# Ph. D. ORDINANCES, RULES, REGULATIONS AND PROCEDURES (Dec 2013)

# PREAMBLE

Jaypee Institute of Information Technology (Deemed University) offers programs leading to the award of the Degree of Doctor of Philosophy, (PhD). The award of PhD degree is in recognition of high academic achievements, independent research and application of knowledge to the solution of technical and scientific problems in science, technology, humanities & social sciences and management; creative and productive inquiry is the basic requirement underlying the research work.

The academic program leading to the PhD degree is broad-based and involves course credit requirements.

The Degree of Doctor of Philosophy (PhD) of the Jaypee Institute of Information Technology (Deemed to be University) shall be conferred on a candidate who fulfils all the requirements specified in these Ordinances and Regulations.

### 1. CRITERIA AND PROCEDURE FOR ADMISSION TO PhD PROGRAM

### 1.1. Minimum Qualifications :

- (i) M. Tech Degree of a University or equivalent for Ph.D. in Engineering / Technology in respective branch with 60% Aggregate Marks or CGPA not less than 6 on scale of 10.
- (ii) Master's Degree of a University for Ph.D. in Sciences / Humanities / Social Sciences / Management / Pharmacy in respective discipline or equivalent with 60% Aggregate marks or CGPA not less than 6 on scale of 10.
- (iii) M. C. A. Degree with 60% Aggregate Marks or equivalent CGPA and two years experience, only for Ph. D. in Computer Science & Engineering/ Information Technology Departments.
- (iv) B.Tech Degree with 70% aggregate marks or equivalent CGPA in respective branch of engineering/ technology.
- (v) Consistently good academic record / performance with 1<sup>st</sup> division all through; i.e. 60% aggregate marks or equivalent CGPA of not less than 6 on a scale of 10 at undergraduate and post graduate level for students admitted after PG programs at (i) to (iii) above.

### 1.2. Admission

### (A) Admission will be based on;

- (i) Satisfying the requirements of minimum qualifications as laid down in 1.1.
- (ii) Performance in Interview for those who have qualified in SLET /UGC /CSIR (JRF) or equivalent national level examinations or are in receipt of fellowships like DST/DBT /DAE/CSIR /QIP /ICMR /DRDO etc.
- (iii) Performance in
  - a) the PhD Entrance Test to be conducted by JIIT, Noida for all those who are not qualified in any of the examinations mentioned in 1.2.(ii) and
  - b) the subsequent Interview, for short-listed candidates only based on the written test as at 1.2 (iii)-(a) above.

### (B) Following are related to the admission process;

- (i) Candidates are required to discuss their research interests and proposed research work at the time of Interview.
- (ii) Number of Scholars to be admitted shall be at the discretion of the JIIT, based on the availability of the resources and academic profile of the candidates.
- (iii) Due consideration will be given to the National Reservation Policy.
- (iv) Faculty members from JIIT, JRFs/Project Fellows may be permitted to register directly after due scrutiny of the candidature by the Dean(A&R) and after approval of the VC.

- (v) The students admitted to the PhD Program will be required to register themselves for the specific Program. The registration will be renewed every semester, on satisfactory progress.
- (vi) The enrollment / admission shall be done only in the beginning of a semester.

# (C) Classifications

- (i) The applicant for admission to the Ph.D program shall be classified under the following categories which shall be decided by the Doctoral Program Monitoring and Advisory Committee (DPMAC)
- (ii) <u>Full-time Research Scholar</u> Such scholars shall be working full time in the institute and also may be in receipt of the Research Fellowship awarded by the university or an outside agency like DST/DBT/CSIR etc.
- (iii) <u>Part-time Research Scholar</u> They may include institute faculty/staff, project staff like JRF etc. who are on rolls of the institute and working under the project supervisors for various sponsored projects. Further, scholars who may be working elsewhere and not in JIIT and willing to meet the Ph.D program progression requirements like residential requirement / course work as laid down by the university may be enrolled as a part time research scholar (in the school/ departments which may offer part time programs) subject to production of a No Objection Certificate from their organization and facilities for carrying research work in their organization exist to the satisfaction of DPMAC. Such scholars shall not be awarded any research fellowship/ assistantship by the university.
- (iv) <u>Sponsored Research Scholar</u> Scholars who are working in the industry / institutions and who are enrolled for the Ph.D program after being spared/sponsored by their parent organization for doing the Ph.D work shall come under the sponsored category. Such candidates will have to provide the required undertaking from their sponsoring organization. (proforma as per <u>Annexure-1</u> attached). Such scholars shall not be awarded any research fellowship/Assistantship by the institute.

# 2. ENROLLMENT AND REGISTRATION PROCESS

As per Annexure-2 attached.

### 3. PhD THESIS SUPERVISOR(S), THEIR ELIGIBILITY CRITERIA AND ALLOCATION

- 3.1 For every PhD student, a PhD supervisor will be appointed by the VC on the recommendations of Dean (A&R) and the concerned HOD who will keep in mind the available specializations of the supervising faculty members and research interest of the student while recommending the Supervisor(s).
- 3.2 There will be a DPMAC for each Research Scholar which will be constituted by Dean (A&R) in consultation with HoD and supervisor(s). The DPMAC will consist of:
  - (a) Dean(A&R) Chairman
  - (b) Head of the Department
  - (c) One expert in the field from the department
  - (d) One expert from outside the Department
  - (e) Respective Supervisor(s)
- 3.3 The Supervisor shall himself / herself be a PhD degree holder.
- 3.4 The Dean (A&R) may recommend a second supervisor, considering the nature and contingencies of the research topic, from within or outside JIIT, who should fulfill the same condition of having PhD, as the main Supervisor.
- 3.5 At any given point of time, no supervisor will have more than the following number of Ph.D. students under his/her supervision:
  - (a) Professors / Associate Professors 8 Students
  - (b) Assistant Professors / Senior Lecturers / Lecturers 6 Students
  - (c) The above numbers shall be increased by 2 to include candidates being supervised by JIIT faculty in Institutes other than JIIT. In such cases the supervisor will be required to declare the number of candidates being supervised by him at other Institutes/Universities.

- 3.6 In exceptional cases where the research topic is of interdisciplinary nature, Dean (A&R) may recommend a third supervisor.
- 3.7 In case a supervisor moves out of JIIT before submission of Thesis by the candidate then a new supervisor is to be recommended by Dean (A&R) and HOD concerned. However, original supervisor may continue as Co-supervisor if available and willing; provided he/she has supervised the scholar for at least one year.
- 3.8 In case a supervisor proceeds on long leave i.e. more than six months, then (s)he shall cease to continue as supervisor provided (s)he has supervised the candidate for less than one year and/ or has moved out of India. In all such cases a new supervisor will be appointed as per clause 3.1. In case supervisor has proceeded on long leave, supervised the candidate for at least one year and is located in India then (s)he may continue as co supervisor subject to the limit that in no case number of supervisors for a scholar shall exceed three.
- 3.9 In case a supervisor(s) is/are not available due to any reason and the Ph.d Thesis has been submitted, the VC on recommendations of the Dean (A&R) and HOD of the School/Department will appoint an administrative supervisor to take care of the process of evaluation of the thesis.

### 4. COURSE WORK AND ATTENDANCE REQUIREMENT

4.1 Every student admitted to the PhD Program will have to earn minimum credits from the course work as specified in the table below: -

S.No.	Entry Qualifications	Min. Course Work Credits Required (including core courses)
1.	M.Tech-Engg/Technology, M.Phil in Pharmacy/ M.Pharm	9
2.	M.Phil in Science / Humanities / Social Sciences, MBA	12
3.	Master's Degree in Sciences / Humanities / Social Sciences/ M.C.A.	15
4.	B.Tech	36

- 4.2 Course work is to be successfully completed within first two semesters by full time students and within first four semesters by part-time / sponsored students after registration.
- 4.3 The Research Scholar must obtain a minimum of 'B' Grade in every registered course for successfully earning the credits allotted to the course.
- 4.4 Courses/subjects to be undertaken

### (A) Core Courses: Every research scholar will take the following courses:

- (i) Research Methodologies including Quantitative Methods 3 Credits (could be different for different departments).
- (ii) Literature Survey- 2 credits.
- (iii) Ethics, Intellectual Property Issues and Plagiarism 1 credit.

### (B) Additional Courses/Subjects

All other courses / subjects to fulfill the credit requirement shall be at advanced level and relevant to proposed PhD research work of the candidate and shall be as specified by DPMAC in each case, these may add up credits to a value higher than the minimum required as per the academic needs of the scholar.

### 4.5 Attendance requirement during the course work.

It is essential for all scholars to comply with the policy of attendance of the university during the course work.

### 4.6 Semester Withdrawal due to Medical / Other Reasons

A scholar may seek semester withdrawal on the basis of medical advice after due approval of the Vice Chancellor through the Dean and Head of the Deptt. after submitting the authentic medical record. Further the scholar may be allowed to take a semester withdrawal for any other genuine reason but after approval of the Vice Chancellor based on the recommendations of the DPMAC and Dean (A&R).

The semester withdrawal will count towards the maximum limit for submission of Ph.D thesis as specified in the rules.

# 5. RESIDENTIAL AND OTHER REQUIREMENTS

# 5.1 Residential Requirement

- (i) The residential requirement is to ensure the attendance of a scholar for completion of the course work and also ensuring frequent interaction with the supervisor in the initial phase of the program to assist in finalizing the area / topic of research and thereafter for constant mentoring of the research work by the Ph.D supervisor.
- (ii) The registered PhD students should therefore, preferably work full time through out the tenure of their PhD Program.
- (iii) The residential requirement for sponsored and part-time candidates means ensuring full attendance and constant interaction with the supervisor. However, in special cases of Sponsored and Part Time students from Academic/Research Organization/Reputed Industry, the residential requirement may be relaxed upto a reasonable extent on completion of the course work. They may be permitted to return to the parent Organization and continue his/her PhD work there provided;
  - (a) He/she is able to get a qualified Co-supervisor in his/her organization and
  - (b) The organization has necessary facilities and permitted the candidate to carry out PhD research Work.

However, above conditions (a) and (b) may be relaxed if the parent organization is located within 100 kM distance from JIIT. Such candidates will have to be in constant touch with the supervisor at JIIT. It is desirable that the scholars spend at least two weeks every semester in JIIT and interact with the supervisor in addition to interaction as may be required and desired by the supervisor.

- (iv) There will be no residential requirement for candidates serving in any institution of Jaypee Education System (JES).
- 5.2 All scholars allowed to work part-time / sponsored will have to report for every semester seminars and for all performance evaluation requirements in order to renew their registration.
- 5.3 The requirement of the Co-supervisor from the industry / research organization having PhD Degree, may be relaxed, provided, he/she has long R & D experience and the same is established by experience / publication/ other relevant records of the external supervisor.

# 6. DURATION

6.1 Minimum and maximum duration to qualify for the award of the PhD Degree

	Minimum Duration	Maximum Duration	
For Full Time Candidates	Three years	Six years	
For Part Time Candidates	Three years	Seven years	
For B.Tech Candidates	Four years	Seven years	
The maximum period will count from the date of enrollment to the date of submission of the Ph.D theses.			

- 6.2 In exceptional circumstances, to the satisfaction of the Vice-Chancellor, a candidate may be granted (a) an extension of maximum of one year over and above the maximum duration as specified above or (b) a relaxation of one year in the minimum duration as specified above provided (s)he is a full time candidate with M. Tech. or equivalent as entry qualification.
- 6.3 In case a PhD scholar is not able to successfully complete the PhD within the maximum duration as specified above (including 6.2(a) above) his/her registration will expire and his PhD program will stand automatically terminated.

# 7. APPRIASALS, ASSESSMENTS AND EVALUATION

- 7.1 An appraisal of the progress of each PhD Scholar will be carried out by DPMAC and an External Expert at approximate intervals of every One and Half years. The purpose of these appraisals shall be to provide guidance for enhancing the quality of research and an independent feedback on the progress of the Scholar.
- 7.2 Once the scholar has
  - (i) completed the course work requirement successfully,
  - (ii) completed the research Work,
  - (iii) published at least three papers out of which two must be in reputed, referred, indexed and cited journals. A list of reputed, referred, indexed and cited journals will be maintained by each department / school which will be updated at least half yearly.
  - (iv) The candidate will be required to;
    - (a) submit a draft synopsis of the PhD work and
    - (b) deliver a synopsis seminar, which will be open to all faculty members and research scholars.
- 7.3 Synopsis seminar will be evaluated by DPMAC and if found fit for submission, the same shall be recommended by DPMAC. The candidate will then be required to submit the final PhD synopsis in the specified format with all suggested modifications included, by a date given by Dean (A&R) / DPMAC.
- 7.4 The candidate will be required to submit PhD thesis in the specified format and fulfilling other requirements within three months of the submission of the final PhD Synopsis. The format is attached as <u>Annexure-3</u>.
- 7.5 If a Ph.D. Scholar fails to submit the PhD thesis in the specified format fulfilling all the requirements within the date approved at the time of the PhD synopsis presentation, then the following procedure is to be followed
  - (i) The PhD Scholar may apply to the Dean (A&R) through the Supervisor(s) and the HoD, for grant of some more specific time for submission of the PhD Thesis.
  - (ii) The Supervisor(s) may forward the application to the Dean (A&R) through the HoD either supporting the extension or rejecting it, with full justification in either case.
  - (iii) The HoD would give his/her own comments and send the application to the Dean (A&R).
  - (iv) After giving full consideration and examining the progress of the PhD scholar from the date of registration, the Dean (A&R) would give recommendation to the VC for final decision and approval. In any case, the extension for submission of the PhD Thesis can not be more than a month from the earlier given date for submission.
  - (v) The VC will give his final decision and approval.
- 7.6 In case, a PhD scholar fails to submit the PhD thesis even within the granted extended period, his/her PhD synopsis and the seminar shall be treated as cancelled. He/she has to start the process of submitting fresh PhD synopsis and giving a fresh PhD synopsis seminar following the normal procedure. No second extension will be granted.
- 7.7 Both the points (7.5) and (7.6) above are applicable only within the valid period of the PhD Registration as per Clause 6. In case it spills beyond valid PhD registration period, the PhD Registration will stand automatically terminated. After termination the process of renewal of the PhD registration has to be followed, if the PhD scholar so desires.

#### 7.8 Nomination of Panels of Examiners:

- (i) Two panels of examiners each consisting of five experts having long experience and good standing in the relevant field of the PhD work, will be proposed by the DPMAC in consultation with the supervisor(s) to the Dean (A&R) who on accepting the same shall get it approved by the Vice-Chancellor.
- (ii) The first panel will have experts from within India geographically spread over the entire country and the second panel will have experts from out side India spread over different continents.
- (iii) The Vice-Chancellor will finalize the examiners, one from each panel, to whom the thesis will be sent for evaluation after obtaining their consent.
- (iv) The approved Examiners will be approached, along with copy of the synopsis seeking their consent.
- (v) The supervisor(s) shall be the internal examiner(s) and will be required to give an evaluation report on the thesis on the prescribed format attached as **Annexure-4**.

### 7.9 Evaluation Report

- (i) The external examiners are supposed to give their evaluation reports with their recommendations in a prescribed format within ten weeks of the receipt of the thesis.
- (ii) If the report(s) of the external examiner(s) are not received within the specified period of 10 weeks, the Registrar may send a reminder to the concerned examiner(s) to expedite the reports positively within two weeks of the receipt of the reminder.
- (iii) In any case, if the report(s) are not received even by the extended period, the Registrar would put up a note to the VC to this effect, who may approve the name(s) of other examiner(s) from the appropriate category of the panels.
- (iv) The Registrar would send the thesis to the new examiner(s) following usual procedure.
- (v) This process can continue till the particular category of panel is exhausted. However, the VC may like to terminate the panel(s) at any point of time.
- (vi) In case, the panel(s) gets exhausted or is terminated by the VC, the VC may seek fresh panel(s) from the DPMAC through Dean (A&R). The Registrar would send the thesis for examination to the examiner(s) as approved by the VC from the appropriate new panel(s).
- (vii) If both the panel(s) in each category either get exhausted or are terminated by the VC, the VC may decide the next course of action in consultation with the Dean(A&R).
- (viii) The External Indian Examiner will be the examiner for the Viva-Voce Examination (Open Defense).
- (ix) The Recommendations and the evaluation reports from all the examiners including the supervisor(s) will be placed before the Vice-Chancellor for further action.
- (x) If the Vice-Chancellor finds the recommendations and the evaluation Reports from all the examiners (i.e. including internal examiners) satisfactory, the date of final Viva-Voce examination will be decided in consultation with the External Indian Viva-Voce Examiner.
- (xi) In case, the report(s) and recommendations of one external examiner(s) is not favourable, the thesis would be sent to another examiner, from the respective panel, to be decided by the Vice-Chancellor, for evaluation.
- (xii) However, if the report(s) and the recommendations from both the external examiners are not favourable, then the PhD Thesis will be rejected and the PhD degree will not be awarded.

#### 7.10 Re-Registration in case of rejection of thesis:

- (i) The candidate may, however, be allowed to renew his/her registration to continue the PhD work on the same topic and under the same supervisor(s) for another minimum period of one year. A fresh Thesis has to be submitted by the candidate within two years but not earlier than one year of renewal. The normal process of the evaluation will be followed afresh
- (ii) If a PhD scholar, who has been allowed to renew registration to continue for PhD degree after his/her thesis was rejected, fails to submit the fresh thesis within two Years as specified above, his/her PhD renewal of registration will be totally terminated once for all.

- (iii) The registration of a PhD scholar expires
  - (a) on completion of the allowed maximum period of registration even after granted extension, or
  - (b) on the final rejection of the thesis, even after submission/re-submission of the PhD thesis. No second renewal of registration is permitted.

# 7.11 Open Defence

- (i) Once the thesis is accepted, the candidate will be required to defend his/her PhD work and the thesis in an open Viva-Voce Examination(s). He has to answer satisfactorily the queries of the examiners at the time of the Viva-Voce Examination where the DPMAC members shall also be present.
- (ii) On completion of the final PhD Viva-Voce-Examination, the examiners will give their report in the prescribed format. The candidate will be required to submit the final version of the thesis in the required format, incorporating all the suggestions of the Viva-Voce Board, both in hard as well as soft forms within the time limit specified by Dean (A&R). The incorporation of the required changes will be certified by supervisor(s) and verified by Dean (A&R).
- (iii) On receipt of the final version of thesis, Registrar will present the same along with reports of all examiners to the Dean (A&R) who in turn will forward the same along with his observations, if any, to the Vice Chancellor who shall finally decide on award of Ph D degree to the candidate or otherwise. A Provisional Certificate would be issued to the candidate, if applicable.
- (iv) The final degree will be awarded in the Convocation.

### 8. RE-REGISTRATION FOR PHD DEGREE

- 8.1 On the final expiry of the registration, even after renewal, due to expiry of the period as above or final rejection of the thesis as above, the registration will be terminated.
- 8.2 However, if the PhD Scholar desires and gives proper justification, may be allowed to re-register for PhD afresh. The re-registration will require the PhD scholar to take up a new current topic with new and / or earlier supervisor(s). The maximum period for the re-registration will be three years including all extensions and the minimum for submission of the new PhD Thesis is two years. Following the normal procedures and the PhD regulations, the PhD Scholar must submit the new thesis within three years, but not earlier than two years of re-registration, failing which, the re-registration will be terminated and he/she will not be allowed for any further registration.
- 8.3 The evaluation process for the thesis submitted under re-registration will be the same as for the new registration.

### 9. PREMATURE CANCELLATION OF REGISTRATION

- 9.1 The PhD registration will be cancelled in any one of the following eventualities by the competent authority:
  - (a) If he/she absents himself/herself for a continuous period of four weeks without prior intimation/ sanction of leave.
  - (b) If he/she resigns from the Ph.D. Program.
  - (c) If he/she fails to renew his registration in any semester.
  - (d) If his/her academic progress is found unsatisfactory.
  - (e) If he/she is found involved in an act of misconduct and / or indiscipline.
  - (f) If the PhD registration is cancelled on any of the above accounts, re-registration is not permitted at all.

# 10. RULES REGARDING AWARD OF RESEARCH FELLOWSHIP

Attached as **Annexure-5** 

### **11. LEAVE AND ATTENDANCE**

- (i) A scholar will be entitled to leaves as per leave rules formulated by the Institute and amended from time to time. A full time scholar is entitled to 30 days of leave including leave on medical grounds per academic year. He/she shall not be entitled to mid-semester breaks, summer and winter vacations etc. The leave per semester shall be restricted to 15 and this shall not be carried forward to the next semester.
- (ii) The leave beyond 30 days will be without research fellowship.
- (iii) Such an extension of leave shall be granted under exceptional circumstances by the Dean (A&R) and only once during the program of the scholar.

# **12. DEPOSITORY WITH UGC**

Following the successful completion of evaluation process and the announcement of the award of the PhD degree, a soft copy of the PhD thesis will be sent to the UGC within a period of thirty days.

# 13. GENERAL

In case a scholar is found adopting of suspected of adopting unfair means before, during and after the examination or lifting of some other's work(s) and inserting it in his/her project, seminar and dissertation etc. without proper acknowledgement, credit and reference or plagiarizing the dissertation/project report etc., such penal action shall be taken by the institute as may be necessary to up hold the sanctity and integrity of the examination system and the creditability of the institute.

Notwithstanding anything contained in these Ordinances & Regulations, all the PhD scholars will be governed by the rules and procedures framed by the Institute in this behalf, and on matters of general discipline and in force from time to time. The decision of the Vice Chancellor in all matters related to Ph D shall be final and binding on all parties.