registration Enclosed)		
Pre-Ph.D Seminar/Synopsis		..... Yrs..... Months after date of Final Registration
Thesis Submission		..... Months ..... days after the submission of synopsis

Certify that the information furnished above are true and correct to the best of my knowledge.

**Signature of Student**

<b>Signature of Joint Supervisor</b>
Name:
Date:

<b>Signature of Supervisor</b>
Name:
Date:

**Note:** (Font Times New Roman, Font Size 12)

(For Office use only)

**To be Verified by the DRC Coordinator with Date**

**Date of the Receipt office of Dean (RC):**

**Signature of the Dean (RC) with Date**



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

## CHECKLIST FOR PHD THESIS SUBMISSION

Annexure  
B.II

- |   |        |
|---|--------|
| 1. Proforma for Thesis submission   | YES/NO |
| 2. Three (03) copies of the Thesis along with Soft copy as per the norms of the IGDTUW Regulations. | YES/NO |
| 3. Copy of Similarity Report by Turnitin/ iThenticate Software                                      | YES/NO |
| 4. Whether Thesis submitted within the maximum duration   | YES/NO |
| a) If No, Extension of time obtained  | YES/NO |
| b) Copy of the Extension order enclosed, if applicable  | YES/NO |
| 5. Whether Thesis Submitted within three months of Synopsis submission                              | YES/NO |
| a) If no, a copy of extension by the HOD/DRC on the recommendation of DRC is enclosed.              | YES/NO |
| 6. No Dues Certificate (original )  | YES/NO |
| 7. Covering letter duly signed by the supervisor and forwarded through the HOD                      | YES/NO |
| 8. Annual Fee Payment Details(Enclosed Copies Fee Receipts)   | YES/NO |
| 9. Thesis Evaluation Fee Receipt Details (Enclosed copy)  | YES/NO |

**Checked and found correct**

**(Signature of the Supervisor/HOD with seal)**





# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

**Annexure  
B.III**

(THESIS TO BE SUBMITTED FOR EVALUATION)

## TITLE OF THE THESIS

*(Times New Roman, Font Size 18, Bold)*

Thesis Submitted in  
Partial Fulfillment for the award of

*(Times New Roman, Font Size 14)*

## DOCTOR OF PHILOSOPHY

*(Times New Roman, Font Size 16, Bold)*



By

**NAME OF STUDENT** *(Times New Roman, Font Size 16, Bold)*

Under the supervision of *(Times New Roman, Font Size 14)*

(Name of Supervisor/s)

DEPARTMENT OF.....

*(Times New Roman, Font Size 14)*

INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN

Kashmere Gate, Delhi-110006 *(Times New Roman, Font Size 14)*

Month, Year (First Submission date)

*(Times New Roman, Font Size 14)*



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

(TO BE SUBMITTED WITH FINAL THESIS AFTER FINAL VIVA VOCE)

**Annexure  
B.III**

## **TITLE OF THE THESIS**

*(Times New Roman, Font Size 18, Bold)*

Thesis Submitted in  
Fulfillment for the award of

*(Times New Roman, Font Size 14)*

## **DOCTOR OF PHILOSOPHY**

*(Times New Roman, Font Size 16, Bold)*



By

**NAME OF STUDENT** *(Times New Roman, Font Size 16, Bold)*

Under the supervision of *(Times New Roman, Font Size 14)*  
(Name of Supervisor/s)

DEPARTMENT OF.....

*(Times New Roman, Font Size 14)*

INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN  
Kashmere Gate, Delhi-110006 *(Time New Roman, Font Size 14)*

Month, Year (First Submission date)

*(Time New Roman, Font Size 14)*



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

Annexure  
B.V

(Template for Thesis Text)

## CHAPTER 1 *(Times New Roman, Font Size 14, Bold 7), Centre Aligned*

**Introduction** *(Times New Roman, Font Size 16, Bold), Left Aligned*

**1.1 Fundamentals of Physics** *(Time New Roman, 14pts, Bold, Left Aligned)*

Text (12 pts)

**1.1.1 Refraction** *(Time New Roman, 12pts, Bold, Left Aligned)*

Text (12pts)

**1.1.1.1 Refraction** *(Time New Roman, 12pts, Left aligned)*

Text (12 pts)



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

**Annexure  
B.VI**

## CANDIDATE'S DECLARATION

*(Times New Roman, Font Size 16, Bold)*

I, ....., Enrollment No.....  
Department of .....certify that the work embodied in this Ph.D. thesis is my own bonafide work carried out by me under the supervision of ..... at Department of .....Indira Gandhi Delhi Technical University for Women. The matter embodied in this Ph.D. thesis has not been submitted in full or in part for award of any other degree/diploma of this or any other university. The work submitted for consideration of award of Ph.D is original..

**Date:** .....

**Name and signature of Student  
Department**

**Signature of Joint Supervisor**

**Name:**

**Date:**

**Signature of Supervisor**

**Name:**

**Date:**

**Note:** *(Font Times New Roman, Font Size 12)*



**Indira Gandhi Delhi Technical University For Women**  
**(Established by Govt. of Delhi vide Act 9 of 2012)**  
**ISO 9001:2015 Certified University**

**CERTIFICATE BY SUPERVISORS**

*(Times New Roman, Font Size 16, Bold)*

**Annexure  
B.VII**

**Annexure  
B.VIII**

This is to certify that the thesis entitled  
“.....” is original work and has been carried out by  
Ms.....Enrollment No..... and submitted for the award of  
**DOCTOR OF PHILOSOPHY** and that it has not been submitted in the full or in part for any  
other degree/diploma of this or any other University.

**Signature of Joint Supervisor**

**Name:**

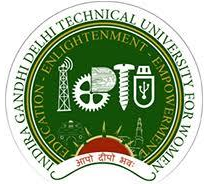
**Date:**

**Signature of Supervisor**

**Name:**

**Date:**

**Note:** *(Font Times New Roman, Font Size 12)*



**Indira Gandhi Delhi Technical University For Women**  
(Established by Govt. of Delhi vide Act 9 of 2012)  
**ISO 9001:2015 Certified University**

**COPYRIGHT TRANSFER CERTIFICATE**

*(Times New Roman, Font Size 16, Bold)*

**Title of the Thesis (12 Pts):**

**Candidate's Name (12 Pts):**

**Enrollment No (12 Pts):**

**Department (12 Pts):**

**©Copyright Transfer**

**Indira Gandhi Delhi Technical University for Women,  
Kashmere Gate, Delhi-110006. All rights reserved**

The undersigned hereby assigns all copyrights to the Indira Gandhi Delhi Technical University for Women, Kashmere Gate, Delhi-110006 for the above thesis submitted for the award of the Ph.D. degree.

Signature of the Candidate (with date)

Department

**Signature of Joint Supervisor**

**Signature of Supervisor**

**Name:**

**Name:**

**Date:**

**Date:**

*Note: However, the author may reproduce or authorize others to reproduce material extracted verbatim from the thesis or derivative of the thesis for author's personal use provided that the source and the University's copyright notice are indicated*

**Note:** *(Font Times New Roman, Font Size 12)*



**Indira Gandhi Delhi Technical University For Women**  
**(Established by Govt. of Delhi vide Act 9 of 2012)**  
**ISO 9001:2015 Certified University**

**Annexure  
B.IX**

**Supervisor's Certificate for Exclusion of Self-Published work**

*(Times New Roman, Font Size 16, Bold)*

The content of the chapters \_\_\_\_\_ have been published in

- 1.
- 2.
- 3.
- 4.

This published work has been included in the thesis and has not been submitted for award of any degree to any University/institute.

Name & Signature of Student

**Signature of Joint Supervisor**

**Name:**

**Date:**

**Signature of Supervisor**

**Name:**

**Date:**

**Note:** *(Font Time New Roman, Font Size 12)*



**Indira Gandhi Delhi Technical University For Women**  
**(Established by Govt. of Delhi vide Act 9 of 2012)**  
**ISO 9001:2015 Certified University**

**PLAGIARISM CERTIFICATE**

*(Times New Roman, Font Size 16, Bold)*

<b>Annexure B.X</b>
-------------------------

Title of the Thesis.....

.....Total Page.....

Researcher.....Enrollment No.....

Supervisor.....

Department.....

Institution.....

.....

This is to report that the above thesis was scanned for similarity detection. Process and outcome is given below:

Software used.....Date.....

Similarity Index ..... Total word count .....

The complete report is submitted for review by the Supervisor and a copy is attached along with.

**Checked by  
Name & Signature of the Student**

The complete report of the above thesis has been reviewed by the undersigned. (Check Box)

The similarity index is below accepted norms of 10%

The similarity index is above accepted norms, because of the following reasons

1.....

2.....

3.....

The thesis may be considered for the award of degree.

Name & Signature of the Student

**Signature of Joint Supervisor**

**Name:**

**Date:**

**Signature of Supervisor**

**Name:**

**Date:**





**Indira Gandhi Delhi Technical University For Women**  
**(Established by Govt. of Delhi vide Act 9 of 2012)**  
**ISO 9001:2015 Certified University**

**Annexure  
B.XI**

**CERTIFICATE FOR THESIS REVISION**

*(Times New Roman, Font Size 16, Bold)*

**(To be submitted with final thesis after Viva-voce)**

This is to certify that I ....., Enrollment No. .... Department  
..... Have incorporated all the revisions as suggested by the thesis examiners in  
the Final Thesis entitled “.....”  
.....” submitted for  
the award of Doctor of Philosophy.

Signature of the Candidate (with date)

Department

**Signature of Joint Supervisor**

**Name:**

**Date:**

**Signature of Supervisor**

**Name:**

**Date:**

**Note:** *(Font Time New Roman, Font Size 12)*



**Indira Gandhi Delhi Technical University For Women**  
**(Established by Govt. of Delhi vide Act 9 of 2012)**  
**ISO 9001:2015 Certified University**

**PUBLICATION DETAILS**

**Annexure  
B.XII**

**1. Details of Research Scholar**

- a) Name of Research Scholar : .....
- b) Enrollment No. : .....
- c) Full Time/ Part Time : .....
- d) Department : .....

2. **Thesis Title:** .....

**3. Research Publications (Please attach Photo copy of the papers and proof for impact factor):**

**(a) Number of Papers published in Journals :**

Paper Published in	Number of Paper Published
<b>i. Journal</b>	
National	
International	
<b>ii. Conference</b>	
National	
International	

**(b) Publication Details:**

<b>i. Journals (Please add as many rows as required)</b>				
Sr. No	Details of Publications in IEEE Format	SCI/ESCI/SCOPUS/ Web of Science/ others	Impact factor (if any)	Date of publication/ acceptance

<b>ii. Conference (Please add as many rows as required)</b>				
Sr. No	Details of Publications in IEEE Format	SCI/ESCI/SCOPUS/ Web of Science/ others	Impact factor (if any)	Date of publication /presentation

**Signature of Student**

**Signature of Joint Supervisor**  
**Name:**  
**Date:**

**Signature of Supervisor**  
**Name:**  
**Date:**

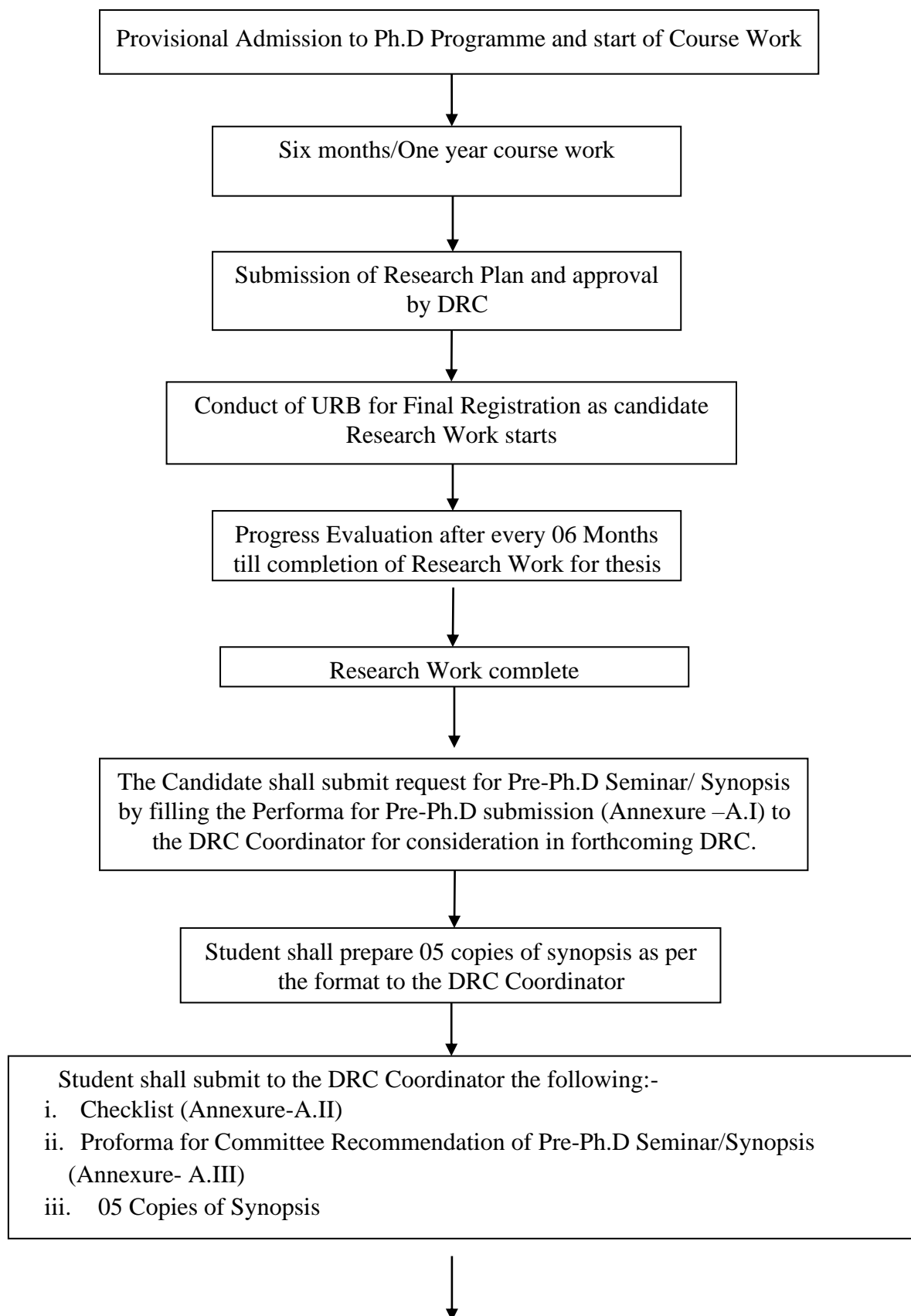
**Note:** (Font Times New Roman, Font Size 12)

*Rhad*



**Indira Gandhi Delhi Technical University For Women**  
(Established by Govt. of Delhi vide Act 9 of 2012)  
ISO 9001:2015 Certified University

**FLOW CHART FOR PRE-Ph.D SYNOPSIS AND Ph.D THESIS**  
**SUBMISSION**

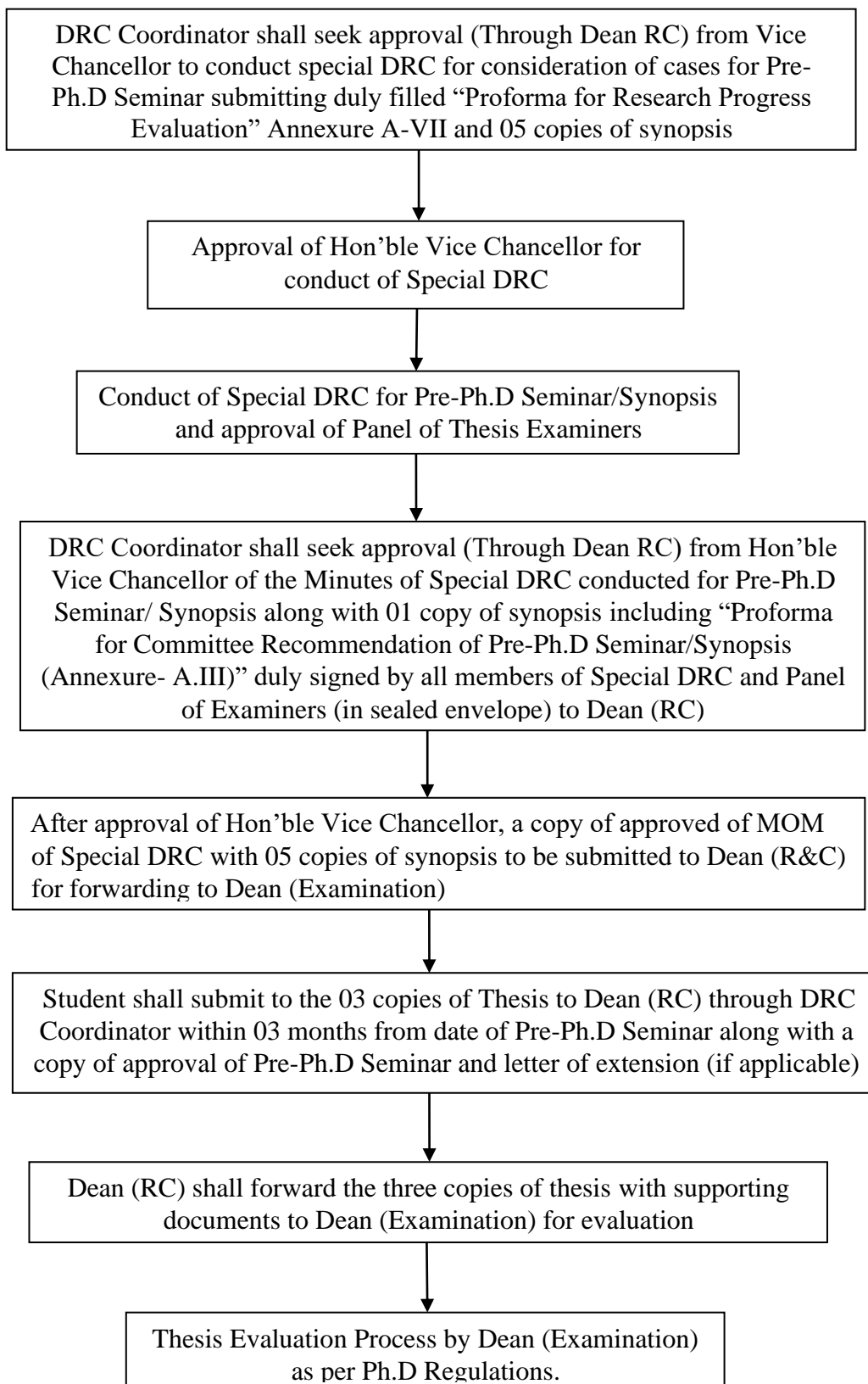


Contd.



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)  
ISO 9001:2015 Certified University



*Rhad*



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)  
ISO 9001:2015 Certified University

## Supporting Document: 3.1.1

3.1.1 The institution's Research facilities are frequently updated and there is a well defined policy for promotion of research which is uploaded on the institutional website and implemented



Assessment Period: 2016 -2021



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 09 of 2012)

ISO 9001:2015 Certified University

## University Approved Supervisor, IGDTUW

### DEPARTMENT OF CSE

Dr. Amita Dev, Hon'ble VC	Artificial Intelligence, Big Data Analytics, Speech Translation Systems,
Prof. Devendra Kumar Tayal, Professor	Machine Learning, Data & Text Mining, Natural Language Processing, AI, Data Analytics, Big Data Analysis, Fuzzy Database Management, Intelligent Computing
Prof. S.R.N. Reddy, Professor	Computer Education, Embedded systems, Mobile Computing, Wireless Sensor Network, Real Time Systems, IoT
Prof. Ela Kumar, Professor	Artificial Intelligence, Web Technologies, Natural Language Processing, Big Data Analytics.
Prof. Seeja K.R., Professor	Data Mining, Algorithms, Intelligent Computing, Machine Learning, Biometrics, Deep Learning
Dr. Vivekanand Jha, Assistant Prof.	Wireless Sensor Networks, Internet of Things, Computer Networks, Algorithms Design, Machine Learning, Passive Optical Networks
Dr. Ravinder M., Assistant Prof.	Image Processing, Video Retrieval, Image Retrieval, Machine Learning
Dr. Arunima Jaiswal, Assistant Prof.	Machine learning, Deep learning, soft computing, social media analytics, intelligent computing, big data analytics, social and semantic web.

### DEPARTMENT OF IT

Prof. R.K. Singh, Professor	Software Engineering / Software Testing, Software Project Management
Prof. A.K Mohapatra, Professor	Information Security, Secure Wireless Networks
Prof. Arun Sharma, Professor	Machine Learning, Software Eng., Big Data Analytics
Prof. Brijesh Kumar Professor, IT	<b>IOT, Drone and AI:</b> IoT Smart Board Design and Testing, Drone Design and Testing, AI Applications. <b>Semiconductor Devices and Circuits:</b> VLSI Design, Digital System Design, Flexible Electronics, Devices & Circuits Modeling and Simulation.

Prof. Poonam Bansal Professor, CSE-AI	AI, Machine learning, Data Analytics, Speech Technology
Dr. Nonita Sharma Associate Prof., IT	Data Mining, Machine Learning, Wireless Sensor Network, IoT
Dr. Deepak Kumar Sharma Associate Prof., IT	Wireless Sensor Network, Network Security, Internet of Things Communication Protocols, Cloud and Fog Computing
Dr. S. Kamble, Associate Prof., CSE-AI	Image and Video Processing, Language Processing, Data Analytics
Dr. Kalpana Yadav, Assistant Prof.	Software Reliability, Neural Networks, Data Communication Networks.
Dr. Niyati Baliyan, Assistant Prof.	Knowledge Engineering and Semantic Web, Machine Learning and Deep Learning, Natural Language Processing
Dr. Mohona Ghosh, Assistant Prof.	Cryptography, Cyber Forensics, Cyber Security
Dr. Nisha Rathee, Assistant Prof.	Data Analytics, Data and Text Mining, Machine Learning, Social Media Analytics, Bio-inspired Optimization Techniques, Model Based Software Testing
Dr. Bhawna Narwal, Assistant Prof.	Information Security, Wireless Network Security, IoT Security
Dr. Gaurav Indra, Assistant Prof.	Network Security, Internet of Things Communication Protocols, Distributed Consensus in Blockchain Ecosystem
<b>DEPARTMENT OF ECE</b>	
Prof. Ashwni Kumar, Professor	Optical Communication, Digital Signal Processing, VLSI, Strategic MGT, Telecom MGT
Prof. Jasdeep Kaur, Professor	VLSI, Analog, Mixed Mode Circuits and Systems Design
Prof. Nidhi Goel, Professor	Embedded System, Computer Vision, Multimedia Security, Medical Image Processing, Renewable Energy Resources
Prof. Vandana Niranjana, Professor	VLSI Design, Low Power Low Voltage CMOS circuits, Mixed Signal design, BiCMOS Circuits, Microelectronics, Radio Frequency circuits, Analog Integrated Circuits.
Dr. Maria Jamal, Assistant Prof.	Control Engineering, Electrical Engineering Smart Grid, Medical Engineering, Neural Network, Artificial Intelligence
Dr. Shobha Sharma, Assistant Prof.	VLSI design

Dr. Kanchan Sharma, Assistant Prof.	Optical and Wireless communication, Digital Image Processing, Microwave and antenna design, Signal processing, Wireless sensor network, Information security, IoT
Dr. Pankaj Gupta, Assistant Prof.	Power Systems, Power Electronics, Control Systems, Electrical Engineering & Renewable Energy Sources.
Dr. Richa Yadav, Assistant Prof.	Digital Signal Processing, Designing of Fractional Order Differentiators and Integrators, Optimization of Operators, Evolutionary Algorithms, Digital Image Processing
<b>DEPARTMENT OF MAE</b>	
Prof. N.R. Chauhan, Professor	Machine Design Engineering, Tribology Fluid Film Bearing, FEM Computation Engineering, Vibration, Alternate Fuels in IC Engines, Composite Material, Robotics & Automation, Manufacturing & Automation
Prof. Manoj Soni, Professor	Production and Automation Engineering, Prosthetics.
Dr. O.K. Singh, Associate Prof.	Thermal Science and Engineering, Thermal Power Plant, Refrigeration and Air-Conditioning.
Dr. Deepti Chhabra, Assistant Prof.	Industrial Engineering, Manufacturing and Production Engineering, Manufacturing Automation, Green Manufacturing , Flexible Manufacturing System, and Industry 4.0
Dr. Pankaj Tomar, Assistant Prof.	Tribology, Applied Mechanics, Green Manufacturing.
Dr. Shipra Aggarwal, Assistant Prof.	Manufacturing Automation, Tribology of fluid film bearings, Material Science, Machine Design Engineering
Dr. Vivek Chawla, Assistant Prof.	Robotics and Automation, Production Engineering and Management, Flexible Manufacturing Systems, Composite Materials, Industrial Engineering and Project Management
Dr. Pooja Bhati Assistant Prof.	Biomaterials, Biomedical Devices, Polymers, Polymer Processing, Composites and Scaffolds, soft robotics, computational studies, material science and manufacturing science .
<b>DEPARTMENT OF APPLIED SCIENCES &amp; HUMANITIES</b>	
<b>PHYSICS</b>	
Prof. Chhaya Ravi Kant, Professor	Nanotechnology, Nano materials, Thin Film Technologies
Dr. Dinesh Ganotra, Associate Prof.	Applied Optics, Digital Image Processing, Optical Information Processing, Panoramic and 3-D Imaging
<b>CHEMISTRY</b>	
Prof. Ranu Gadi, Professor	Atmospheric Sciences (carbonaceous aerosols, organic compounds and trace gases)



Dr. N. Bhavani Prasad, Assistant Prof.	Materials Science, Nanoscience and Nanotechnology
<b>MATHEMATICS</b>	
Prof. Shalini Arora, Professor	Mathematical programming, Combinatorial Optimization, Allocation Problems
Dr. Geeta Sachdeva, Assistant Prof.	Operations Research, Nonlinear Programming
<b>ENGLISH</b>	
Dr. Bhavya, Assistant Prof.	English Literature, Communication Studies
<b>DEPARTMENT OF A&amp;P</b>	
Prof. Rashmi Ashtt' Professor	Urban planning: Infrastructure Planning, Sustainable Planning, Governance, Gender sensitive planning, Inclusive planning, Smart cities  Architecture: Architectural Pedagogy, Digital architecture, Sustainable architecture, Intelligent Buildings, Gender specific Architecture

*Rhad*



**Indira Gandhi Delhi Technical University For Women**  
(Formerly Indira Gandhi Institute of Technology)  
Kashmere Gate, Delhi-110006

16312

**RESEARCH WING**

F. No. RW(08)/IGDTUW/URB/2019/963

Dated: 03/04/2019

**OFFICE ORDER: 07**

As approved in the Fourth Meeting of URB dated 27<sup>th</sup> February 2019, University Approved Supervisors/Joint Supervisors at IGDUTW for following:

S. No	Name of Faculty	Supervisor / Joint Supervisor
1	Dr. Amita Dev, Vice Chancellor	Supervisor
2	Dr. Vandana Niranjani, Associate Prof., Deptt of ECE	Supervisor
3	Dr. Pankaj Tomar, Assistant Prof., Deptt of MAE	Supervisor
4	Dr. Niyati Baliyan, Assistant Prof., Deptt. of IT	Supervisor
5	Dr. Pankaj Gupta, Assistant Prof., Deptt of ECE	Joint-Supervisor
6	Dr. Ravinder M., Assistant Prof., Deptt. of CSE	Joint Supervisor
7	Dr. Sumit Kumar Yadav, Assistant Prof., Deptt. of CSE	Joint Supervisor
8	Dr. Sourabh Bharati, Assistant Prof., Deptt. of IT	Joint Supervisor

Dr. Chhaya Ravikant  
Dy. Dean (R&C)

Copy to:

1. Hon'ble Vice-Chancellor
2. All Deans/Dy. Deans (EA, AA, SW, Plg., IRD)
3. All HOD (CSE, IT, ECE, MAE, AS&H)
4. All DRC Coordinators
5. Ph.D Coordinator
6. All University Approved Supervisor/Joint Supervisor
7. Guard file



**Indira Gandhi Delhi Technical University For Women**  
(Formerly Indira Gandhi Institute of Technology)  
Kashmere Gate, Delhi-110006

**RESEARCH WING**


F. No. RW(08)/IGDTUW/URB/2020/ 1288

Dated: 22/06/2020

**OFFICE ORDER: 08**

As approved in the Fifth Meeting of URB dated 24<sup>th</sup> February 2020, the following faculty members have been approved as University Approved Supervisors for the Ph.D Programme.

S. No	Name of Faculty	Supervisor
1	Dr. Maria Jamal, Assistant Prof., ECE	Supervisor
2	Dr. Shobha Sharma, Assistant Prof., ECE	Supervisor
3	Dr. Vivekanand Jha, Assistant Prof., CSE	Supervisor
4	Dr. Shipra Aggarwal, Assistant Prof., MAE	Supervisor
5	Dr. Vivek Chawla, Assistant Prof., MAE	Supervisor
6	Dr. Mohona Ghosh, Assistant Prof., IT	Supervisor

  
Dr. Chhaya Ravikant  
Dy. Dean (R&C)

Copy to:

1. Hon'ble Vice-Chancellor, IGDTUW
2. Registrar, IGDTUW
3. All Deans/Dy. Deans (EA, AA, SW, Plg., IRD), IGDTUW
4. All HOD (CSE, IT, ECE, MAE, AS&H), IGDTUW
5. All DRC Coordinators, IGDTUW
6. Ph.D Coordinators, IGDTUW
7. All University Approved Supervisors, IGDTUW
8. Guard file



**Indira Gandhi Delhi Technical University For Women**  
Kashmere Gate, Delhi-110006

**RESEARCH WING**

F. No. RW(03)/IGDTUW/URB/2021/1449

Dated: 13/04/2021

**OFFICE ORDER**

As approved in the Sixth Meeting of URB dated 10<sup>th</sup> February 2021, Dr. Pooja Bhati, Assistant Professor, Deptt. of MAE has been approved as University Approved Supervisor for the Ph.D Programme.

  
Prof. Ranu Gadi  
Dean (R&C)

Copy to:

1. Hon'ble Vice-Chancellor, IGDTUW
2. Registrar, IGDTUW
3. All Deans (EA, AA, SW, IRD), IGDTUW
4. All HOD (CSE, IT, ECE, MAE, AS&H), IGDTUW
5. All DRC Coordinators, IGDTUW
6. Coordinators (R&C), IGDTUW
7. All University Approved Supervisors, IGDTUW
8. Guard file



**Indira Gandhi Delhi Technical University For Women**  
(Formerly Indira Gandhi Institute of Technology)  
Kashmere Gate, Delhi-110006

**RESEARCH WING**

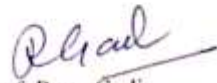
F. No. RW(06)/IGDTUW/URB/2022/

Dated: 26/05/2022

**OFFICE ORDER**

The following faculty members have been approved in the Seventh Meeting of URB dated 23<sup>rd</sup> March 2022, as University Approved Supervisors for the Ph.D Programme.

S. No	Name of Faculty	Supervisor
1	Dr. Arunima Jaiswal, Assistant Prof., CSE	Supervisor
2	Dr. Dcepti Chhabra, Assistant Prof., MAE	Supervisor

  
Prof. Ranu Gadi  
Dean (R&C)

Copy to:

1. PS to Hon'ble Vice-Chancellor, IGDTUW
2. PA to Registrar, IGDTUW
3. HODs(CSE, MAE) IGDTUW
4. DRC Coordinators (CSE, MAE), IGDTUW
5. Coordinator R&C, IGDTUW
6. Concerned faculty members, IGDTUW
7. Guard file



## Supporting Document: 3.1.1

3.1.1 The institution's Research facilities are frequently updated and there is a well defined policy for promotion of research which is uploaded on the institutional website and implemented



**Assessment Period: 2016 -2021**



**Indira Gandhi Delhi Technical University for Women**

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

---

**NORMS, RULES & REGULATIONS FOR UNDERTAKING  
SPONSORED RESEARCH AND INDUSTRIAL CONSULTANCY**

**IN**

**INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN**



## INTRODUCTION AND GENERAL INFORMATION

1. **Introduction.** Sponsored Research and Industrial Consultancy projects are essential means of enhancing institution-industry interaction and faculty development. By supporting the Govt., PSU and the industry, the University intends to contribute towards the Country's economic growth and serve the society. Therefore, as a matter of policy, the University encourages its faculty members to undertake scientific and technical research/collaboration and consultancy work with outside agencies.

2. **Objectives.** The objectives of promoting University consultancy and sponsored research project in the University shall be as given below: -

- 2.1 The primary objective of undertaking any sponsored research project and consultancy work shall be creation of new knowledge, widening and expansion of existing knowledge and experience of faculty and staff members.
- 2.2 All types of sponsored research projects and consultancy works irrespective of value of the project shall be acceptable so long as there is a distinct value addition to the faculty and staff. The work must be challenging and must involve niche areas of expertise available in the University.
- 2.3 The research and consultancy works which are likely to bring repute to the University and increase the number of patents in favour of the faculty and the University will be given the top priority.
- 2.4 All University consultancy and sponsored research projects in support/partnership of National and International agencies, Govt., PSUs, or Industries engaged in development of major infrastructure and/or in economic development shall be considered subject to the academic and administrative restrictions laid down by the University.

3. **IRD Cell: Organization for Control and Management.** For the purpose of administration in fulfilment of the objectives of the University research and consultancy as laid down above, the University shall run Cell named IRD Cell headed by a Dean (IRD) selected for the following purposes: -

- 3.1 Execution of all administrative functions including planning, budgeting, project monitoring (both technical and financial), budgetary control, compliance with terms and conditions of agreement/contract between sponsor(s) and the University etc.
- 3.2 Administration of all the contractual / deputed project personnel and inventory management of stores procured through the PI and HOD.



- 3.3 Promotion of University research and consultancy, Technology Transfer, IPR and Software Marketing activities etc.
  - 3.4 Liaison with PIs, the University and Sponsors.
  - 3.5 Utilisation and monitoring of various development funds such as RDF and PDF as described.
  - 3.6 Any other activities that may be assigned from time to time.
4. **Categories.** The sponsored research and consultancy associated with the University can be broadly classified into two categories:
    - 4.1 **University Research and Departmental Research at Academic Centers.** Every department has faculty and students involved extensively in research activities. Undergraduate education is greatly benefited by the environment of postgraduate programs, while both the curricula derives strength in a research environment created by doctoral and postdoctoral programs. Not only the departments of the University, the various academic centers are also involved in research activities, in order to contribute and benefit from the advances in knowledge frontiers, which will help generate state-of-the-art technologies responding to the need of the country.
    - 4.2 **University Sponsored Research and Industrial Consultancy.** Sponsored Research (SR) and Industrial Consultancy (IC) are two important modes through which the faculty supports the development of knowledge and technology. Indira Gandhi Delhi Technical University for Women (IGDTUW) recognizes Sponsored Research (SR) and Industrial Consultancy (IC) as the essential attributes of teaching and research. A full-fledged office operating under Dean (IRD) provides administrative and accounting support to the faculty undertaking sponsored research and consultancy work.
  5. **Eligibility and Restrictions.** Following eligibility conditions shall apply: -
    - (a) All types of University consultancy and sponsored research projects and related assignments can be taken up only by full time faculty including VC and academic staff. The extent of works undertaken be such that it will not interfere with the discharge of their normal duties.
    - (b) All types of University consultancy and sponsored research projects and related assignments, whether carried out by an individual or a group, irrespective of the quantum of facilities of the University availed and irrespective of amount involved shall be accepted only with the prior permission of the Dean (IRD)/VC. While seeking the sanction the nature of the job and time period involved must be specified.
    - (c) No ceiling limit has been prescribed for undertaking University consultancy and sponsored research projects and related assignments provided (i) consultancy work does not interfere with the normal teaching / research work in the University and other duties of the staff member(s) concerned and (ii) the total time to be spared by the consultant staff member(s) on all consultancy jobs in hand at a particular time should not exceed the laid down maximum limit of hours per week.
    - (d) University staff may be granted project leave up to 10 days during a calendar year for work related to Sponsored Research and Industrial Consultancy Projects, in addition to the special casual leave available as per norms.
  6. **Exemptions.** These rules shall not apply to examination work such as paper setting, evaluation, superintendence, invigilation, fees for attending Selection Committee Meeting, honorarium, fees for report writing and publications, lectures etc. All fees for such academic work will be paid directly to the faculty concerned without any share accruing to the University. The permission of the concerned Head is to be obtained by the concerned faculty before undertaking such assignments except those which are confidential/secret in nature such as, paper setting for

examination, attending UPSC selection committees etc. Absence from duty for work of this nature where payment of a fee is involved shall be on the basis of leave of the kind due and may be obtained in the usual manner.

7. **University Sponsored Research and Industrial Consultancy.** Sponsored Research and Industrial Consultancy are two important modes through which the faculty supports the activities contributing to the development of knowledge and technology. In the present times of continuous innovation and fast changing technology the curriculum must also be updated continuously to keep pace with time and research and consultancy projects help the faculty to remain in organic contact with the technological change. Thus, the activities of sponsored research and industrial consultancy have become an essential part of the activities of the teachers. Historically, this University was set up to cater to the development needs of India and that tradition has continued over the last several years. The University has well recognized core competence in traditional engineering and its benefit is harnessed for the country's industrial and economic growth by extending consultancy services. The University, through its faculty, can handle almost any type of problem/need of the industry.

8. **Consultancy Services.** The faculty of this University is competent to provide a wide variety of consultancy services in almost every discipline, some of them are:

- (a) Cause-and-remedy studies
- (b) Pre-feasibility and feasibility studies
- (c) Detailed project reports
- (d) Design of systems/components/processes
- (e) Validation of designs/drawings
- (f) Development of industrial products/systems/processes
- (g) Development of systems software
- (h) Development of application software for offline and online applications.
- (i) Technical and Energy Audit
- (j) Industry supported training programmes
- (k) Training programme for faculty/ industry persons organized by the faculty of IGDTUW

9. **Modes of University Industry Interaction.** For University Industry Interaction the University encourages its faculty, scientists, technicians and students to interact with industry in all possible ways with the spirit of deriving mutual benefit. The major modes of interaction are listed below:

- (a) Professional consultancy by the faculty to industries.
- (b) Industrial testing by faculty & technicians at site or in laboratory.
- (c) Joint research programs and field studies by faculty and people from industries.
- (d) Visits of faculty to industry for study and discussions or delivering lectures.
- (e) Visits of industry executives and practicing engineers to the University for Seeing Research Work and laboratories, discussions and delivering lectures on industrial practices, trends and experiences.
- (f) Memoranda of Understanding between the University and industries to bring the two sides emotionally and strategically closer.
- (g) Human resource development programmes by the faculty for practicing engineers.

- (h) Workshops, conferences and symposia with joint participation of the faculty and the industries.
- (i) Participation of experts from industry in curriculum development.
- (j) Collaborative degree programs.
- (k) B.Tech. and M.Tech. projects/dissertation work in industries under joint guidance of the faculty and experts from industry.
- (l) Practicing engineers taking up part-time M.Tech./Ph.D. program at IGDTUW, Delhi.
- (m) Short-term assignment to faculty members in industries.
- (n) Visiting faculty/professors from industries.
- (o) Professorial Chairs sponsored by industries at the University.
- (p) R&D Laboratories sponsored by industries at the University.
- (q) Scholarships/fellowships by industries at the University for the students.
- (r) Practical training of students in industries.

10. **Initiation and Management of Consultancy Projects.** Each consultancy project has a Principal Investigator (PI) who is a faculty member/scientist in the service of the University and is responsible for:

- (a) Formulating the project proposal which may include planning of the work to be done, estimating costs according to the guidelines provided in the University regulations, if identifying other faculty member(s)/ scientist(s) in the service of the University to work as Co-investigators of the project and identifying technical staff for assistance, if required.
- (b) Co-ordination and execution of work.
- (c) Associating students, outside experts and external agencies, as and if required.
- (d) Handling all communications with the client.
- (e) Writing intermediate and final reports for the project.
- (f) Making recommendations to the Dean (IRD) regarding expenditure from the project funds and remuneration to be paid to faculty, staff and students.

11. **The Client (sponsoring organization).** The client usually approaches the University for consultancy work through a faculty member or a functionary of the University (i.e. Head of the Department, Dean (IRD) or Vice Chancellor/Pro-Vice Chancellor). Sometimes, some faculty/set of faculty members may also be interested in taking part in a bidding process to get a prestigious research/consultancy project offered by any national/international agency on competitive rates. When a faculty member is approached for the work, he will generally be the Principal Investigator, if the work falls in his/her area of expertise. If he does not wish to be the Principal Investigator, the HOD/Centre will identify a suitable person as the PI. If the project is referred to a functionary, the concerned HOD would identify the Principal Investigator according to the required expertise for the work. Normally the agreed charges of the project are to be deposited by the client, in full, before the work commences. However, this stipulation is negotiable. In cases where the work is started with only partial payment, the arrangement of balance payment will be clearly spelt out in advance and approved by Dean (IRD). The Registrar or the Dean (IRD), on behalf of the University will receive all the payment from clients. Principal Investigator will take the approval of Dean (IRD) through the concerned Head of the Department for undertaking the consultancy project.

12. **Information for a New Client.** A new client (an organization or industrial company looking for a consultancy service from this University) may proceed as follows:

- (a) The client may browse through the bio-data of faculty members and try to identify a faculty member whose expertise and experience are relevant to the problem/requirements of the client, and then write/speak to him.

- (b) When the client has identified an individual faculty member who can handle his/her problem, he can write a few words on his/her problem or requirement to that faculty member or speak to him on telephone. Telephone Numbers, e-mail address and fax of all faculty members/officials of the University are available on the website.
- (c) When it has not been possible to identify a faculty member for the work, the client may browse through the list and activities of the various departments, and try to identify a Department/Center of the University relevant to his/her problem/needs and write to the Head of the concerned Department/Center. The e-mail address or telephone and fax numbers can be seen from the web pages of the respective Department/Center. The Head will identify an individual faculty member who can take up the job and inform his/her name to the client so that further correspondence/dialogue can be held directly between them.
- (d) When it has not been possible to identify a centre/department for the work, the client may write briefly about his/her problem/needs to the Dean (IRD) at IGDTUW. The Dean (IRD) will identify the department / individual faculty member and inform the client. Subsequently the client can have correspondence/ dialogue directly with the Head of Department or the faculty member.

13. **Testing Services.** Various departments of the University regularly undertake testing work utilizing the elaborate laboratory facilities and the expertise of faculty and technicians. However, routine testing is discouraged as it diverts attention from the primary responsibility of teaching and research. The examples of a few typical testing facilities existing are:

- (a) Testing of the samples of paper, water, building materials and chemicals.
- (b) Routine type and development tests on industrial products such as electrical/electronic meters, switches, transducers, cables, circuit breakers etc.
- (c) Calibration of meters, instruments and transducers.
- (d) Environmental testing such as vibration, shock, temperature cycle, water and dust penetration.
- (e) Residual life assessment of buildings, dams, bridges and power-plant structures and equipment.
- (f) Performance testing of small hydro-electric power plants.
- (g) Testing using special facilities like: Wind Tunnel, Survey and Remote Sensing laboratories, Scanning Electron Microscope, Thermal Ionization Mass Spectrometer etc.

#### **Facilities**

14. Various other facilities available within IGDTUW are given on the website or can be obtained by writing to the Head of the Departments or the Dean (IRD)

#### **Rules and Guidelines**

15. The common guidelines for Sponsored Research and Industrial Consultancy, as approved by the BOM, Indira Gandhi Delhi Technical University for Women are enclosed at Appendix A.



# Indira Gandhi Delhi Technical University for Women

(Established by Govt. of Delhi vide Act 9 of 2012)

ISO 9001:2015 Certified University

---

## Appendix A

### NORMS, RULES & REGULATIONS FOR UNDERTAKING SPONSORED RESEARCH AND INDUSTRIAL CONSULTANCY

#### 1. Preamble

In the light of changing economic scenario, government policies and University priorities, the University considers sponsored research and industrial consultancy projects as important means for extending benefit of scientific research work at the University to the sponsoring agencies broadening the experience base of the University community and as a tool for contributing to the country's economic growth. Therefore, as a matter of policy, the University encourages its faculty members to undertake research and consultancy work as a measure of scientific/technical collaboration with outside agencies. Appropriate Research and consultancy projects, in addition, for providing much needed service to the government and industry, also benefit the concerned faculty members and the University in several ways. They enrich the professional experience and knowledge of faculty members and thus make them better educators. Research and consultancy projects provide a firsthand knowledge of the current problems of industry and the emerging area which is very helpful in tuning the curriculum to the national needs. The faculty members get an opportunity to apply their ideas for finding out the solutions to the problems in emerging areas. Furthermore, the consultancy work also provides incentives for their contribution to all categories of staff.

#### 2. Definitions

- 2.1 **University** means Indira Gandhi Delhi Technical University for Women, Delhi
- 2.2 **Department** means all the academic departments, academic centre, centre of excellence and academic service centre at the University.
- 2.3 **Vice Chancellor** means **Vice Chancellor**, Indira Gandhi Delhi Technical University for Women, Delhi.
- 2.5 **Dean of Research & Consultancy (Dean, IRD)** means Dean for development of Sponsored Research & Industrial Consultancy in Indira Gandhi Delhi Technical University for Women, Delhi
- 2.6 **IRD Advisory Committee** means committee for Sponsored Research & Industrial Consultancy, Indira Gandhi Delhi Technical University for Women, Delhi, constituted in accordance with University rules.
- 2.7 **Project** implies sponsored research projects or industrial consultancy projects or routine testing projects.
- 2.8 **Sponsored Research Projects** means Research Projects sponsored by Government, public, private, national/international agencies and autonomous bodies. Generally, the project cost including expenditure towards manpower, equipment's, consumables and supporting services of the University is borne by the sponsor.

- 2.9 **Consultancy Project** means consultancy assignment/job given by outside agency to a faculty of the University for work within mutually agreed scope. It will also include a consultancy assignment/job referred to the Head of the Department or a functionary of the University (i.e. Vice Chancellor or Dean(s) or Registrar which may be taken up as a Consultancy Project by faculty.
- 2.10 **Routine Testing Project** implies those testing works where the rates are fixed by the department.
- 2.11 **Sponsor** means the organization that offers a Project to the University and provides necessary financial support for successful completion of the project in time.
- 2.12 **Principal Investigator (P.I.)** is a member of the faculty/scientist of the University with necessary expertise and competence to conduct a Research and consultancy work. Normally, the faculty/scientist who submits the project proposal and negotiates with the sponsor and is instrumental in getting the project funding is the Principal Investigator (PI). In case of research project, emeritus fellow/chair professor/ visiting professor may also be the PI.
- 2.13 **Investigator (I)** means a person from amongst the faculty/scientist (including Emeritus Fellow, chair faculty, visiting professor) co-opted by the Principal Investigator to work jointly with him/her on the project or any other Faculty Member so permitted by the VC/Dean (IRD).
- 2.14 **Consultant:** Consultant is an individual or government / public sector undertaking/ government company engaged for a specific period to carry out specific job.
- 2.15 **Project Staff** means a person appointed in conformity with the guidelines to work on a project.
- 2.16 **Research Development Fund (RDF)** means a part of the University Overhead Charges (UOC)/share received for sponsored research and Industrial consultancy project credited to a separate fund operated by Dean (IRD).
- 2.17 **Professional Development Fund (PDF)** means a fund for individual academic staff, to which a part of the University overhead charges/ share from Research and consultancy projects are transferred.
- 2.18 **Project Monitoring Committee:** Project Monitoring Committee (PMC) means the Committee constituted to monitor the large projects with outlay of more than Rs. 50 lacs.

### 3. General

- 3.1 Individuals or Departments shall take up projects after taking approval of the Dean (IRD) through the Head of the concerned Department. All funds in connection with Projects should be received in the name of the Dean (IRD)/Registrar, IGDTUW, Delhi. The account of Projects/RDF/DDF/PDF will be maintained by IRD Office and controlled by Dean (IRD). Norms for project initiation and management are given at Annexure 1.
- 3.2 The time spent by a faculty/scientist on Consultancy Project will not exceed one day per working week plus one day during week end, thus a total of 104 man days during the calendar year.
- 3.3 Consultancy project from any sponsor can be taken up for a minimum amount of Rs. 50,000/-. For consultation work involving only site visit or personal discussion a minimum amount of Rs.10,000/- per man-day for faculty/scientist/ Gp A staff and Rs.1,000/- per man-day for technical and other non-academic staff may be charged.

- 3.4 University staff may be granted project leave up to 10 days during a calendar year for work related to Sponsored Research and Industrial Consultancy Projects, in addition to the special casual leave available as per University norms.
- 3.5 Report(s) and data collected/ originated out of project are the joint Intellectual Property of the sponsor and the investigators which can be used by the sponsor for its own use only and cannot be disclosed to a third party without prior consent of the sponsor and the Principal Investigator.
- 3.6 The IPR policy of the University shall be applicable. However, if there is a condition in MoU signed between the Sponsor and PI, regarding the IPR issue that will take precedence over the condition laid down in the above para. The report of the Sponsored Research and Industrial Consultancy projects will be kept by PI for a period of 03 years from the date of closure of the project and for routine testing from the date of issue of report.
- 3.7 If a prima-facie case of malpractice and/or misconduct is established by a fact finding committee against a staff member in connection with project(s), the Vice Chancellor, on the recommendation of Dean, IRD may prohibit the concerned staff member to take part in any new project either as Principal Investigator or Investigator, till such time that a final decision is taken by the appropriate authority in the matter. However, in such cases the concerned staff member will be expected to complete his/her obligations in the ongoing project(s) with which he/she is connected, in order that the ongoing projects and obligations to the sponsor do not suffer.
- 3.8 All purchases under projects/PDF/DDF shall be made as per norms prevailing in the University. In case of equipment which is to be carried outside, the same should be insured before they are taken out.
- 3.9 Faculty/scientist may accept honorary membership of board of directors of companies with the condition that there will not be any direct involvement of the faculty in concerned industry/company and such membership in the respective expertise is limited to three memberships.
- 3.10 A sitting fee is payable to an expert other than those involved in the project for attending consultation meetings duly notified by PI in connection with the project work with the approval of Dean (IRD)/ Vice Chancellor.

## 4. Manpower

### 4.1 Project staff

- 4.1.1 The project staff shall be appointed/hired for assisting/working on the project in any one of the following ways with the approval of Dean (IRD)/Vice Chancellor depending upon the specific requirements of the project, project length, constraints and the requirements with due justification.
  - 4.1.1.1 **Use of Existing Staff.** Existing Laboratory Staff such as technicians and those permanent or contractual staff who may be available without affecting Department schedule may be considered subject to the requirement of the project and availability of such staff. Such staff may be hired from across various Departments in consultation with concerned HOD. Such staff may be paid as per the approved rates of Overtime/Honorarium in the University or as may be approved by PI and the Dean (IRD)/Vice Chancellor.
  - 4.1.1.2 **Direct Appointment by the University.** The PI may approach the competent authority and seek permission for direct appointment/hiring of engineers and staff on the project. Such staff shall be appointed for assisting/working on the project as per prescribed selection procedure, designations, qualifications and experience requirements and consolidated fellowship/emoluments as given at Annexure 2 and 3.

4.1.1.3 **Hiring of Manpower by Hiring a Consultant/Placement Agency.** Sometimes, there may be a possibility of employed persons frequently quitting the job. In such a case, the PI may choose to hire an intermediate Consultant/Placement Agency through a tender who shall be made responsible for supplying the required qualified manpower for the entire duration. The PI shall seek permission from the Vice Chancellor through Dean (IRD) to exercise this option through a selection committee as given in Annexure 2 with the approval of Dean (IRD).

4.1.2 Open selections will be held for all project positions.

4.1.3 Appointments on all project positions drawing emolument shall be on contract only.

4.1.4 The Project staff shall work for fulfilling the objectives of the project.

4.1.5 Transfer of project staff from one project to another, either on completion or midway, may be permitted by Dean (IRD) on the recommendation of respective PIs.

4.1.6 The tenure of appointment of a project staff will be at the most for the remaining duration of the project. The severance notice may be issued to the project staff by the PI one month prior to the termination of appointment.

4.1.7 On the completion of one year or more and on the recommendation of PI, the enhancement of fellowship/emoluments of a project staff may be considered by the Dean (IRD).

4.1.8 A contractual project staff appointed shall execute a Contract Agreement with PI at the time of joining with the explicit provision that the contract may be terminated by either side, the staff or PI, by giving one month's notice or one month's consolidated emoluments in lieu of the notice. The contract will be complete when countersigned by Dean (IRD) who will retain the original contract agreement.

4.1.9 Appointment of project staff on ad-hoc basis against a project position can be considered by Dean (IRD) on the recommendation of the PI for a period not exceeding 89 days.

## **4.2 Student Assistants**

The PI may engage University Students (who may or may not be getting fellowship/ assistantship) as student assistants for the project work. The payment for such engagement shall be limited to Rs. 8000/- per month for UG and PG students, Rs. 18000/-per month for Ph. D. students and Rs. 40,000/- per month for Post Doc Fellows.

## **4.3 Consultants**

The PI may, with the prior approval of Dean (IRD) may avail the services of individuals not in the University service or government organization as Consultants. However, the amount payable to consultant(s) shall be limited to 40% of the total contracted amount in consultancy project.



## 5. Travel

- 5.1 The most expeditious and convenient mode of travel should be used to minimize period of absence from the University. Admissible DA or actual boarding & lodging expenses will be paid on production of receipt. Expenses on local travel by taxi will be reimbursed against receipt as per actual. Besides the PI may consider to exercise the following options in consultation with the Dean (IRD)/Vice Chancellor: -
- (a) Using own transport and claiming a reimbursement at certain fixed rates as may be approved by Dean (IRD)/Vice Chancellor
  - (b) Hiring a travel agency for the duration of project through a Committee as may be Approved by the Dean (IRD)/ Vice Chancellor.
- Approval for domestic travel shall be accorded by PI including for self-subject to leave approved by the competent authority. Faculty/Scientist and Group-A Officer are allowed to travel by AC taxi. Advance for travel will be approved by the Dean (IRD).
- Payment of charges to travel agents for Ticket purchase assistance, Visa assistance, Insurance etc. shall be admissible from project funds.
- However, if sponsor has specified any specific condition(s) for travel under the project that shall be followed normally.
- 5.2 Approval of Dean (IRD) and the VC will be required for all international travels and any deviations from above.

## 6. Finance and Accounts

### 6.1 Research Project

- 6.1.1 At the time of submission of a sponsored research project proposal, the PI shall make a provision of University Overhead Charges (UOC) at the rate of 20% of the total project cost or at the rate permitted by the sponsor. However, this will not be treated as a condition for accepting the award of project.
- 6.1.2 **Transfer of Staff Costs out of Sponsored Research Project to Research Development Fund:** In the Sponsored Research Project amount charges under the budget head of faculty time, staff costs will be transferred to the Research Development Fund. Further, if any amount is provided by the sponsor as honorarium to the investigators as one of the components in a Sponsored Research Project, the same may be distributed among them.

### 6.2 Consultancy Project

- 6.2.1 At the time of submission of a consultancy project proposal, the PI shall make a provision for University share at the rate of 35% of the total contracted project cost. However, such share shall be 45% for routine testings. In the case of industry supported training programmes and training programmes for faculty / industry persons organized by faculty of IGDTUW as described in 8(j) and 8(k) of the introduction and general information, the university share shall be 25%.

6.2.2 Details of distribution of project fund shall be as below:

Item	Consultancy project	Routine testing
Total money received	G	G
Service Tax	L	L
Total contracted amount (T)	(G-L)	(G-L)
University share (P)*	0.35 T/0.25T	0.45 T
Remaining amount (F)	0.65 T/0.75T	0.55 T
Total expenditure	E	E
Balance Amount for distribution (S)	(F-E)	(F-E)

\*However, in case of a large consultancy project funded by a Government Organisation, Universityshare may be negotiated with the approval of Vice Chancellor.

- 6.2.3 For consultancy project with an outlay of Rs. 10 lacs or more interim distribution may be permitted subject to the condition that the total distribution does not exceed 40% of the balance amount and that the amount of distribution is commensurate with the work completed.
- 6.3 A separate account head shall be maintained for each project by IRD Office and shall be responsible for the submission of audited statement of accounts as and when required by the sponsors.
- 6.4 For all ministerial staff, the upper limit for remuneration from Projects and other sources is 60% of the gross salary received in a financial year and for all Technical Staff it is 100%.
- 6.5 If any of the academic staff wishes to divert part or whole of his/her own remuneration to his/her Professional Development Fund, the same will be permissible.

**7. Development Funds.** Professional Development Fund (PDF) is a performance-linked fund created for the faculty and other academic staff of the University with the objective of supporting their professional needs. The fund can be utilized by the faculty to attend conferences, pay membership subscription to professional societies, and purchase books, journals, stationery, software, data base, computer and computer peripherals, etc. Similarly, Research Development Fund (RDF) are proposed which will be built from the consultancy and research projects undertaken by the University. These funds will be used for the purpose of development of required infrastructure in the department and the University respectively.

#### 7.1 Share of PDF (Professional Development Fund)

The distribution of University shares to be credited to the PDF are as per the following table.

##### Distribution of University Share in percentage

Type of Project and Component available for distribution	Distribution (%)		
	RDF	PDF	Incentive to Staff
(A) Sponsored Research Project/HRD Programmes University Overhead Charges(UOC) Received from sponsor (I)	70	20	10
(B) Consultancy Project	75	20	5
(C) Routine Testing Project	95	0	5

## **7.2 Utilization of PDF**

- 7.2.1 The PDF can be utilized by the concerned individual for the following purposes:
- Travel (domestic and abroad) and related expenditure for individual, student or outside expert
  - Exploratory visits (Academic)
  - Engagement of project staff
  - Membership fee of professional societies
  - Books, journals related, stationary and computer consumables and any storage media
- 7.2.2 All travels (domestic and abroad), engagement of persons and expenditure for more than the limit of expenditure without calling quotations under PDF shall require the approval from Dean (IRD).
- 7.2.3 The items procured out of PDF shall be properly accounted for by the concerned department /centre and shall remain as the property of the University. However, items purchased under 7.2.1 (e) can be retained by the concerned faculty members permanently during the period of service and/or on retirement/leaving the service of the University.
- 7.2.5 After leaving the University the PDF will also be available to the concerned person for 3 years for expenditure at sl. 7.2.1 a, c and d only.

**Note:** Leaving the University means not serving the University in any capacity like faculty/re-employed faculty/Emeritus Fellow/Chair faculty/visiting faculty etc. Serving as consultant will not be counted as serving the University.

- 7.2.6 For the faculty members coming from other institutions such as NITs or state Institutions to IGDTUW, who carry out projects and other activities involving contribution towards their PDF, on request the fund so accumulated could be transferred from IGDTUW to their institution with the approval of the competent authority.

## **8. Admission of Project Staff to Academic Programs**

- 8.1 A project staff is eligible to register for Ph.D. or Master's Programme of the University as per University norms subject to his/her satisfying the admission requirements of the University.
- 8.2 The concerned project staff will be required to give an undertaking that he/she will not be automatically eligible for award of University fellowship and shall finance himself/ herself beyond the tenure of the appointment if University fellowship is not awarded.
- 8.3 The project staff admitted to Ph.D./ Master's programme will be governed by the relevant ordinances and fulfil his/her obligations towards the PI & the project in which he/she is appointed.

## **9. Sponsors Specific Conditions**

Specific conditions of sponsor (e.g. DST, DAE, CSIR) for designation(s), qualifications and employment condition(s) for manpower and other expenditure related shall be followed.

## **10. Exception Clause**

These guidelines shall normally be applicable to all Projects. However, any changes required which does not constitute to policy change may be approved by Vice Chancellor on the recommendations of Dean (IRD).

## **11. Review**

These rules may be reviewed normally in three years or as per needs.

## 1. PROJECT INITIATION AND MANAGEMENT

- 1.1 Each project will have a Principal Investigator (P.I.) who will be a faculty member /Scientist in the service of the University and who will be responsible for:
- (i) Formulating the project proposal which may include
    - (a) planning of the work to be done,
    - (b) estimating costs according to the guidelines provided in the later section, and
    - (c) if necessary, identifying other Investigators, who shall also be faculty member(s)/Scientist(s) in the service of the University,
  - (ii) Co-ordination and execution of work,
  - (iii) Handling all communications with the sponsor,
  - (iv) Writing of intermediate and final reports according to the project proposal
  - (v) Ensuring that all reports bear the name of the Principal Investigator and his/her signatures and the name(s) of the Investigator(s) who participated in the project,
  - (vi) Signing the Memorandum of Understanding (MoU) or Agreement with the sponsor, if required. Guidelines for MoU/Agreement are given at Annexure 4.
- 1.2 The PI will, at his/her discretion, co-opt the names of other faculty members as Investigators.
- 1.3 The PI will prepare research project proposal in conformity with:
- (i) permitted designation and emolument/fellowship rates for project staff, with qualification and experience as specified by the sponsor otherwise of the University
  - (ii) provision for University overhead charges as per the rules of the University,
  - (iii) other guidelines for Sponsored Research Projects, and
  - (iv) Rules, Regulations & Statutes of the University
- 1.4 All research project proposals shall be submitted to the sponsors through the concerned Head of the Department and Dean (IRD).
- 1.5 It shall be the responsibility of the PI to get project work completed satisfactorily within the sanctioned grant and duration.
- 1.6 The PI shall ensure that the head-wise expenditure does not exceed the budgetary allocation as applicable.
- 1.7 The PI shall maintain the details of equipment purchased out of research project funds separately for each project and send a copy of the record to Dean (IRD) for placing the same before the Govt. for Audit, for verification or as and when required for any other purpose.
- 1.8 The PI shall be responsible for maintenance of Laboratory Record Book (LRB) as required for IPR submission, periodical and/or final technical report(s) of the research project work to the sponsor as required. He/she will also send a copy of the final technical report to Dean (IRD).
- 1.9 The PI shall write to the sponsor for timely release of funds with a copy to the Dean (IRD) for follow up, if necessary.
- 1.10 For Research Project: The sponsor which assigns the research project usually are approached by an individual or a functionary of the University (i.e. Head of the Department, Dean (IRD) or Vice Chancellor).  
For Consultancy project: The sponsor which assigns the consultancy project usually approaches the University for Consultancy work through an individual or a functionary of the University (i.e. Head of the Department, Dean (IRD) or Vice Chancellor). When an individual is approached for the work, he/she will be normally the Principal Investigator. If the project is referred to a functionary, the Principal Investigator would be identified by the Head of the Department to whom Dean (IRD) refers the project.

- 1.11 No retiring faculty member be allowed to submit a consultancy project proposal as Principal Investigator (PI), if its duration extends to one year or more beyond his/her date of retirement, or if more than half of the proposed duration of the project falls beyond the date of retirement of the PI.
- 1.12 The Emeritus Fellows, Chair Faculty, Visiting Faculty, faculty on contract etc. can be appointed/nominated/ continued as principal investigator for research projects if the sponsors do not have any objection.
- 1.13 If the PI leave the University, retires or proceeds on leave or not available for some reason, Dean (IRD), on the recommendation of the P.I. (if he/she is available) shall appoint a new PI, who will assume the powers and responsibilities of the PI. The new PI should be agreeable to become PI. The new PI will also give an undertaking to complete the project within the remaining funds and time period, to the Dean (IRD) through H.O.D. However, in exceptional circumstances, a retired faculty member may continue to work as P.I. with the approval of the Vice Chancellor, if he/she continues to serve the University in some other capacity.
- 1.14 Normally the agreed charges of the consultancy project are to be deposited by the sponsor, in full, before the work commences. However, this stipulation is negotiable. In cases where the work is started with only partial charges deposited in advance, the arrangements of subsequent receipt offunds from the client have to be clearly spelled out in advance.
- 1.15 Project file will be closed with the submission of final project report and final settlement of accounts etc.

## **2. BUDGETARY NORMS**

### **A. FOR RESEARCH PROJECTS**

The total agreed charges of a Research project will consist of the University share, actual expenses of the project covering following.

- (i) Permanent equipment to be procured / fabrication of equipment or models (refer Annexure 5 for norms of procurement of materials).
- (ii) Consumable materials (refer Annexure 5 for norms to be followed)
- (iii) Travel expenses in connection with the project work (domestic and foreign if budgeted/ allowed by sponsor)
- (iv) Computational or other charges payable to any other outside agency.
- (v) All contingency expenses for preparation of report and literature (books, journals) and any other item budgeted under the proposal and approved by the sponsor.
- (vi) Expenses for work to be carried out on payment basis, remuneration to student assistants.
- (vii) Insurance on equipment and manpower during travel.

## **B. FOR CONSULTANCY PROJECTS**

The total agreed charges of a Consultancy project will consist of the University share, actual expenses and the remuneration to be distributed to the faculty and staff. The actual expenses should cover the following costs related to the project. The service tax will be applicable as per government rules.

- (i) Permanent equipment to be procured / fabrication of equipment or models.
- (ii) Consumable materials.
- (iii) Travel expenses in connection with the project work.
- (iv) Computational or other charges the Principal Investigator may have to pay to the University or any other outside agency in the course of the execution of the work.
- (v) Charges to be paid for the use of specific equipment in the departments or central facilities.
- (vi) Contingency expenses to cover cost of supplies, preparation of report, typing, word processing, drawing, drafting, stationery, reproduction, literature (books, journals, membership fee for professional societies), postage, courier, FAX and telephone (including rental and STD/ ISD call bills of telephone at residence or mobile phones), cost of insurance of personnel/ equipment being used for the project and medical reimbursement on duty (excluding major ailments) for staff etc.
- (vii) Expenses for work to be carried out on payment basis, remuneration to student assistants.
- (viii) Insurance on equipment and manpower during travel
- (ix) Any other costs considered appropriate.

The approval of the Dean (IRD) to make any expenditure from the project funds assumes that funds are available in the project for the purpose.

### **3. Collaboration with Outside Organizations**

If collaboration with other Govt./Public Sector organizations is envisaged, the nature scope and financial budget of the proposed arrangements will also be specified at the time of submitting the project proposal for approval.

### **4. LIABILITY**

In case any legal dispute arises between the Investigator(s) and the sponsor such that the Investigator(s) are in any way, held responsible to make good the losses incurred by the sponsor, such liability will be restricted to a maximum limit which will be calculated as follows:

Maximum Liability = The total amount charged for the project – the expenditure / liabilities on the project. It is in the interest of the Investigators to bring this fact to the notice of the sponsors. The expenditure / liabilities as determined by the University will be calculated as the expenditure / liability till such date on which the sponsors inform the Investigator in writing to stop work on the project for ongoing projects, or till the end of the project for completed projects. This amount does not include the remuneration paid to the Investigator(s) and staff of the University. The University may take a suitable insurance for this purpose on a rolling basis. The expenditure on this account may be charged to the IRDFund.

The amount charged by the University is on lump sum basis. Submission of the requisite report on the work itself shall constitute the Utilization Certificate / final bill.

### **5. DISAGREEMENTS / DISPUTES**

- 5.1 Any disagreement within the University arising at any stage of a Consultancy project will be resolved in consultation with Dean (IRD) / Vice Chancellor to ensure an expeditious removal of bottlenecks and smooth functioning of the project.
- 5.2 In case of any dispute arising at any stage of Consultancy project between Investigator(s) and the sponsor(s), the Investigator(s) will be responsible for settlement of the dispute.
- 5.3 All legal action will be subject to jurisdiction at Civil Courts at Delhi.

## 6. ARBITRATION

In the event of any dispute or difference at any time arising between the parties relating to Consultancy project or any other clause(s) or any content of the right and liabilities of the parties or other matters specified therein or with reference to anything arising out of the Consultancy or otherwise in relation to the terms, whether during the Consultancy or thereafter, such disputes or differences shall be endeavoured to be resolved by mutual negotiations. If, however, such negotiations are infructuous, the dispute should be finally settled through Arbitration and Conciliation Act, 1996 by three arbitrators appointed in accordance with the said Act by VC, IGDTUW. The arbitrators shall give reasoned and speaking award and the award shall be binding on all the Parties. Any expenditure due to this arbitration if arise shall be shared equally by all the Parties. The arbitration proceedings shall be held at Delhi/ New Delhi. Further for settlement of any legal dispute, the jurisdiction of the Court shall be in Delhi/New Delhi only.

## 7. PUBLICATION OF RESULTS

PI will have the right to publish the work carried out by him/her unless the sponsors have an agreement under which their prior permission is required. In such cases the draft paper before publication will be submitted to sponsors and if no objections are raised within one month of the submission of the proposal to publish the result, it will be assumed that the sponsors have no objection to the publication.

## 8. PROJECT MONITORING COMMITTEE

For large projects the Project Monitoring Committee with the following composition shall review and assess the progress periodically (at least once a year) for timely completion of the projects. The committee may also advise Dean (IRD) in any other matter on the project.

- |   |                    |
|---|--------------------|
| (1) Dean, (IRD)   | - Chairman         |
| (2) Head of the concerned Deptt. or his/her nominee   | - Member           |
| (3) Head of one more Deptt. from relevant field or his/her nominee  | - Member           |
| (4) One faculty Member from relevant field  | - Member           |
| (5) Principal Investigator  | - Member           |
| (6) One expert from outside the University in relevant field, if required,<br>or representative of sponsor, if required by sponsor. | - Member           |
| (7) Faculty Member  | - Member Secretary |

Further, certain guidelines for project control, management and monitoring are given at Annexure 6.

## 9. DOCUMENTS TO MAINTAIN

Following documents will be maintained by P.I through his/her team members and produced for audit as and when required

- (a) **Attendance Records.** Attendance/site visit record of the P.I, members, hired staff etc. with man-hours spent during each visit.
- (b) **Inspection/Site Visit Register.** A register to record expert advice by expert members and consultants suggestions and remarks of the P.I and members with date and their signature during their visit to the site. Record feedback on its implementation also in the same register.
- (c) **Salary/Payment Record.** To record all payments made to P.I, members, salary and other payments made to staff
- (d) **T & P Register.** Register for recording hire/purchase of all equipments, materials, all consumables, non-consumables items etc. and its utilization.
- (e) **Travel Record Register.** To record details of all expenditure incurred on travel.
- (f) **Log books and Warranty/Guarantee Record.** Log books be used to record number of hours, laboratory equipment or hired or purchased equipments have been used. Besides maintain warranty/guarantee certificates and also breakdown details of equipments.
- (g) **Correspondence File** - For all correspondence since initiation
- (h) **Agreement/Contract** - maintain complete record of all agreements, contracts, drawings and such document which may constitute legal requirement.

- (i) **Record of Monthly Progress Report** - Record of monthly progress report submitted to IRD Cell and a copy of progress report submitted to client as may be desired by him.
- (j) **Any Other Document** - Any other document as directed by Dean (IRD) or as may be decided by the P.I.

**Note** - The above documents may be merged but all records must be maintained for minimum 03 years or as may be laid down by the sponsor and produced for audit or any other purpose whenever required.

## 10. FORMS

To ensure smooth administration & management of Projects, only the forms supplied by Dean (IRD) will be used by the PIs and others concerned. The list of forms and their purposes are given below: -

SN	FORM NO	NAME AND PURPOSE OF FORM
1	Dean (IRD) 01	Forms for Approval of Consultancy Project
2	Dean (IRD) 02	Consent of Proposed Investigator(s) from other than PIs Deptt
3	Dean (IRD) 03	Involvement of Consultant
4	Dean (IRD) 04	Student Assistantship-For UG/PG/Ph.D/Post Doc. Fellow
5	Dean (IRD) 05	Approval of Project Positions
6	Dean (IRD) 06	Advertisement to fill up Project Positions
7	Dean (IRD) 07	Screening Committee Report (Walk in Interviews)
8	Dean (IRD) 08	Selection Committee Report (through advertisement)
9	Dean (IRD) 09	Contract with candidates selected/engaged
10	Dean (IRD) 10	Extension of Time/Revision of Project Amount
11	Dean (IRD) 11	Travel (Domestic)
12	Dean (IRD) 12	Travel (International)
13	Dean (IRD) 13	Expenditure from PDF
14	Dean (IRD) 14	Distribution of consultancy project funds
15	Dean (IRD) 15	Certificate of T & P items purchased under project
16	Dean (IRD) 16	Proposal for Distribution of UOC received against Sponsored Research Projects
17	Dean (IRD) 17	Request for hiring of services in the project (through approved agency) or for hiring of a placement agency
18	Dean (IRD) 18	Letter for Termination of Project



**SELECTION PROCEDURES FOR RECRUITMENT OF PROJECT STAFF  
(Including for Walk in Interview)**

**1. PREPARATION OF DRAFT ADVERTISEMENT**

- (i) Principal Investigator will send the draft advertisement to Dean (IRD) for approval
- (ii) Dean (IRD) will approve the draft advertisement and return it to the Principal Investigator for notification/ advertisement.

**2. ADVERTISEMENT OF THE POSITIONS**

The Principal Investigator will advertise the positions through University website and through other means and receive the applications.

**3. SCREENING OF APPLICATIONS**

- (i) The P.I. will fix the meeting of Screening Committee and send the report of the screening committee to Dean (IRD) for approval.
- (ii) The P.I. will issue the letters to the candidates called for interview after Screening Committee report has been approved by Dean (IRD).
- (iii) For walk in interview, screening is not required.

**4. SCREENING COMMITTEE CONSTITUTION**

- (i) Faculty from the existing panel approved by the Vice Chancellor -- Chairperson
- (ii) Concerned Principal Investigator -- Member
- (iii) One faculty member from the Department as available to the P.I -- Member

**5. INTERVIEW**

- (i) The PI will fix the date of the interview and get the interview conducted. The PI will send the recommendations of the Selection Committee to Dean (IRD) for approval.
- (ii) The PI will arrange the walk-in-interviews on the advertised date by a duly approved Selection Committee.

**6. SELECTION COMMITTEE CONSTITUTION**

- (i) Faculty from the existing panel approved by the Vice Chancellor -- Chairperson
- (ii) Head of the Concerned Department or his/her nominee -- Member
- (iii) Concerned Principal Investigator -- Member
- (iv) One faculty member from outside the Department as available to P.I. -- Member
- (v) One external expert from outside the University -- Member  
If required by the sponsor

**7. FINAL SELECTION / APPOINTMENT**

Selection Committee report will be approved by Dean (IRD) and appointment letter will be issued by PI.

**PROJECT POSITIONS, QUALIFICATIONS AND FELLOWSHIPS/EMOLUMENTS, TERMS AND CONDITIONS FOR PROJECTS STAFF****1. Project Positions, Qualifications and Fellowships/Emoluments**

<b>A.</b>	<b>Fellowships</b>	<b>Minimum Qualifications</b>	<b>Amount per month (in Rs.)</b>
1	Project Associate	B. Tech/B. Arch/M.Sc./MCA	20,000/- to 40,000/- + HRA
2	Research Associate	M. Tech/M. Arch/M. B.A. (2 years duration). Ph. D. in Science	25,000/ to 50,000/- + HRA
3	Project Fellow	Ph.D. in Engg/Ph. D. in Science with 2 year experience (After Ph.D) or M.Tech. /MBA + 3 year or B.Tech. + 6 year experience	30,000/- to 70,000/- + HRA
<b>B.</b>	<b>Other Positions</b>	<b>Minimum Qualifications</b>	<b>Emoluments per month (in Rs.)</b>
4	Project Consultant	Ph.D. + 4 year experience Or M.Tech/M. Arch + 6 years experience or B.Tech/B. Arch +10 years experience	50,000/- to 1,50,000/- + HRA
5	Project Assistant (Technical)	Diploma (3 years ) duration or ITI with 4 years experience	15,000/- to 30,000/- + HRA
6	Project Officer (Admin)	MBA/CA	25,000/- to 50,000/- + HRA
7	Project Assistant (Admin)	Graduation	15,000/- to 30,000/- + HRA
8	Project Attendant (Admn/Tech.)	12 pass or 10 pass +2 year experience or 8th Pass + 4 years experience	8,000/- to 20,000/- + HRA

**Note:** - (i) To meet specific needs of the project, any change in qualification and emoluments may be approved by Dean (IRD) on the recommendation by PI.

(iii) However, if sponsor (e.g. DST, DAE, CSIR) has specified any specific designation(s), qualification and employment condition(s) for manpower that shall be followed.

2. HRA: The project staff (including those appointed on ad-hoc basis) shall be entitled to HRA as per the University rules, if accommodation in the campus is not made available to him/her. If the person is residing within the IGDTUW Campus House Rent Allowance (HRA) upto entitlement or actual payment made whichever is less will be payable. HRA shall be charged to the salary head of the respective project.
3. Conduct Rules: The project staff shall maintain record and secrecy of the findings/technical information and shall not communicate in any manner without the approval of the P.I any official document or information to any person or agency. They shall also follow general code of conduct of the University.
4. Disciplinary Proceedings: Dean (IRD) may, at his/her own discretion or on the recommendation of the PI, constitute committee(s) to conduct disciplinary proceedings against project staff, if necessary. On the basis of the report of the committee, suitable disciplinary action may be initiated and penalty be imposed by the Dean (IRD).

5. Leave: All project staff working on project shall be entitled for following types of leave:

Casual leave: 8 days per year on pro-rata basis Earned

leave: 2½ days per completed month of work

Maternity leave: 135 days (Only for the appointment for a year or more)

The record of the leave shall be allowed and maintained by PI.

6. Medical Insurance: Annual premium for medical insurance (from nationalized insurance company only) for illness requiring hospitalization may be reimbursed to project staff appointed for 1 year or more with the limit of sum assured of Rs. 2.00 Lac for self, Rs. 2.00 lac for spouse and Rs. 1.00 lac for each child (up to two children) on the recommendation of PI chargeable to project, if funds are available in the project.

## **GUIDELINES FOR MoU/AGREEMENT**

If a MoU/Agreement is required to be signed with the sponsor of a Consultancy Project, it should generally include the following clauses. Additional clauses may be added if considered necessary:

**1. General**

This section should include the reference to the proposed Consultancy and identify the parties concerned pertaining to the MoU.

**2. Scope**

This section should spell out briefly the nature of work, its limitations and the expected end results.

**3. Time Frame**

This clause must indicate the expected duration of the project and should also indicate the schedule of review of progress, submission of reports etc., if any.

**4. Consultancy Charges and payment terms**

The document must clearly indicate the charges to be paid including applicable service tax along with payment terms.

**5. Responsibilities**

This clause should define clearly the responsibilities of the various parties with regard to making the data and / or material available for the work as also for the return of the same, as and if applicable.

**6. Patents/Publications**

The MoU should clearly spell out the arrangements proposed to be made with regard to any patents or publications arising out of the proposed Consultancy project.

**7. Force Majeure**

This is an important clause and must be included to safeguard the interest of the various parties due to one or more of the unforeseen force majeure events

**8. Arbitration**

The document shall provide for a suitable channel to settle any disputes or differences related to the execution of the Consultancy project, which shall conform to clause given earlier

**9. Liability**

This clause should indicate the maximum liability which is to be accepted in the event of the project being terminated without completion at any stage and shall be in conformity with clause given earlier

**10. Amendment to the MoU**

The clause should specify a provision for amendments to any one or more clauses of the MoU through mutual consent, at any stage during work of the project, due to any reason whatsoever. Two model formats of MoU, format 'A' and format 'B' are available on the Intranet of the University and may be used as such or with minor modifications conforming to the above guidelines. Format 'B' is concise and is recommended for smaller projects. Format 'A' is much more elaborate. If a different format is used, its legal vetting by the University's Advocate will be the responsibility of the PI concerned.

### NORMS FOR HIRING/PURCHASE

**Hiring/Purchase of Equipment's, Materials and Consumables.** Hiring and/or purchase of equipment's, materials, consumables shall be done as expeditiously without wasting time as given below in the table. The inventory of items purchased will be maintained by the PI in a stock register and on completion of the project/consultancy work, the PI shall transfer the same to the inventory/stock register of the concerned department of PI/Dean (IRD) along with a Certificate (see forms) for further disposal.

Purchase up to Rs15,000/-	Purchase From Rs. 15,001 to 2.00lakh	Purchase above 2.00 lakh
1. No quotation is required. 2. PI will make the purchase solely.	1. Minimum 3 tenders/ quotations are requisite. 2. Procurement will be made through limited tender enquiry. 3. Purchase Committee will constitute of PI/Co-PI, two other faculty members (at least one member from outside the consultancy/ project team), 4. Purchase order will be issued by PI/Co-PI.	1. Minimum 3 tender responses are requisite. 2. Procurement will be made through National/Inter-national Competitive bidding. 3. Procurement may be made through limited tender enquiry. 4. Purchase Committee will constitute of PI/Co-PI, two other faculty members (at least one member from outside the consultancy/ project team), one member from IRD and one member from accounts. 5. Requirement of GFR and advertisement/publicity etc. as applicable shall be followed. 6. Purchase order will be issued by PI/Co-PI

**NOTE - In order to facilitate timely completion of projects, expeditious method of procurement in minimum possible time frame shall be adopted without violating Govt./University norms of procurement.**

## GUIDELINES FOR PROJECT CONTROL, MANAGEMENT AND MONITORING

Complete control and management of the consultancy and research work shall be exercised by the VC through Dean (IRD Cell) and the PI. Control, management and monitoring must not however interfere with the technical execution which is time bound, nor should it come in conflict with the primary responsibility & accountability for which the PI and his/her entire team are responsible. For this purpose, all the functions shall be defined as **Administrative Functions and Control, Technical Functions and Control and Financial Functions and Control**. These are described in the Table below along with primary and advisory responsibilities.

Type of Function /Control	Description	Primary Responsibility & Accountability	Advisory Responsibility
<b>Administrative Functions and Control</b>	Administrative functions include acceptance of suitability of a consultancy/project, approval of proposal by any PI and his/her team, monitoring technical adequacy and progress, monitoring financial progress etc.	VC through Dean (IRD) and HODs of the Departments	HOD or P.I may request for certain changes/ relaxations depending upon specific work & constraints
Note	In fulfilment of its administrative functions, Dean (IRD) shall be free to lay down or call for any document, nominate any appropriate team in consultation with the concerned HOD to visit the site etc. However, while on administrative matters, the decision of VC /Dean (IRD) shall be final but on all technical and financial matters, the decision of the PI shall be final and the P.I shall continue to be held overall responsible and accountable.		
<b>Technical Functions and Control</b>	<p>1. Technical functions and control include all technical aspects of the consultancy/research project for which the P.I along with his/her team is to be considered competent and an expert. The complete team shall be collectively responsible <b>Technically and held accountable JOINTLY</b>.</p> <p>2. However, while formulating the proposal, the P.I must lay down clearly the technical expertise and responsibility of each of his/her members so that they are held accountable for decisions pertaining to that area/subject</p>	The complete team shall be collectively responsible <b>Technically and held accountable JOINTLY</b> . P.I may however <i>ab initio</i> itself define the technical roles assigned to various members of his/her team.	Dean (IRD) and HOD may offer valuable suggestions, <b>however, these will only be advisory. The decision of the team as conveyed by P.I shall be final on all technical matters</b>
<b>Financial Functions and Control.</b>	Financial functions include budgetary planning and expenditure on manpower, materials, TA/DA etc., optimal utilisation of funds for work and following Govt./ IGDTUW rules on expenditures.	Primary responsibility of the PI and his/her team	Dean (IRD), accounts and audit.



## Supporting Document: 3.1.1

3.1.1 The institution's Research facilities are frequently updated and there is a well defined policy for promotion of research which is uploaded on the institutional website and implemented



**Assessment Period: 2016-2021**



## INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN

### FORM FOR APPROVAL OF CONSULTANCY PROJECT

1. Name of the Department .....

2. Title of the Project.....

3. Sponsor's Name and Address.....

4. Type of Sponsorship: Private Sector/Govt. Sector/Public Sector Foreign Agency Others (Please Specify)

5. Payment to be received in: FULL Indian Currency PART Foreign Currency

6.(i) Date of Commencement ..... (ii) Expected Date of Completion .....

7. Whether MoU / Agreement Signed with Agency: Signed /Not Signed

8. Details of Staff involved:

Name of Investigator(s) with Employee No	Department	Brief Role as Expert or Member	Man-days	Signature
(P.I.)				
ATTACH ANOTHER SHEET GIVING DETAILS - (i) SN (ii) NAME (iii) CAPACITY i.e - P.I/EXPERT/MEMBER (iv) DETAILS TASKS AND RESPONSIBILITIES FOR WHICH ACCOUNTABLE (v) TENTATIVE MAN-DAYS (vi) AGREED MINIMUM HOURLY REMUNERATION(IF PROFITABLE) (vi) SIGNATURE				

Technical Staff (only regular Staff) with Employee No.	Brief Role	Technical Staff (only regular Staff) with Employee No.	Brief Role

9. Budget (should conform to the amount of contract/agreement with the sponsor)

Budget Head / Description	Budgeted Amount	Present Allocation (only in case of Part Payment)
1. Gross Amount including Service Tax		
2. Less- Service Tax		
3. Contracted Amount		
4. University Share (35% of Contracted Amount)		
5. Expenditure (Estimated*)		
6. Honorarium (Estimated)		

\* ATTACH SEPARATE SHEET GIVING COMPLETE TENTATIVE DETAILS of the amount to be used by the PI for cost of Material, Contingency/Misc., Travel, Work-hire, Consultant, Research Project Staff etc.

Correspondence with sponsor attached:  request from sponsor  offer from PI  response from Sponsor

Recommended

Signature of Head of the Deptt/Centre (with date & stamp)

Signature of the Principal Investigator (with date)

**Dean (IRD) Office, IGDTUW**

Project No: .....

Dated:.....

Approved /Not Approved

**Dean (IRD)**

Copy to: 1. Principal Investigator 2. Head of the Department

**FOR USE BY DEAN (IRD) ACCOUNTS OFFICE**

PROJECT No. \_\_\_\_\_

University Share to be deducted

35% of the Contracted Amount

Note:

1. In case of part payment by the agency, the University share will be deducted on contracted part of each installment.
2. The University Share will be distributed amongst RDF (RC Fund), PDF and incentive to staff etc. on getting full payment and at the time of closing the project only.

CONTRACTED AMOUNT	% of UNIVERSITY SHARE	COORDINATOR IRD	REGISTRAR
	35%		

University Share: Rs. ....

For Comments / Remarks

**INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN**

**Form for Consent of Proposed Investigator(s) from other than PI's Department**

- 1. Project No.  
.....
- 2. Name and department of Principal Investigator:  
.....
- 3. Title of Project  
.....  
.....  
.....
- 4. Name and department of Proposed Investigator(s)  
.....  
.....
- 5. Number of man-days of involvement (for each investigator)  
.....

**Agreed**

**Recommended**

Signature of Proposed Investigator(s)  
(with date)

Signature of Principal Investigator  
(with date)

---

**Dean (IRD), IGDTUW**

Approved /Not Approved

**Dean (IRD)**

- Copy to:** 1. Principal Investigator  
2. Investigator(s)

**INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN**

**FORM FOR INVOLVEMENT OF CONSULTANT**

- 1. Project No.:  
.....
- 2. Name and department of Principal Investigator:  
.....
- 3. Title of Project:  
.....  
.....
- 4. Name and address of the proposed Consultant(s)  
.....
- 5. Nature of involvement of Consultant(s):  
.....
- 6. Proposed duration of engagement of the Consultant – man months..... or .....
- 7. (a) Total Contracted amount excluding service tax = (T) =  
Rs.....  
(b) Proposed payment to Consultant(s) = (B) = Rs.  
.....  
(c) Approved amount to Consultants earlier, if any (C) =  
Rs.....  
(d) Payment in terms of percentage of total contracted amount = [(B+C)/T] \*100 =  
..... %

**Encl.:** 1. Brief bio-data of the Consultant      2. Consent of the Consultant

Signature of Principal Investigator (with date)

---

**Dean (IRD), IGDTUW**

Approved /Not Approved

**Dean (IRD)**

**Copy to:** 1. Principal Investigator

## INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN

## FORM FOR STUDENT ASSISTANTSHIP\* – FOR UG/PG/PH.D

1. Project No.:

.....

2. Name of Principal Investigator:

.....

3. Name and details of UG/PG/Ph.D. student(s):

.....

Sl. No.	Name	UG/PG/Ph.D. student(s)	Amount (Rs.)	Duration
1.				
2.				
3.				
4.				

4. Signature of supervisor, if other than P.I., (for Ph.D):

.....

Approved

Signature of P.I.  
(with date)

- \*1. The PI may engage University students (who may or may not be getting fellowship/ assistantship) as student assistants for the project work. The payment for such engagement shall be limited to Rs 8,000/- per month for UG and PG students, Rs 18,000/- per month for Ph. D. students.
2. For sponsored research project(s), this is admissible only if there is a provision in the sanctioned budget.

**INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN**

**FORM FOR APPROVAL OF PROJECT POSITION(S)\***

1. Project No.: .....
2. Name and Department of Principal Investigator: .....
3. Title of the Project: .....
4. Sponsor: .....
5. Date of Start: ..... End Date: .....
6. Position(s) details of the advertisement: .....

Project position(s)	Monthly Emoluments	Duration of the Project

7. Draft advertisement: Enclosed

**Signature of Principal Investigator (with date)**

\*The project staff shall be appointed as per clause 4.1 and the Annexure-2 and 3 of rules for sponsored research and industrial consultancy projects.

-----  
**Dean (IRD), IGDTUW**

**Principal Investigator**

Project position(s) and draft advertisement approved

**Or**

Project position(s) and draft advertisement with the proposed modifications approved

Approved /Not Approved

**Dean (IRD)**

**Copy to:** 1. Principal Investigator

**INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN**  
**(Name of Dept./Centre)**

Dated: .....

**ADVERTISEMENT TO FILL UP PROJECT POSITIONS\***

Applications are invited from Indian nationals only for project position(s) as per the details given below for the consultancy/research project(s) under the Principal investigator (Name:.....), Dept./Centre..... INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN.

1. Title of the project:
2. Sponsor of the project:
3. Project position(s) and number:
4. Qualifications:
5. Emoluments:
6. Duration of the project:
7. Job description:

**Note:**

1. Candidates before appearing for the interview shall ensure that they are eligible for the position they intend to apply.
2. Candidates desiring to appear for the Interview should submit their applications with the following documents to the office of Principal Investigator through email, by post or produce at the time of Interview:
  - Application in a plain paper with detailed CV including chronological discipline of degree/certificates obtained.
  - Experience including research, industrial field and others.
  - Self-Attested copies of degree/certificate and experience certificate, if any.
3. Candidate shall bring along with them the original degree(s)/certificate(s) and experience certificate(s) at the time of interview for verification.
4. Preference will be given to SC/ST candidates on equal qualifications and experience.
5. Please note that no TA/DA is admissible for attending the interview.

The last date for application to be submitted to office of the Principal Investigator is ..... by 5 PM.

The interview will be held at ..... on ..... at ..... (to be given only for walk in interview)

**Tel:**

**Fax:**

**Name and signature  
of Principal Investigator**

**Email:** \*To be uploaded on IGDTUW website and copy may be sent to appropriate addresses by PI for wider circulation.

**INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN**

**SCREENING COMMITTEE REPORT**

- I. Copy of approval from Dean (IRD) for project position(s) and advertisement to be attached by P.I.
  
- II. Member of screening committee
  - 1. Chairperson (from the approved panel) .....
  - 2. P.I. (Member).....
  - 3. Faculty member from the Department(Member) .....
  
- III. Number of application(s) received:  
.....
  
- IV. Name of Candidate(s) recommended for interview: (To be enclosed along with the candidature of the candidates)
  
- V. List of rejected applicants along with the reason(s): (To be enclosed along with the candidature of the candidates)

**Member (P.I.)**

**Member**

**Chairperson**

Dated:

---

**Dean (IRD), IGDTUW**

The recommendation of the Screening Committee is in accordance with the norms laid down in the project and advertisement.

Report of Screening Committee approved/not approved  
.....

**Dean (IRD)**



**INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN  
SELECTION COMMITTEE REPORT**

I. Copy of approval from Dean (IRD) for project position(s) and advertisement : to be attached by P.I.

II. Member(s) of Selection Committee:

- 1. Chairperson (from the approved panel) .....
- 2. Head of the Department or his/her nominee (Member) .....
- 3. P.I. (Member).....
- 4. Faculty member from Outside the Department .....
- 5. External Expert (if applicable) .....

III. Name of candidate (s) appeared before the Selection Committee: List Enclosed

**RECOMMENDATIONS**

The following candidate(s) have been found suitable for appointment in the project position(s) in the order of merit.

Sl. No.	Name	Project Position	Emoluments

**Member (P.I.)      Member      Member      Member      Chairperson**

**Dean (IRD), IGDTUW**

The recommendation of the Selection Committee is in accordance with the norms laid down in the project and advertisement.

Report of Selection Committee approved/not approved (give reasons) .....

**Dean (IRD)**

**Consultancy Project**  
**CONTRACT\***

Between Dr.....( ), Principal investigator, .....(name of the dept./centre) Indira Gandhi Delhi Technical University for Women, being the first party who hereby agree to assign the work given in the schedule below to Shri/km..... S/D/O Shri ....., the second party, on the basis of particulars given in his/her application on the following terms and conditions: -

1. That the first party will pay the second party a monthly consolidated amount as per the schedule given below on the satisfactory completion of the work assigned.
2. That the second party do hereby agree to complete the work assigned as per the schedule given below, to the satisfaction of the first party, and to hand over all assets/ materials of the first party in his/her charge at completion or termination of the contract as the case may be: -
3. (i) Name of the Scheme: Project no. .... sponsored by .....  
(ii) Type of work to be done: .....  
(iii) Duration in which the work is to be completed as per this contract:  
From ..... to .....  
(iv) Amount to be paid monthly: Rs. ....per month + HRA as per institute Rules.  
(v) The facilities to carry on the above work will be made available by the first party on all working days of the IGDTUW between 8:45 a.m. to 5.30 p.m. and any other days required for completing the work by the first party and no claim for any extra time will be entertained.
4. The first party reserves the right to rescind the contract with a fortnight notice in the event it is found that the progress and the performance of the second party are not satisfactory.
5. This contract can also be rescinded by either party without assigning any reason, with a notice of the fortnight.
6. That the first party and the second party do hereby declare to abide by the aforesaid terms of this contract and the second party will have no claim other than the amount specified in the schedule of work as per this contract to be done by him/her.
7. That his/her contract and its acceptance by the second party will only be for the specified work and duration and this would bear no claim, whatsoever, to other future work, if any, to the second party on this accounts.

Date:

**Second Party**  
With complete address

**First Party**  
Principal Investigator  
Name and Department

1. Witness

1. Witness

\*To be execute on a non judicial stamp paper of Rs. 100/-.

Note: Form may be modified as per the need.

**INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN****FORM FOR EXTENSION OF TIME OF PROJECT / REVISION OF PROJECT BUDGET**

1. Project No.: .....
2. Name and department of Principal Investigator: .....
3. Title of the Project: .....
4. Sponsor: .....
5. Extension of Time: Expected date of completion
  - (a) Original .....
  - (b) Revised .....
6. Revision of Project budget: Contracted Amount
  - (a) Original (Rs.) .....
  - (b) Revised (Rs.) .....

Budget Head / Description	Revised Budget (In Rs.)
1. Gross Amount including Service Tax	
2. Less- Service Tax	
3. Contracted Amount	
4. University Share (35% of Contracted Amount)	
5. Expenditure (Estimated*)	
6. Honorarium (Estimated)	

7. Reason for Extension of Time of project and /or Revision of project amount  
(correspondence to be attached, if any).

.....  
 .....

**Signature of Principal Investigator (with date)**

**Dean (IRD), IGDTUW**

Approved /Not Approved

Copy to: 1. Principal Investigator

**Dean (IRD)**

INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN

FORM FOR DOMESTIC TRAVEL ASSISTNCE

- 1. Project No.: .....
2. Name of Principal Investigator: .....
3. Sponsor: .....
4. Project title: .....
5. Name and designation of travelling person(s)
(a) .....(b) .....
(c) .....(d) .....
6. (a) Place(s) to be visited along with dates: .....
(b) Purpose of visit: .....
(c) Mode of travel: .....

APPROVED travel under clause 5.1 of rules for sponsored research and industrial consultancy project.

Signature of P.I. (with date)

- \*1. If sponsor has specified any specific condition(s) for travel under the project that shall be followed.
2. To be attached by each travelling person with the respective TA bill form(s)
3. To be sent to Dean (IRD) office only, in case advance is required.

7. Advance in the name of: ..... Empl. No. ....
of Rs. ....

Signature of applicant for advance

Recommended

Signature of P.I. (with date)

Dean (IRD), IGDTUW

Approved /Not Approved

Dean (IRD)

Copy to: 1. Principal Investigator

NOTE: Certified that the visit has been undertaken with leave duly approved by the competent authority.

Signature and name of travelling person (with date)

INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN

FORM FOR INTERNATIONAL TRAVEL ASSISTNCE

- 1 Project No.:
2 Name of the Principal Investigator and department:
3 Sponsor:
4 Project title:
5 Name and designation of travelling person(s)
6 (a) Itinerary of the travel along with date and duration:
(b) Purpose of visit :
7 Estimated Expenditure
(a) Travel Expenditure:
i. Road/Rail Fare: Rs. Air fare Rs.
ii. Local journey Rs.
(b) Per Diem:
(i) Daily allowance @ for days =Rs.
(ii) Hotel accommodation @ for days = Rs.
(c) Visa and assistance fees(Rs): Travel insurance Rs:
(d) Miscellaneous expenses (registration, telephone/internet etc) Rs.
8 Advance in the name of: Empl. No. of Rs.

Signature of applicant for advance

Recommended

Signature of P.I. (with date)

- \*1. If sponsor has specified any specific condition(s) for travel under the project that shall be followed.
2. To be attached by each travelling person with the respective TA bill form(s)

Dean (IRD), IGDTUW

Approved /Not Approved

Copy to: 1. Principal Investigator

Dean (IRD)

NOTE: Certified that the visit has been undertaken with Ex-India leave duly approved by the competent authority.

Signature and name of travelling person (with date)

**INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN**

**PDF EXPENDITURE FORM**

1. Name of Faculty: ..... Emp. no: .....
2. Purpose: Travel\* (Domestic and International)/Purchase /Manpower engagement
3. Travel (A) Itinerary of the travel along with date and duration:  
.....  
.....  
(B) Purpose of visit: .....
- (C) Estimated Expenditure
  - (a) Travel Expenditure:
    - i. Road/Rail Fare: Rs. .... Air fare Rs. ....
    - ii. Local journey Rs. ....
  - (b) Per Diem:
    - i. Daily allowance @ ..... for ..... days = Rs. ....
    - ii. Hotel accommodation @ ..... for..... days = Rs.....
  - (c) Visa and assistance fees(Rs): ..... Travel insurance Rs: .....
  - (d) Miscellaneous expenses (registration, telephone/internet etc) Rs. ....Total: Rs. ....  
Advance, if required, Rs. ....
4. Details of Purchase (item(s) and estimated cost)  
(Only for the purchase to be processed by calling quotations as per University purchase rules):  
.....  
.....
5. Manpower engagement: Position ..... Emoluments ..... Duration.....  
(As per rules for sponsored research and industrial consultancy project. Bio-data of the person(s) to be enclosed)

Signature of the faculty with date

\*Subject to admissible under clause 7.2.1 of rules for sponsored research and industrial consultancy project

**Dean (IRD) Office, IGDTUW**

Approved /Not Approved

**Dean (IRD)**

Copy to: 1. Concerned Faculty

-----  
**NOTE:** Certified that the visit has been undertaken with leave duly approved by the competent authority.

Signature and name of travelling person (with date)

Note: Form may be modified as per the need.

## INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN

## FORM FOR DISTRIBUTION OF CONSULTANCY PROJECT FUNDS

1. Project No..... Distribution: Final / Interim
2. Name of Principal Investigator & Department: .....
3. Title of Project: .....
4. Project Fund Position
- Gross Amount including Service Tax=G = Rs. ....
- Less-Service Tax=L = Rs. ....
- Contracted amount T = (G-L) = Rs. ....
- Amount payable to University share P = Rs... ..
- Amount distributed earlier (if any) = X = Rs.....
- Remaining amount (F)=T- P - X = Rs. ....
- Total expenditure on the project = E = Rs. ....
- Savings = S = (F-E) = Rs. ....
- 5.Amount to be Distributed = Rs. ....

Mention all the names as per approval even if the amount to be disbursed is nil.

To be filled by P.I.				To be filled by (IRD)		
Name	Employee Code	Bank A/c No.	Amount in Rs.	Income Tax	Net. Amount	Token No.
Total						

Certified that

**1. a.** This is final distribution and that the work has been completed and the report has been sent.

**OR**

**b.** This is interim distribution and the percentage of amount of work done against the project is not less than the corresponding percentage of the charges being distributed now.

**2. a.** No separate T&P register was maintained for the project

**OR**

**b.** Separate T&P register was maintained, the certificate duly signed by Head of The deptt/centre is attached.

\_\_\_\_\_  
Signature of Principal Investigator (with date)

\_\_\_\_\_  
Dean (IRD), IGDTUW

Approved /Not Approved

\_\_\_\_\_  
Dean (IRD)

Copy to: 1. Principal Investigator





**Certificate of T&P items purchased under project**

(To be submitted to Dean (IRD) office at the time of closure of the project, if a separate T&P register for the project has been maintained by PI)

- 1. Project No.: .....
- 2. Name of the Principal Investigator and Department: .....
- 3. Title of the Project: .....
- 4. Sponsor: .....
- 5. T&P register has been submitted to department store/office (as per purchase and store rules)

**Principal Investigator** (with date)

**Head of the Department** (with date)

**INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN**  
**(PROPOSAL FOR DISTRIBUTION OF UOC RECEIVED AGAINST SPONSORED RESEARCH PROJECTS)**

1. Project No: .....
2. Distribution: Interim Final: .....
3. Title of Project  
:.....
4. Sponsoring Agency:  
.....
5. Name of P.I: .....
6. Designation: .....
7. Deptt. / Centre :  
.....
8. Date of Commencement of Project: .....
9. Date of Completion of the Project: .....

10. Amount of UOC Deducted till date

- |                 |                        |
|-----------------|------------------------|
| (a) Amount..... | Date of Deduction..... |
| (b) Amount..... | Date of Deduction..... |
| (c) Amount..... | Date of Deduction..... |
| Total (T) _____ |                        |

11. Amount of UOC available for this

Distribution (D) (not more than 50% of T in case of interim distribution)	:	Rs.....
--	---	---------

12. 20% of (D) to PDF

- |                       |   |         |
|-----------------------|---|---------|
| (a) PDF of<br>Dr..... | : | Rs..... |
| (b) PDF of<br>Dr..... | : | Rs..... |
| (c) PDF of<br>Dr..... | : | Rs..... |
| Total _____           |   | Rs..... |

13. 10% of (D)

- |  |   |         |
|--|---|---------|
| Details of distribution of amount asat<br>Sl. 13.              | : | Rs..... |
| (a) Department Office (20%)                                    | : | Rs..... |
| (b) Dean RC office and persons<br>Directly related to R&C work | : | Rs..... |
| (c) Tech. Staff of Dept. Central Administrative                | : | Rs..... |
| (d) Fund   | : | Rs..... |

**Total**      Rs. \_\_\_\_\_

14. Balance to R&C Fund for IDF  
(50% of D)

Rs.....

Total of 12,13,14 = D

Rs.....

[Details of distribution of Incentive to Deptt. office staff and Tech. Staff are given on the reverse]

15 (a) Certified that no Ministerial or Technical Staff is being paid out of the incentive money from Sponsored Research Projects in a financial year an amount exceeding his/her gross salary of one month.

(b) Certified that the total remuneration including that proposed here and over time payment received by the individuals are within the limits laid down by University rules.

---

**Signature of Head of the Deptt /Centre  
(with date & stamp)**

---

**Signature of the Principal  
Investigator (with date)**

---

**Endorsement by Dean (IRD)  
Office, IGDTUW**

---

**Approved/Not  
Approved**

The above request is in accordance with the norms laid down.

---

**Coordinator (IRD)**

---

**Dean (IRD)**

**Copy to:** 1. Head of the Department  
2. Principal Investigator



**Request for hiring of services in the project through approved agency  
OR  
For Hiring of a Placement Agency**

The hiring of the following services (list of services given overleaf) may kindly be approved in the interest of the work and to ensure timely completion of targets for project. In case no approved agency exists, permission of hiring a placement agency may please be permitted:

1. Name of the project : \_\_\_\_\_
2. Type of work : \_\_\_\_\_
3. Quantum of Work : \_\_\_\_\_  
(The requisite work should be quantum\*and Work Specific with & duration based so that the Agency be instructed to complete the Concerned work through their work source).
4. Unskilled I or II /Semi Skilled I or II/ Skilled /Highly Skilled I or II : \_\_\_\_\_
5. Mode of payment Monthly/single bill basis : \_\_\_\_\_
6. Expected duration to complete this work : \_\_\_\_\_  
\*Per day basis\*
7. Chargeable Project Grant No... : \_\_\_\_\_
8. The budget head : \_\_\_\_\_
9. Justification with the reason(s) as to why that work cannot be performed by the existing Project Staff -  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Recommended/Not Recommended

Signature of P.I

**NOTE:** - \* Please see Appendix-A as overleaf to fill these columns.

Head of the Deptt./Office

=====

**REPORT OF DEAN (IRD) OFFICE**

Following is the fund position in the above project grant.

Fund budgeted in the budget head Rs....

Available fund in the budget head Rs....

Recommended that the work order as above may be given to the hiring agency the Guard well security services

(p) Ltd for finalization of the work for the period from.....to.....

D.A. (Accounts)

.....

Dean (IRD) May Please sign letter to M/S.

Signed  
Dean (IRD)

## LIST OF SERVICES

Sl. No.	Category	Work
1.	UNSKILLED	(i) Checking of Forms/Identity Cards at the beginning of the Semester. (ii) Filing papers in files & numbering them. (iii) Replacing of file covers. (iv) Sanitation work. (v) Repair work of buildings. (vi) Electrical maintenance work. (vii) Water supply work. (viii) Horticulture work. (ix) Dusting & cleaning of Computer Key Boards of Computers in labs & Offices.
2.	SEMISKILLED	(i) Periodic Maintenance and upkeep of instruments/equipment & other technical work in laboratories of a semiskilled nature. (ii) Periodic Maintenance of a semiskilled nature, in Buildings (iii) Periodic Maintenance of a semiskilled nature, of Electrical installations (iv) Periodic Maintenance of a semiskilled nature, of Water Supply installations
3.	SKILLED	(i) Tabulation work. (ii) Field study and sampling. (iii) Sample analysis. (iv) Maintenance of office records. (v) Maintenance of Institute vehicles. (vi) Periodic Maintenance and upkeep of instruments/equipment & other technical work in laboratories of a skilled nature. (vii) Periodic Maintenance of a skilled nature, in Buildings. (viii) Periodic Maintenance of a skilled nature, of Electrical installations (ix) Periodic Maintenance of a skilled nature, of Water Supply installations (x) Maintenance of a skilled nature, of Air-conditioning equipment. (xi) Maintenance of a skilled nature, of Air-conditioning installations. (xii) Typing work on Computers. (xiii) Any other work of a skilled nature.
4.	HIGHLY SKILLED	(i) Collection of data. (ii) Field Study and sampling. (iii) Sample analysis. (iv) Computer Data entry on per page basis. (v) Driving of Vehicles for students tours, transporting persons to the airport, shifting the patients to out station hospitals etc. (vi) Recording of Minutes of meetings using shorthand. (vii) Periodic Maintenance and upkeep of instruments/equipment & other technical work in laboratories of a highly skilled nature. (viii) Periodic Maintenance of highly skilled nature, in Buildings. (ix) Periodic Maintenance of highly skilled nature, of Electrical installations. (x) Periodic Maintenance of highly skilled nature, of Water Supply installations (xi) Maintenance of highly skilled nature, of Air-conditioning equipment. (xii) Maintenance of highly skilled nature, of Air-conditioning installations (xiii) Any other work of a highly skilled nature.

Note: Form may be modified as per the need.

(To be issued 30 days before the completion of Time Bound Engagement/Completion of the  
Project (delete as not applicable)  
Department of \_\_\_\_\_

**INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN**  
**Termination of Time Bound Engagement Under Category \_\_\_\_\_**  
**in Consultancy/Sponsored Research Project No \_\_\_\_\_**  
**Title : \_\_\_\_\_**

**No. IGDTUW/-PI/Cons/Spons.Res Project**  
To

**Dated:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Whereas vide this office letter No. IGDTUW/-PI/Cons/ Spons Res Project \_\_\_\_\_  
dated \_\_\_\_\_ you were offered the time bound engagement w.e.f. \_\_\_\_\_ to  
\_\_\_\_\_ under Consultancy / Sponsored Research Project No. \_\_\_\_\_  
Title: \_\_\_\_\_.

You had accepted the same and had joined the job. The above project is to be completed on  
\_\_\_\_\_.

Whereas, it was mentioned at serial No. III of your letter of engagement referred above, the  
said assignment shall stand automatically terminated on \_\_\_\_\_.

You are hereby served with 30 days notice for termination of your above assignment as per  
section 25(F) (a) of the Industrial Disputes Act, 1947 for the under mentioned reasons:

\_\_\_\_\_  
Please acknowledge receipt of this letter by signing on its duplicate copy.

(\_\_\_\_\_) \_\_\_\_\_  
Name & Signature of PI (with date)  
Project No. \_\_\_\_\_  
Department \_\_\_\_\_

Copy to:

- 1 Dean (R&C)
- 2 Head of the Department/Centre



# Indira Gandhi Delhi Technical University For Women

(Established by Govt. of Delhi vide Act 9 of 2012)  
ISO 9001:2015 Certified University

## Supporting Document: 3.1.1

3.1.1 The institution's Research facilities are frequently updated and there is a well defined policy for promotion of research which is uploaded on the institutional website and implemented



Assessment Period: 2016 -2021





**Indira Gandhi Delhi Technical University For Women**  
(Formerly Indira Gandhi Institute of Technology)  
Kashmere Gate, Delhi-110006

**INDUSTRIAL RESEARCH & DEVELOPMENT CELL**

Ref. No. F. IRD/007/IGDTUW/Research Award/2020-21/564-580

Dated: 08-09-2020

**Order**

The guidelines for the Award for Researchers (Faculty/students) of IGDTUW have been duly approved by the Board of Management in its 9<sup>th</sup> meeting held on 06.05.2019 and implemented with effect from 1<sup>st</sup> August 2019 (Annexure-A). The procedure to be followed for the Research award is hereby issued with the approval of the Competent Authority of IGDTUW as under:


- i. The cash award will be given to Researchers (regular/contractual faculty members and students of IGDTUW) in the recognition of importance of the published research work and to motivate the individual excellence in research.
- ii. The award will be granted to the journal papers published in each year (1<sup>st</sup> January to 31<sup>st</sup> December), published along with Digital Object Identifier (DOI), pagination and year of publication.
- iii. Only the first author and/or the corresponding author shall be eligible to apply for the award. In case the student is the first author and also corresponding author and faculty member is a co-author, then the student would apply for the award. However, the prize amount shall be distributed to the faculty member and student as per the approved guidelines.
- iv. If there are more than one corresponding authors then the author whose name appears first on the paper submission system, shall be treated as the corresponding author for the purpose of applying the award.
- v. The publication made in the paid journals and open access journals shall not be considered for cash awards.
- vi. Impact Factor must have been calculated by Thomson Reuters in case of SCI/SSCI or SCIE and Elsevier in case of SCOPUS.
- vii. An application form in Annexure-B is to be filled by Faculty Member/student for applying for the award. The Application form shall be duly verified by HOD and submitted to the IRD Cell along with all the requisite documents.
- viii. The faculty members/students with publications during each year shall submit the form duly verified by HOD to IRD Cell by 31<sup>st</sup> January of the succeeding year. However, for 2019 (from August 1 – December 31, 2019), the faculty members/students shall apply for the award under the four categories mentioned in the guidelines, in the prescribed application form latest by September 30<sup>th</sup> 2020.

*R. Gul*  
2/9/2020

Contd., page 2/-

- ix. A University level Committee comprising of all HODs, Dean (Academics), Dean (R & C) and Dean (IRD) shall review the applications. The Committee shall declare the list of faculty members/students eligible for Research awards with approval of the Vice Chancellor.
- x. The regulations for division and distribution of award prize given in the approved guidelines would be applicable.

The expenditure on "Award for Researchers (Faculty/ Students) of the University" will be met under the Head "GIA (General)"


  
(Dr. Ranu Gadi)  
Dy. Dean (IRD)

Ref. No. F. IRD/007/IGDTUW/Research Award/2020-21

Dated: 08-09-2020

Copy forwarded for kind information and further necessary action to:

- I. PS to Hon'ble Vice-Chancellor, IGDTUW, Delhi
- II. PA to Registrar, IGDTUW, Delhi
- III. All Deans/Dy. Deans, IGDTUW, Delhi
- IV. All HoDs, IGDTUW – for circulation among faculty members and Students
- V. AFO, Accounts Branch, IGDTUW, Delhi
- VI. Incharge Personnel Division, IGDTUW, Delhi
- VII. System Analyst with a request to upload the order on the University website.
- VIII. Guard File

  
(Dr. Ranu Gadi)  
Dy. Dean (IRD)

## **Guidelines for the Inception of Award for the Researchers (Students/Faculty) of the University**

Research and development activities have a very high weightage for any accreditation like NBA or NAAC or the ranking purpose like NIRF, QS and others. In our University, research aspect needs further boosting. To promote good quality research papers for publication in reputed Journals, following is proposed.

The cash award will be given to researchers (regular/contractual faculty members and students of IGDTUW) in the recognition of importance of the published research work and to motivate the individual excellence in research. The publications considered must be listed in Science Citation Index (SCI) or SCI expanded or SCOPUS. The award will be granted to the journal papers published in each year (1<sup>st</sup> January to 31<sup>st</sup> December). Only the first author and/or the corresponding author shall be eligible to apply for the award. The publication made in the paid journals and open access journals shall not be considered for cash awards (irrespective of the listing in the publication societies/houses/presses specified in the following list).

First Author will be considered an individual who is a faculty member of IGDTUW and his/her name appears first in the list of authors on the title page of the paper. Corresponding author is a faculty member of IGDTUW and his/her name appears first in the list of corresponding authors on the submission page of the paper. As a proof of corresponding author, the researcher must provide the screen shot of the tool box of the paper submission system (say, Editorial Manager/Scholar One etc) where the name of the author appears on the login page and the title of the paper claimed is listed. If there are more than one corresponding authors then the author whose name appears first on the paper submission system, shall be treated as the corresponding author for the purpose of the award.

Impact Factor must have been calculated by Thomson Reuters in case of SCI/SSCI or SCIE and Elsevier in case of SCOPUS.

### **AWARD CATEGORIES and SELECTION CRITERIA**

#### **Outstanding Research Awards**

A Cash Prize of Rs. 50,000/- (Rs. Fifty Thousand only) will be awarded along with certificate of merit  
Selection Criteria: The Paper must be a Journal paper of impact factor at least 3.0, for IEEE Transaction and 1.0 for all other indexed Journals indexed in SCI/SSCI or SCI Expanded and published in the following:

1. Proceedings of Royal Society
2. American Mathematical Society
3. American Physical Society
4. American Society for Mechanical Engineers (ASME)
5. IEEE Transactions (IF>3.0)
6. ACM Transactions
7. Institute of Mechanical Engineering, London
8. American Society of Testing Materials (ASTM)
9. Nature Publishing Groups

In addition to the above list, the journals with impact Factor  $\geq 3.0$  will also be considered for the award.

#### **Premier Research Award**

A cash prize of Rs.25,000/- (Rs. Twenty-Five Thousand Only) will be awarded along with certificate of merit. Selection Criteria: The Paper must be a journal paper of impact factor at least 1.0, indexed in SCI/SSCI/ or SCI Expanded and published in the following:

*Alhad*  
*8/19/2020*

1. IEEE Transaction (TRIF<3)
2. IEEE Journals
3. Springer
4. Elsevier (Science Direct)
5. Oxford University Press
6. Pergamon-Elsevier Science Ltd
7. Cambridge University Press
8. Wiley Blackwell
9. Blackwell Publishing
10. John Wiley & Sons
11. IET
12. Biomedical Central Ltd.
13. MIT Press
14. Indiana University Press
15. American Meteorological Society
16. American Physiological Society
17. American Society of Microbiology
18. American Chemical Society
19. American Institute of Physics
20. Institute of Physics (IOP) Publishing Ltd
21. International Organization for standardization (IOS) Press
22. Princeton University Press
23. Society of Industrial and Applied Mathematics
24. Proceedings of National Academy of Sciences of USA

In addition to the above list, SCI and SCI Expanded indexed journal not included in the above list and having impact factor  $\geq 5.0$  shall also be considered for the award.

#### **Commendable Research Award**

A cash prize of Rs. 15,000/- (Rs. Fifteen Thousand only) will be awarded along with a certificate of merit.

Selection Criteria: The paper must be a journal paper of impact factor less than 1.0 indexed in SCI/SSCI or SCI expanded and published in the above list (Premier Research Award category). In addition to the above list, SCI and SCI Expanded indexed journal not included in the above list and having impact factor  $\geq 2$  and  $< 5.0$  shall also be considered for the award.

#### **Motivational Research Award**

A Cash Prize of Rs. 10,000/- (Rs. Ten Thousand only) will be awarded along with a certificate of merit.

Selection Criteria: The paper must be a journal paper not included in SCI/SSCI or SCI expanded but a SCOPUS indexed with impact factor  $\geq 1.0$ .

#### **REGULATIONS FOR DIVISION & DISTRIBUTION OF AWARD PRIZE**

Case 1: If all the authors are amongst the university faculties, then first author will decide the individual author's contribution for the purpose of distribution of prize amount.

Case 2: If the authors are amongst the university faculties and the university students, then university faculty (whose name appears first in the paper) will decide the individual author's contribution for the purpose of distribution of prize amount.

*R. S. Rao*

Case 3: If the first author, corresponding author and other authors are the University students, then the head of Head of Department of the first/corresponding students department (whose name appears first in the paper) will decide the individual author's contribution in consultation with the first author for the purpose of distribution of prize amount.

Case 4: If one (or more) of the author/s is/are external to the University, then the prize amount will be divided by total number of authors and the equal part (one share) of the total prize amount will be disbursed to the University contributors. The prize amount of the external author will be subtracted from the total prize amount.

Case 5: A faculty member of the University or a University student shall be permitted to claim cash prize for a maximum of three papers as author or co-author in the category of commendable research award.

The Guidelines will be implemented with effect from 1<sup>st</sup> August, 2019.

*Rhadi  
20/10/2019*



**Indira Gandhi Delhi Technical University For Women**  
(Formerly Indira Gandhi Institute of Technology)  
Kashmere Gate, Delhi-110006

**Application form for applying for Research award for published paper(s)**

The Published paper(s) come under the category of (Please tick)

- A. Outstanding Research Awards with a cash value of Rs. 50,000/- along with certificate of merit ( )
- B. Premier Research Awards with a cash value of Rs. 25,000/- along with certificate of merit ( )
- C. Commendable Research Awards with a cash value of Rs. 15,000/- along with certificate of merit ( )
- D. Motivational Research Awards with a cash value of Rs. 10,000/- along with certificate of merit ( )

The papers/publications is/are enclosed for consideration of award as per above.

I hereby declare that:

1. All the authors are amongst the University Faculties and myself being the first and/or corresponding author shall decide the Individual author's contribution for the purpose of distribution of prize amount. ( )
2. The authors are amongst the University Faculties and the University students, and myself being the first and/or corresponding author shall decide individual author's contribution for the purpose of distribution of prize amount. ( )
3. One (or more) of the author/s is/are external to the University and the prize amount will be divided by total number of authors and the equal part (one share) of the total prize amount will be disbursed to the University contributors. The prize amount of the external will be subtracted from the total prize amount. ( )

I hereby declare that the above claim is being made by me as per guidelines approved in the 9<sup>th</sup> meeting of BOM dated 06.05.2019. In case of any violation, I will be held responsible and the University is free to take appropriate action and the award money and certificate of merit will be liable to be recovered from me.

Signature of Faculty/Student.....  
Name of Faculty/Student.....  
Department.....  
Emp. Code /Roll No.....  
Mobile No.....

In case the first & corresponding author is student and University faculty is co-author then,

Signature of Faculty.....  
Name of Faculty.....

On the basis of above information, I hereby endorse that I have verified all the above details and forward the same.

Signature of HOD.....  
Name of HOD.....

*Plhad*  
*8/9/2020*

**The details of Published Paper(s)**

S.no.	Title of Paper	Name of Journal	Web Address of Journal	category of paper A/B/C/D	Name of Co-Authors	Impact Factor	Whether journal is open access?	Whether the journal is paid?	Award share Value (Z)*

\* The Value of Z Shall be  $0.5 \leq Z \leq 1$ . Please refer to the formula given below for Distribution of Award Money.

**Formula for Distribution of Award Money for Research Awards:**

A is the total award money and there are N authors. The value of Z shall be decided by the Principal author and shall be such that  $0.5 \leq Z \leq 1$ ,

- Case 1: When there is no external author, then the minimum amount credited to each of the author shall be as,

$$A \cdot Z / N$$

- Case 2: When there are external authors, then the minimum amount credited to each of the author shall be as,

$$[A - Y \cdot (A/N)] \cdot Z / (N - Y)$$

Where Y number of authors are external to the University

*D. P. ad / 1200*



**RESEARCH EXCELLENCE AWARD 2019**  
**UNDERTAKING**

I, ....., Designation....., Department of

..... take this responsibility that I have applied for .....number of

papers for the research excellence award and I am First author/Corresponding author\*\* of paper(s).

The paper(s) claimed are eligible for the award as per the Guidelines for the award for Published Paper of the Researchers of Indira Gandhi Delhi Technical University for Women (approved in 9<sup>th</sup> BOM dated 06-05-2019).

In case of any discrepancies or false information revealed in future, University has full right to withdraw the award.

\*\*In case the mention of first/corresponding author is not distinctly made on the front page of the published paper, submission of a snapshot of the paper submission system (for example the Editorial Manager/ Scholar One) through which paper was submitted as corresponding author is mandatory.

(Applicant name, signature and date)

*Alhad*  
*8/9/20*



