



# Visvesvaraya Technological University

“Jnana Sangama”

Belgaum - 590 018, Karnataka State, India

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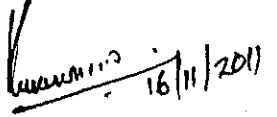
## NOTIFICATION

**Sub : Revised Regulations Governing the Degree of Doctor of  
Philosophy(Ph.D.)**

**Ref: 1. Res. No. 2.3.1 of the 98th E.C. Meeting held on 29-10-2011.  
2. Hon'ble Vice Chancellor's order dt: 10-11-2011**

The existing Regulations governing the Degree of Doctor of Philosophy(Ph.D.) 2006, have been amended and the amended Regulations have been approved by the Executive Council in its 98th meeting held on 29th October 2011. By the direction of the Hon'ble Vice Chancellor The amended Regulations governing the Degree of Doctor of Philosophy (Ph.D.)-2011, is hereby notified (copy enclosed) for the information of all the concerned. The same shall come into effect from January 2012.

By orders

  
(Prof. S. A. Kori)  
Registrar

To,

1. The Principals of all the affiliated Engineering Colleges and the Constituent College of VTU.
2. The Hon'ble Vice Chancellor through the Secretary to V.C., VTU, Belgaum.
3. The Registrar (Evaluation), VTU, Belgaum.
4. The Special Officers of Academic Section of VTU, Belgaum.
5. All the concerned case workers, Academic Section of VTU, Belgaum.
6. The In-charge, CNC Section of VTU, to place the Regulations in the University Web site.

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## VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM REGULATIONS (AMENDED) GOVERNING THE DEGREE OF DOCTOR OF PHILOSOPHY (PH. D) - 2011

(With effect from January 2012)

### PHD-1 SHORT TITLE AND COMMENCEMENT

PHD-1.1 These Regulations shall be called “**VTU Regulations Governing the Degree of Doctor of Philosophy (Ph.D.) - 2011**”.

PHD-1.2 These shall come into force from the date of their notification by the University and be applicable for the candidates who seek registration for Ph.D. in the Faculty of Engineering, Faculty of Architecture, Faculty of Science, Faculty of Computer Applications, Faculty of Business Administration and Interdisciplinary Subject Areas.

### PHD-2 DEFINITIONS

PHD-2.1 In these Regulations unless the context requires otherwise or it is specifically so defined:

- (a) **Admissions Committee** means a committee constituted by the University to carry out the activities concerning the admission of candidates to the Ph.D. programme.
- (b) **AICTE** means the All India Council for technical Education, established at New Delhi by an Act of Parliament in 1987.
- (c) **AIU** means the Association of Indian Universities, with its headquarters at New Delhi.
- (d) **Coursework** means the courses prescribed as a part of the Ph. D programme, which all the candidates shall successfully complete as a pre-requisite.
- (e) **Co-Supervisor** means the additional Research Supervisor who supervises/guides the doctoral research of a candidate along with the Research Supervisor.
- (f) **Degree** at Undergraduate/ Postgraduate/ Doctor of Philosophy level mean UG/ PG/ Ph. D in abbreviated form..
- (g) **Doctoral Committee** means the committee constituted by the University to review the research progress of a candidate.
- (h) **Dual Degree** means two Degrees, viz., Master of Technology (M. Tech.) or Master of Architecture (M. Arch.) and Ph.D. for which registration to be made together.
- (i) **FIP** means the Faculty Improvement Programme of the UGC.
- (j) **Foreign Students** means candidates who are foreign citizens, with master's degree or equivalent recognized by UGC /AIU.
- (k) **GOI** means the Government of India in abbreviated form.
- (l) **GOK** means the Government of Karnataka in abbreviated form.

- (m) **Intake** means the number of students sanctioned for admission to a Research Centre/Faculty of the University in a year.
- (n) **KSCHE** means the Karnataka State Council for Higher Education established at Bangalore by the GOK in 2009.
- (o) **MHRD** means the Ministry of Human Resource Development of the GOI.
- (p) **NRI/FN/PIO** mean Non-Resident Indian/Foreign National/Person of Indian Origin categories in abbreviated form.
- (q) **Pre-registration Interview** means an interaction with the candidate arranged by the Admissions Committee to evaluate his/her suitability for Ph.D. admission.
- (r) **QIP** means the Quality Improvement Programme of the GOI.
- (s) **Research Supervisor** means a qualified faculty member / scientist recognized by the University to supervise/guide the Ph.D. candidates.
- (t) **Research Centre** means a College / Institute / Department / Research establishment and the like, recognized by the University for the candidates to pursue Ph.D. research in an approved discipline.
- (u) **Refereed Journal** means a reputed professional journal or literary journal or publication in which the research articles or papers are selected for publication by a panel of referees who are experts in the field.
- (v) **UGC** means the University Grants Commission established at New Delhi by an Act of Parliament in 1956.
- (w) **ULRA Test** means the University Level Research Aptitude Test conducted by the University for preparing the merit list of candidates for admission to the Ph.D. programme.
- (x) **University** means the Visvesvaraya Technological University (VTU), with its Headquarters at Belgaum.
- (y) **Viva Voce Board** means a committee of experts appointed by the University to conduct the final viva-voce on the Thesis submitted by the candidate.

PHD-3

PHD-3.1

## BOARDS AND COMMITTEES

### Constitution of Boards/Committees

The University shall constitute the following Boards and Committees for conducting the Ph. D Programme:

- (a) Admissions Committee
- (b) Doctoral Committee
- (c) Viva Voce Board and,
- (d) Such other Boards/Committees, as may be required;

The composition, duties and responsibilities of the Boards and Committees shall be as given below:

**PHD-3.1.1 Admissions Committee:**

The Admissions Committee to be constituted by the Vice Chancellor for each Faculty, shall consist of:

- |                                      |                 |
|--------------------------------------|-----------------|
| 1. Dean of the Faculty,              | Chairperson     |
| 2. Nominee of the Executive Council, | Member          |
| 3. Nominee of the Academic Senate,   | Member          |
| 4. Nominee of the Vice Chancellor,   | Member          |
| 5. Registrar,                        | Member Convener |

If there is no Dean appointed for a Faculty, the Vice Chancellor may nominate one among the other Deans to be the Chairperson of the Admissions Committee for that Faculty. The Admissions Committee shall be responsible for identification and notification of intake, getting the entrance test(s) conducted, the merit list(s) prepared, interview(s) for candidates organized, the Reservation Policy followed, Pre-registration interview facilitated and such other tasks connected with the admission of candidates for the Ph. D Programme. The tenure of the Committee shall be *two* years and the constitution of the Committee shall be aligned with the academic year at the University. The Committee shall meet as often as required.

**PHD-3.1.2 Doctoral Committee:**

The Doctoral Committee to be constituted by the Vice Chancellor, in consultation with the Research Centre, for each candidate shall have the following composition:

- |   |                       |
|---|-----------------------|
| 1) Head of the Research Centre,                                 | Chairperson           |
| (or his/her Nominee approved by the Vice Chancellor)            |                       |
| 2) Two domain experts appointed by the Vice Chancellor,         | Members               |
| (from a panel of four experts from outside the Research Centre) |                       |
| 3) Research Supervisor,   | Member-Convener       |
| 4) Co-Supervisor (if any),                                      | Joint Member-Convener |

The Doctoral Committee may have the same composition for all the candidates working under one Research Supervisor. The Committee may be re-constituted by the Vice Chancellor in the case of non-availability of existing member(s) or for any other valid reasons, in consultation with the Research Supervisor(s) and the Research Centre. The Doctoral Committee shall be responsible for reviewing and monitoring of the progress of the candidate from his/her commencement of Ph.D research to the submission of the Thesis. The Committee shall be free to meet as often as required and frame its rules/regulations to enable the smooth functioning of research work of the candidate(s).

**PHD-3.1.3 Viva Voce Board:**

The Viva Voce Board to be constituted by the Vice Chancellor for each candidate after the Thesis has received favourable Reports from all the

adjudicators, shall have the following composition:

1. Research Supervisor, Chairperson
2. Co-Supervisor(s), if any, Co-Chairperson
3. Identified Adjudicator, Member

The Board shall conduct the final Viva Voce of the candidate in connection with the defense of his/her Thesis, prepare its Report, a Consolidated Report and other Reports certifying the satisfactory completion of all the steps in connection with the Ph. D degree award for the consideration of the Executive Council of the University.

PHD-3.1.4

#### **Other Boards and Committees:**

The Vice Chancellor may constitute other Boards/Committees in connection with other specific requirements in the conduct of the Ph. D Programme. The duties/responsibilities and other details of these Boards/Committees shall be as notified by the University.

PHD-4

#### **SUBJECT / TITLE OF RESEARCH AND NATURE OF RESEARCH PROGRAMME**

PHD-4.1

##### **List of Faculties**

The University shall permit the registration for Ph.D. in the following Faculties, namely,

- (a) Faculty of Engineering
- (b) Faculty of Architecture
- (c) Faculty of Science
- (d) Faculty of Computer Applications and
- (e) Faculty of Business Administration

In all these cases, the research work for the Ph. D Degree shall be generally uni-disciplinary and be largely in the main subject area/ branch of the PG Programmes in the concerned Faculty.

PHD-4.2

##### **Inter-Disciplinary Subject Areas**

It shall also be possible for a candidate to pursue Ph.D. research in a subject area of inter-disciplinary nature in the same Faculty in which the candidate has obtained a PG Degree or across two or more Faculties in the University. The admission of such candidates shall be subject to Regulation PHD 5.2.6.

PHD-5

#### **ELIGIBILITY FOR ADMISSION**

PHD-5.1

##### **Eligibility Requirements**

The eligibility requirements for candidates to get admitted to the Ph. D Programme shall include the following:

PHD-5.1.1

##### **Categories of Candidates and Other Requirements:**

There shall be provision for the following categories of candidates for admission to Ph. D.:

- (i) **Full-Time:** Candidates who shall pursue Ph.D. research on full time basis, either as regular, QIP/FIP scholars or those belonging to M.Sc.(Engg.) by research + Ph. D or M.E./M. Tech./M. Arch. + Ph, D Dual Degree categories.
- (ii) **Part-Time:** In-service candidates having a minimum professional experience of one year after his/her UG Degree from among faculty members working in any Engineering College / Polytechnic / University / Deemed to be University (recognized / accredited by appropriate bodies in India) or research staff of public / private organizations, who shall pursue Ph.D. research on part time basis.
- (iii) **Full-Time (Special):** Foreign candidates belonging to NRI/FN/PIO categories, who shall pursue Ph.D. research on full time basis, including those of the Dual Degrees as in (i) above. These candidates shall have passed the UG / PG Degree programmes (recognized / accredited by approved bodies in India) and have proficiency in English.

## PHD-5.1.2

### Study leave / Employment / Clearances:

- (a) Employed candidates, who take up Ph.D. Programme on full time basis, shall produce a certificate from their employer-organization(s) for having sanctioned study leave for a minimum period of three years, along with the No Objection Certificate (NOC).
- (b) Candidates not having employment, who take up Ph.D. Programme on full time basis shall give an undertaking to the effect that they shall not take up any employment during the period of Ph.D. registration, except availing of scholarships / fellowships / stipends, if any.
- (c) Foreign students shall hold valid passport/visa, clearance from MHRD and other agencies as mandated by the GOI.

## PHD-5.2

### Minimum Qualifications to be Satisfied

The minimum academic qualifications to be satisfied by the candidates seeking admission to the Ph. D Programme, shall be as given below in respect of the different Faculties:

### PHD-5.2.1

#### Faculty of Engineering:

- (a) The candidates shall possess a Master's Degree in Engineering / Technology or equivalent from the University or any other University recognized by it, with a minimum CGPA of 6.75 out of 10 or 60% aggregate marks at either the Bachelor's or the Master's Degree, OR
- (b) The candidates possessing Bachelor's Degree in Engineering / Technology or equivalent recognized by the University with outstanding merit, having either a minimum CGPA of 7.75 out of 10 or 70% aggregate marks and published research papers in refereed journals or filed/obtained patents shall also be eligible for admission, subject to approval by the Admissions Committee, OR

- (c) The candidates pursuing M.Sc.(Engg.) Degree by research at the University, who have successfully completed the prescribed coursework in the first *two* semesters of study with outstanding merit of either a minimum CGPA of 7.75 out of 10 or 70% aggregate marks and published research papers in refereed journals or filed/obtained patents shall be eligible for up-gradation to the M.Sc.(Engg.) + Ph. D Integrated Dual Degree programme, subject to approval by the Admissions Committee, OR
- (d) The candidates pursuing M. Tech. Degree at the University who have successfully completed the prescribed coursework in the first *three* semesters of study with outstanding merit of either a minimum CGPA of 7.75 out of 10 or 70 % aggregate marks and demonstrated good research aptitude shall be eligible for up-gradation to M. Tech. + Ph.D. Integrated Dual Degree Programme, subject to approval by the Admissions Committee.

## PHD-5.2.2

### Faculty of Architecture:

- (a) The candidates shall possess Master's degree in Architecture / allied specialization or equivalent recognized by the University, with a minimum CGPA of 6.75 out of 10 or 60% aggregate marks at either the Bachelor's or the Master's Degree, OR
- (b) The candidates possessing Bachelor's Degree in Architecture or equivalent recognized by the University with outstanding merit, having either a minimum CGPA of 7.75 out of 10 or 70% aggregate marks and published research papers in refereed journals or filed/obtained patents, shall also be eligible for admission, subject to approval by the Admissions Committee, OR
- (c) The candidates possessing Bachelor's Degree in Architecture or equivalent recognized by the University, with 10 years of experience in teaching / research / professional practice in Architecture shall also be eligible for admission, subject to approval by the Admissions Committee, OR
- (d) The candidates pursuing M. Arch. Degree at the University who have successfully completed the prescribed coursework in the first *three* semesters of study with outstanding merit, having either a minimum CGPA of 7.75 out of 10 or 70 % aggregate marks and demonstrated good research aptitude shall be eligible for up-gradation to M. Arch. + Ph.D. Integrated Dual Degree Programme, subject to approval by the Admissions Committee.

## PHD-5.2.3

### Faculty of Science:

The candidates shall possess M.Sc. / M. Phil. Degree in Physics, Chemistry, Mathematics, and such other allied disciplines, recognized by the University with a minimum CGPA of 6.75 out of 10 or 60% aggregate marks at either the Bachelor's or the Master's Degree.



PHD-5.2.4

**Faculty of Computer Applications:**

The candidates shall possess MCA Degree recognized by the University, with a minimum CGPA of 6.75 out of 10 or 60% aggregate marks at the Master's Degree.

PHD-5.2.5

**Faculty of Business Administration:**

The candidates shall possess MBA Degree recognized by the University, with a minimum CGPA of 6.75 out of 10 or 60% aggregate marks at the Master's Degree.

PHD-5.2.6

**Inter-Disciplinary Subject Areas:**

The candidates desirous of pursuing Ph.D. in subject areas of inter-disciplinary nature (as per Regulation PHD 4.2) shall fulfill the following eligibility requirements:

- (a) The candidate shall possess the Master's Degree in an appropriate branch subject / discipline recognized by the University, with a minimum CGPA of 6.75 out of 10 or 60% aggregate marks.
- (b) The candidate shall submit the title of the research area and the research proposal along with his/her application.
- (c) The research area/proposal shall receive commendation/positive recommendation of the Admissions Committee, who may, under approval of the Vice Chancellor, constitute expert Sub-Committees to evaluate the same. In such cases, the Degree shall be awarded in the subject / discipline in which the candidate has registered for the Ph.D. Programme. Further, if required, Co-Supervisor(s) from appropriate discipline(s) may be assigned.

PHD-5.2.7

**Other:**

Foreign candidates for Full-Time – Special Ph.D. Programme shall have obtained their UG and/or PG Degrees in the appropriate branch (as specified under Regulations PHD 5.2.1- PHD- 5.2.6) from a University recognized / accredited by approved bodies in India with a minimum CGPA of 6.75 out of 10 or 60% aggregate marks and have adequate proficiency in English as demonstrated by qualifying in the national/international tests conducted.

PHD-5.3

**Relaxation of Minimum Requirements**

A candidate belonging to SC / ST / Category-I / Physically challenged and any other reserved category as notified by GOK from time to time shall have a relaxation of 5 % or equivalent grade in the minimum prescribed qualification level for the general category of students.

PHD-6

**RECOGNITION / FUNCTIONING OF RESEARCH SUPERVISOR**

PHD-6.1.1

**Procedure for Recognition:**

- (a) The University shall invite applications periodically on its web site or by notification, from eligible faculty members, scientists and others for being recognized as Research Supervisors under all its Faculties. The prospective Research Supervisors shall apply in the prescribed

format, with all the necessary supporting documents, to the University in response to such notifications.

- (b) An Expert Committee under each Faculty, constituted by the Vice Chancellor shall scrutinize the applications received and recommend the names of selected persons to be recognized as Research Supervisors. The selected lists shall be notified by the University after their consideration and approval by the Executive Council.
- (c) Upon recognition, a Research Supervisor shall become eligible to supervise the Ph.D. candidates. The University shall update the lists of recognized Research Supervisors regularly and notify the same on its Web Site. In the absence of supervision of at least one Ph.D. candidate in a period of *five* years, the recognition given to the Research Supervisor shall stand automatically cancelled. However, such persons shall be eligible to seek fresh recognition from the University.

## PHD-6.1.2

### Eligibility for recognition as Research Supervisor:

Faculty members working in recognized academic institutions and Scientists / Engineers working in recognized research establishments / industries shall be eligible for recognition, provided each one of them has:(a) Ph.D. degree from a recognized University in the relevant discipline(s), (b) a minimum of *two* publications in refereed journals during the preceding *five* years, and(c) independent research experience of at least *one* academic year, after obtaining the provisional Ph.D. degree award.

## PHD-6.2

### Functioning of Research Supervisor

## PHD-6.2.1

There shall be a possibility for assigning a Research Supervisor and Co-Supervisor for a candidate registered for the Ph. D Degree at a Research Centre in special cases, as may be decided by the Admissions Committee.

## PHD-6.2.2

In the case of interdisciplinary subject area(s), a candidate may have two supervisors, of which one shall be designated as the Research Supervisor and the other as the Co-Supervisor, with either of them being from the Research Centre where the candidate has registered for Ph.D.

## PHD-6.2.3

A Research Supervisor shall not opt to become Co-Supervisor for more than five candidates at any time.

## PHD-7

### INTAKE

## PHD-7.1

### Number of Candidates per Research Supervisor

The following norms / procedure shall be strictly adhered to while assigning the Research Supervisors to the candidates admitted at a Research Centre. Any violation of these norms/ procedure shall result in the University taking serious steps like de-recognition of the Research Centre or the Research Supervisor.

- (a) Each Research Supervisor shall supervise not more than eight candidates at a time including the candidates who have registered for Ph.D. degree at other Universities (acceptance for supervision of

Ph. D students at other Universities shall be with the written permission of the University). Out of these candidates, five may be from the General Pool and the remaining three candidates shall be reserved for categories, such as SC / ST / Category-I/ Physically challenged.

(b) The seats reserved for SC / ST / category-I / Physically challenged candidates shall be mutually interchangeable, but not transferrable to the General Pool.

(c) The students who have completed the final Viva-Voce shall not be considered while counting the number of candidates assigned to a Research Supervisor.

(d) A Research Supervisor shall not be assigned more than two newly admitted candidates during an academic year.

## **PHD-7.2 Reservation Policy**

The University shall follow the Reservation Policy of GOI/GOK as applicable from time to time, for the total number of candidates admitted to the Ph. D Programme in an academic year.

## **PHD-7.3 Change of Research Centre**

There shall be a possibility for candidates to be permitted to shift from one Research Centre to another within the University due to reasons like, lack of research facilities, non-availability of Research Supervisor(s). In all such cases, the decision of the Admissions Committee shall be final and binding.

## **PHD-8 NOTIFICATION OF VACANT SEATS**

### **PHD-8.1 University Notification**

(a) The Admissions Committee shall identify the vacant seats at each Research Centre annually and issue a notification in leading news papers and on the University website, once in an academic year inviting applications in respect of Ph.D. admissions, mentioning the number of seats available for the General Pool as well as for the Reservation Categories under each Faculty.

(b) The University shall call for the Applications for Admission normally in the months of April/May of every academic year. But, the admission of candidates shall be facilitated either in the odd semester or in the even semester

(c) The University may consider the possibility of offering merit cum means scholarships to eligible candidates to enhance the enrolment of full-time Ph.D. candidates.

## **PHD-9 SUBMISSION OF APPLICATIONS AND THEIR PROCESSING**

Applications from the eligible candidates shall be submitted as follows:

### **PHD-9.1 Submission of Applications to the University**

The eligible candidates satisfying the Regulation PHD- 5 shall submit

their applications for admission to the University in the prescribed format along with other necessary documents; viz., attested copies of degree certificate(s), marks cards of all related examinations, employer's certificate if employed, and such other documents as may be prescribed.

## **PHD-9.2**

### **Functions/Responsibilities of the Admissions Committee**

The Admissions Committee shall arrange for;

- (a) Scrutiny of the applications to determine their eligibility, including those eligible for exemption from the ULRA Test.
- (b) Conducting the ULRA Test and its Evaluation.
- (c) Preparation of the consolidated merit list(s).
- (d) Arranging for Pre-Registration Interviews, wherever applicable.
- (e) Announcement of the list of selected candidates.
- (f) Arranging for interaction between the selected candidates and Research Supervisor(s) at each Research Centre.

## **PHD-10**

### **ULRA TEST**

## **PHD-10.1**

### **Conduct of ULRA Test**

All the eligible applicants shall appear for the ULRA Test, which shall be to determine the candidates' aptitude for research. The marks obtained by the candidates in the ULRA Test shall be valid for a period of two years.

## **PHD-10.2**

### **Exemption from ULRA Test**

The following categories of candidates shall be exempted from appearing at the ULRA Test:

- (a) Full Time (Special) candidates,
- (b) Faculty Members under QIP / FIP,
- (c) Candidates qualified in UGC / UGC-CSIR JRF / SLET / CAT / GATE / NET or other National Test with valid score;
- (d) Candidates with M. Phil. Degree or equivalent as recognized by the University.

## **PHD-10.3**

### **Eligibility for Pre-Registration Interviews**

The candidates who are successful in the ULRA Test and all those belonging to the categories listed under Regulation PHD-10.2 shall appear for the pre-registration interviews.

## **PHD-11**

### **PRE-REGISTRATION INTERVIEWS**

## **PHD-11.1**

### **Expert Committees**

The Admissions Committee shall arrange for interaction with all the candidates selected as per Regulation 10, for pre-registration interviews to assess their suitability to take up the proposed research work. This may be undertaken by Expert Committees constituted by the University for this purpose and arranged at each identified Research Centre.

## **PHD-11.2 Interview Performance**

- (a) If the performance of a candidate is not satisfactory at the Pre-Registration interviews conducted, the Admissions Committee shall give one more chance subsequently to the candidate to appear for the Pre-Registration interviews, provided that his/her eligibility requirements are valid under Regulations PHD-10.1 and PHD-10.2.
- (b) The candidate failing in the second attempt shall not be eligible for provisional registration to Ph.D. But such a candidate shall have to appear for ULRA Test afresh, if required.

## **PHD-12 PREPARATION OF MERIT LIST OF SUCCESSFUL CANDIDATES AND PROVISIONAL REGISTRATION**

### **PHD-12.1 Merit Lists after ULRA Test**

Separate merit lists for the General and Reserved Category candidates shall be prepared by the Admissions Committee including all the successful candidates in the ULRA Test and the Pre-Registration interviews on the basis of the percentage of marks obtained in the ULRA Test, Pre-Registration interviews and in the qualifying examination in the ratio of 25:25:50.

### **PHD-12.2 Preparation of Other Merit Lists**

- (a) The candidates who have cleared the UGC / UGC-CSIR JRF / SLET / CAT / GATE / NET or other National Tests or those with M. Phil Degree (or equivalent, recognized by the University) shall be placed in the merit list based on their percentage of marks in the Pre-Registration interviews and in the qualifying examination in the ratio of 50:50.
- (b) The faculty members seeking registration under QIP/FIP shall be required to appear for Pre-Registration interviews as per the national calendar announced by AICTE/UGC and a merit list prepared separately, based on their percentage of marks in the Pre-Registration Interviews and in the qualifying examination in the ratio of 50:50.

### **PHD-12.3 Preparation of Consolidated Merit List**

- (a) The Admissions Committee shall prepare the Consolidated Merit list of selected candidates immediately after the Pre-Registration Interviews and notify the same on the University Web Site.
- (b) Only the candidates in the Consolidated Merit list shall be considered for filling the existing vacancies.

### **PHD-12.4 Admission Procedure**

- (a) The Admissions Committee shall submit the Consolidated Merit list of selected candidates to the University for facilitating provisional registration
- (b) The University shall communicate the list of selected candidates to each concerned Research Centre.

- (c) The Admissions Committee shall arrange for interaction between the candidates selected for provisional Ph.D. registration and the possible Research Supervisor(s).
- (d) Upon successful interaction with the proposed Research Supervisor(s), each candidate shall submit his/her Research Proposal / Outline in the prescribed format to the University through the concerned Research Centre for the purpose of provisional registration to the Ph.D. Programme. This shall be mandatory for all the candidates.
- (e) The Research Proposal / Outline shall consist of the state-of-the-art, objectives, methodology, work plan and relevance of the proposed research area. The candidate shall also indicate therein, the related branch of Engineering/Technology, Architecture, Science, Computer Applications, Business Administration, inter-disciplinary areas and/or allied fields.
- (f) A candidate desirous of upgrading his/her M. Sc.(Engg.) by research registration to the M.Sc. (Engg.)+ Ph. D Integrated Dual Degree programme, shall submit his/her research proposal to the University before the end of the *third* Semester, which shall be the basis to determine his/her research capabilities by the Admissions Committee.
- (g) A candidate desirous of upgrading his/her M.E./M. Tech. / M. Arch. registration to M.E./M. Tech./M. Arch. + Ph. D Integrated Dual Degree programme, shall submit his/her research proposal to the University before the end of *third* Semester, which shall be the basis to determine his/her research aptitude by the Admissions Committee..
- (h) Each candidate shall have to seek admission only in such branch of major discipline for which the department is recognized as a Research Centre by the University.
- (i) At this stage, each candidate shall also submit a panel of *four* domain experts proposed by the Research Supervisor(s) through the Research Centre for constituting the Doctoral Committee, along with the prescribed fees to the University for provisional Ph.D. registration.

## PHD-12.5 The Ph. D. Programme

- (a) Upon receiving the research proposal / outline and the panel of domain experts proposed along with the prescribed fees, the Vice Chancellor shall constitute the Doctoral Committee as per Regulation PHD 3.1.2.
- (b) After provisional registration, the Ph.D. programme of a candidate shall consist of three parts in sequence, namely, Part-I: Coursework, Part-II: Comprehensive Vice Voce, and Part-III: Synopsis Submission followed by Thesis Submission and successful Defense.
- (c) The Coursework for all categories of candidates listed under Regulation 5.2 shall be as prescribed under Regulation 14, except

those of the M.E./M. Tech./M. Arch. + Ph. D Integrated Dual Degree programmes for whom, there shall be no separate requirement for Coursework and such candidates shall be exempted from Part-I.

(d) A candidate shall be free to apply for a change in the Research topic / Coursework for the consideration of the Doctoral Committee before the completion of Part-I. But, the candidate shall not be permitted to change the Research topic after the completion of Part-I.

(e) All the Ph.D. registrations shall be provisional initially and they shall be confirmed only on the successful completion of both Part-I and Part-II.

## **PHD-12.6 Role of Doctoral Committee**

The Doctoral Committee shall scrutinize and approve the Coursework (Part-I), conduct Comprehensive Viva-Voce (Part-II), and review/monitor periodically (at least once in six months) the research progress of each candidate until his/her submission of the Ph.D. Thesis.

## **PHD-13 CHANGE OF RESEARCH SUPERVISOR**

### **PHD-13.1 Procedure to be Followed**

(a) The request by a candidate for change of Research Supervisor and/ or Co-Supervisor shall be permitted by the University only under exceptional circumstances, such as disability on health grounds of the Supervisor and/or Co-Supervisor and on the endorsement/ recommendation by the Research Centre and the Doctoral Committee.

(b) In the cases like transfer, retirement or resignation of the Research Supervisor/Co-Supervisor before the candidate's submission of the thesis, the Vice Chancellor shall normally permit the candidate to continue to work under the same Research Supervisor/Co-Supervisor or in exceptional cases, permit an alternative arrangement with the consent of the Doctoral Committee.

### **PHD13.2 Handling of Conflict**

In the case of any conflict between the Supervisor and/or Co-Supervisor and the candidate, the Research Centre on receipt of request letter from either of the parties or both, shall refer the matter to the Vice Chancellor. The Vice Chancellor shall constitute a Committee to examine the case and send its report / recommendation to the University. The decision of the Vice Chancellor shall be final in this regard.

## **PHD-14 PART-I - COURSEWORK**

### **PHD-14.1 Proposing Coursework**

The written examinations for the Coursework shall be conducted normally along with the PG Examinations of the University. The candidates shall be permitted to apply and appear for one or more courses at a time in a given examination.

- (a) For each candidate with Master's degree or equivalent qualification in the Faculty of Engineering, Faculty of Architecture, Faculty of Business Administration or Faculty of Computer Applications, the Research Supervisor(s) shall propose *four* courses ( $\geq 12$  Credits) out of those listed by the University for Part-I relating to the area of research proposed by the candidate, along with his/her application for registration.
- (b) For each candidate with Bachelor's degree qualification in the Faculty of Engineering or Faculty of Architecture, the Research Supervisor(s) shall propose *eight* courses ( $\geq 24$  Credits) out of those listed by the University for Part-I relating to the area of research proposed by the candidate, along with his/her application for registration.
- (c) For each candidate of the M.Sc. (Engg.) by research + Ph. D Integrated Dual Degree programme in the Faculty of Engineering, the Research Supervisor(s) shall propose *four* courses ( $\geq 12$  Credits) out of those listed by the University for Part-I relating to the area of research proposed by the candidate, along with his/her application for registration.
- (d) The candidates with M.Sc. + M. Phil. qualifications registered in the Faculty of Science shall study *four* courses ( $\geq 12$  Credits) proposed by the Research Supervisor(s) out of those listed by the University for Part-I relating to the area of research proposed by the candidate, along with his/her application for registration. and approved by the Doctoral Committee
- (e) The candidates with only M.Sc. qualification registered in the Faculty of Science shall study *six* courses ( $\geq 18$  Credits) proposed by the Research Supervisor(s) out of those listed by the University for Part-I relating to the area of research proposed by the candidate, along with his/her application for registration. In addition to the above specified Coursework, all the candidates (including those of the M.E./ M.Tech./M.Arch. + Ph.D Integrated Dual Degree programmes) shall undertake a course on Research Methodology prescribed by the University, which shall include quantitative methods and computer applications. The Coursework shall be in the English language.

## PHD-14.2 Coursework Approval

The Doctoral Committee shall scrutinize and approve the courses proposed by the Research Supervisor(s) in each case, with or without modification.

## PHD-14.3 Coursework Lists

- (a) Individual courses for the Coursework shall be selected from different groups in such a way that there shall be a minimum of one course, but not more than two courses from any group, if grouped by the concerned Faculty/Board of Studies.
- (b) The University shall be free to revise the list of courses from time to time, normally before the commencement of the academic year.



- (c) After getting provisional Ph.D. registration, all the candidates, namely Full-Time, Part-Time and Full-Time (Special) shall take up the coursework recommended by the Doctoral Committee, which shall be a compulsory requirement,
- (d) All the candidates shall submit their applications along with the prescribed fees for the examinations in the individual courses of Coursework in response to the notifications issued by the University in this respect.

**PHD-14.4 Setting up of Question Papers**

Question papers shall be set by the identified examiners appointed for this purpose by the University from the panel recommended by the Admissions Committee.

**PHD-14.5 Evaluation of Answer Scripts**

Answer scripts of all the candidates shall be valued independently by two examiners.

**PHD-14.6 Averaging of Marks Awarded**

If the difference between the marks awarded by the two examiners is less than or equal to 14%, the marks awarded to the candidate shall be the average of the two valuations.

**PHD-14.7 Appointment of Third Examiner**

If the difference between the marks awarded by the two examiners is greater than or equal to 15%, a third examiner shall evaluate the concerned answer script(s). The average of the marks of the nearest two valuations shall be considered as the marks secured by the candidate. However, if one of the three evaluations lies exactly midway between the other two, then the higher two marks shall be taken for averaging.

**PHD-14.8 Prescribed Passing Standards**

(a) For passing the Coursework (Part I), the candidate shall obtain a minimum of 50% of the marks allotted to each Course in the University Examination.

(b) Letter Grades shall be awarded to the candidates declared successful in each Course as follows:

90-100 Marks	: S Grade (Outstanding)
75-89 Marks	: A Grade (Excellent)
60-74 Marks	: B Grade (Good)
50-59 Marks	: C Grade (Satisfactory)
< 50 Marks	: F Grade (Fail)

The University shall have the provision to issue Grade Card(s) to the candidates for the Coursework.

**PHD-14.9 Norms for Maintaining Provisional Registration**

The following norms/standards shall be applicable to all the candidates for maintaining their provisional registration:

- (a) Each individual course to be successfully cleared in a maximum of two attempts;
- (b) The entire Coursework (Part-I) to be completed within *two* semesters from the date of provisional registration by Master's Degree holders;
- (c) Candidates with Bachelor's Degree to complete the entire Coursework (Part-I) within *three* semesters from the date of provisional registration;
- (d) Candidates upgraded to the M.Sc.(Engg.) by research + Ph.D. Integrated Dual Degree to complete the entire coursework within *two* semesters from the date of provisional registration;
- (e) Grace period of *one* more semester possible for all the candidates under extra-ordinary circumstances, based on the University receiving the candidate's request supported by the recommendations of the Doctoral Committee;
- (f) Candidates failing to fulfill the above requirements liable to get their provisional registration automatically cancelled; Such candidates to be free to apply for provisional registration for Ph. D. afresh.

## PHD-15 PRESCRIBED RESIDENCE PERIOD

### PHD-15.1 Mandatory Residence Period for Part-Time Candidates

- (a) A Part-Time candidate shall put in a minimum of *one* semester of residence at his/her Research Centre in not more than 3 phases, before the comprehensive Viva-Voce (Part-II). This residence requirement shall be utilized for the purpose of the coursework preparation as well as formulation of the research problem.
- (b) Each Part Time candidate shall submit to the University through the Research Centre a Certificate issued by the Research Supervisor for completing the residence requirement satisfactorily, within four weeks of its completion.

## PHD-16 PROGRESS REPORTS / PERIODIC REVIEW BY THE DOCTORAL COMMITTEE

### PHD-16.1 Procedure for Review

The Doctoral Committee shall periodically review the research progress of the candidate, at least twice in a year until the submission of the Thesis. Each candidate shall submit a research progress report in the standard format to the Doctoral Committee, *two* weeks prior to the schedule of the meeting. The half-yearly progress report shall cover the aspects such as, the new data collected / obtained, techniques developed, progress in research, discussion of the work done during the review period, new findings and work plan for the future. Research papers prepared/published, if any, shall also be submitted.

The candidate shall make oral presentation of the research progress before the Doctoral Committee.

The Doctoral Committee shall communicate the satisfactory research progress or otherwise of the candidate to the Research Centre for onward transmission to the University.

## PHD-16.2

### **Cancellation of Registration**

The Doctoral Committee shall be free to recommend for the cancellation of Ph.D. registration of the candidate if, Two consecutive research progress reports not adjudged to be satisfactory, and/or Two consecutive research progress reports not submitted;

Before recommending cancellation of registration, the Doctoral Committee shall issue a show-cause notice to the candidate, seeking his/her explanation. On the cancellation of registration, if any, the candidate shall be free to apply to the Vice Chancellor with the recommendation of the Doctoral Committee through the Research Centre for revocation of the cancellation with valid reasons. The decision of the Vice Chancellor in this regard shall be final.

## PHD-16.3

### **The Integrated Dual Degree Programme**

The procedure to be followed for qualifying for two Degrees under the programme and also for the exit option shall be as follows:

### PHD-16.3.1

#### **Award of Two Degrees:**

Upon successful completion of provisional registration including Part-II (Comprehensive Viva Voce) and Part-III (Synopsis Submission followed by Thesis Submission, and successful Defense), the candidates for the Integrated Dual Degree shall be eligible for receiving *two* degrees, namely, M.Sc. (Engg.) by research + Ph.D. or M.E./M. Tech.+ Ph.D. as the case may be in the Faculty of Engineering or M. Arch.+ Ph.D. in the case of Faculty of Architecture,.

### PHD-16.3.2

#### **Exit Option:**

In the case of unsatisfactory progress of research work of a candidate for the Integrated Dual Degree towards Ph.D. award as observed at any stage, the Doctoral Committee shall be free to recommend the candidate to exercise the exit option to get only the M.Sc.(Engg.) by research or M.E./M. Tech. or M. Arch. Degree, as the case may be. The candidate shall be eligible to earn the Master's Degree at or after the end of *fourth* semester of normal Master's degree programme, by re-orienting his/her research proposal, conducting additional work if any, on the advice of the Research Supervisor(s) and preparing/submitting a suitable thesis/ dissertation to the University to meet the requirements of the Masters Degree and then passing in the final oral examination.

## PHD-17

### **PART-II: COMPREHENSIVE VIVA VOCE**

### PHD-17.1

#### **Request for Comprehensive Viva Voce**

The candidate shall submit a written request for the conduct of comprehensive Viva Voce, within *six* months after successful completion of Coursework (Part-I).

In the case of health / employment related problems of a candidate unable to take the comprehensive Viva Voce as above, the University shall be free to allow a further period of *six* months for this purpose, on receipt of a written request from the candidate with the recommendations of his/her Research Supervisor(s) and the Doctoral Committee through the Research Centre.

**PHD-17.2 Scheduling Comprehensive Viva Voce**

The Research Centre, in consultation with the Doctoral Committee and the University, shall schedule the date/time for the comprehensive Viva Voce preferably within *four* weeks upon receipt of the written request from the candidate for this.

**PHD-17.3 Conduct of Viva Voce**

The Doctoral Committee shall conduct the comprehensive Viva Voce in the English language.

The comprehensive Viva Voce shall be a closed-door oral examination consisting of the Doctoral Committee members (as examiners), and the candidate. The Doctoral Committee shall be free to invite additional examiner(s) if need be, chosen from amongst a panel of *two* experts recommended by the Research Supervisor for assisting it in the Viva Voce.

**PHD-17.4 Content and Form of Viva Voce**

The Comprehensive Viva Voce shall consist of a presentation by the candidate on his/her topic of research, including the work done till date and the proposed future work.

The Doctoral Committee (and the additional examiner(s), if present) shall test the candidate for fundamental concepts in the coursework and applied knowledge to carry out the proposed research work.

**PHD-17.5 Performance Standards at Viva Voce**

The Doctoral Committee shall communicate the result of the Comprehensive Viva Voce to the University through the Research Centre as:

(a) The Committee is satisfied at the successful completion of Viva Voce and the candidate shall continue the research work. OR

(b) The Committee indicates the deficiencies in specific areas in which the candidate needs strengthening of knowledge and suggesting a date preferably within the next *three* months for re-examination. If the Doctoral Committee does not recommend the continuation of research work by the candidate even after the second attempt, the provisional registration of the candidate shall stand cancelled automatically.

**PHD-18 CONFIRMATION OF Ph.D. REGISTRATION**

**PHD-18.1 Procedural Steps**

After the successful completion of coursework (Part-I) and the Comprehensive Viva Voce (Part-II), the Doctoral Committee shall

recommend to the University for issuance of notification to the candidate of Confirmation of Registration.

PHD-18.2

## Issue of Notification

The University shall issue the necessary notification within *fifteen* days from the date of receipt of the communication as per Regulation PHD-18.1 from the Doctoral Committee.

PHD-19

## OPEN SEMINARS

PHD-19.1

### Mandatory Pre-Ph.D. Seminars to be given

Prior to the submission of Synopsis (required under Part-III), each candidate shall give *two* pre-Ph.D. presentations, commonly known as, *open seminars* at the Research Centre in the English language, which shall be open to all the faculty members and research scholars, for getting feedback and comments/suggestions from them, for being suitably incorporated into the draft Thesis, under the advice of the Research Supervisor(s).

PHD-20

## PUBLICATION REQUIREMENTS

PHD-20.1

### Mandatory Publications requirement

Each candidate shall publish a minimum of *one* research paper in a Refereed Journal based on his/her research work for the Ph. D Degree, before submission of the Synopsis for adjudication, and produce evidence for the same in the form of reprint or acceptance letter from the Publisher(s) of the Journal.

PHD-21

## VALIDITY PERIOD OF REGISTRATION

PHD-21.1

### Maintenance of Registration

During the period when the registration of the candidate is in force, the candidate shall pay the prescribed tuition and other fees to the University/ Research Centre at the notified time intervals.

PHD-21.2

### Minimum Period for Submission of Thesis by Full-Time Students

Full-Time candidates for the Ph. D Degree including those upgraded to the M.Sc. (Engg.) by research + Ph.D. and M.E./ M. Tech./M. Arch. + Ph.D. Integrated Dual Degree programmes, shall be normally eligible for submission of the Thesis after a minimum period of *three* years from the date of provisional registration, subject to fulfillment of all the prescribed requirements. But, in exceptional cases having outstanding research contributions to be substantiated in writing by the Doctoral Committee, it shall be possible for a Full- Time Candidate to submit the Thesis in less than *three* years.

PHD-21.3

### Minimum Period for Submission of Thesis by Part-Time Students

Part -Time candidates for the Ph. D Degree shall be normally eligible for submission of the Thesis after a minimum period of *four* years from the date of provisional registration, subject to fulfillment of all the prescribed requirements. But, in exceptional cases having outstanding research contributions to be substantiated in writing by the Doctoral Committee, it

shall be possible for a Part - Time Candidate to submit the Thesis in less than *four* years.

**PHD-21.4 Maximum Period for Submission of Thesis by Full-Time Students**

The maximum period for submission of the Ph.D. Thesis by Full-Time candidates including those upgraded to the M.Sc. (Engg.) by research + Ph.D. and M.E./M. Tech./M. Arch. + Ph.D. Integrated Dual Degree programmes, shall be *five* years from the date of provisional registration. But, the Vice Chancellor shall have the powers to extend the maximum period for submission of the Ph.D. Thesis by such a candidate by *one* year on the specific recommendations of the Doctoral Committee forwarded through the Research Centre on receipt of a request for extension from the candidate not less than *six* months prior to the completion of the stipulated period. The decision of the Vice Chancellor in this regard shall be final. In the case of failure of the candidate to submit the Thesis even after the extended period, the registration shall be cancelled, after issuing a show-cause notice to the candidate.

**PHD-21.5 Maximum Period for Submission of Thesis by Part-Time Students**

The maximum period for submission of the Thesis for Part-Time candidates shall be *six* years. But, the Vice Chancellor shall have the powers to extend the maximum period for submission of the Thesis by such a candidate by *one* year on the specific recommendations of the Doctoral Committee forwarded through the Research Centre on receipt of a request for extension from the candidate not less than *six* months prior to the completion of the stipulated period. The decision of the Vice Chancellor in this regard shall be final. In the case of failure of the candidate to submit the Thesis even after the extended period, the registration shall be cancelled, after issuing a show-cause notice to the candidate.

**PHD-22 SUBMISSION OF SYNOPSIS AND THESIS**

**PHD-22.1 Eligibility**

Upon qualifying successfully in the Coursework (Part-I) and the Comprehensive Viva-Voce (Part-II), and satisfactory research progress followed by publication(s) in Refereed Journal(s), the candidate shall be ready to submit the Synopsis first and subsequently the Thesis, within the validity period.

**PHD-22.2 Submission of Synopsis**

At least *three* months prior to the submission of the Thesis, the candidate shall submit a Synopsis of the Thesis in English language. The candidate shall submit *six* hard copies and *one* soft copy of the Synopsis in the prescribed format to the University through the Research Centre along with:

(a) Application for adjudication of the Thesis.

(b) Certificate from Research Supervisor(s) stating that (i) Open seminars, Comprehensive Viva-Voce, at least one publication in a Refereed Journal, and all other academic requirements are fulfilled and (ii) There is *prima facie*

case for the submission of the Thesis and the Thesis does not contain any work, which has been previously submitted for the award of any Degree anywhere.

(c) Undertaking from the candidate as well as research Supervisor(s) shall mention that: "The Thesis is based on the individual, original work of the candidate, which is previously unpublished research work". It shall be ensured by the Research Supervisor(s) that: The Thesis shall not contain any material that infringes the copyright of any other individual or organization and does not hurt the sentiments of any individual(s) or religion(s). The information such as text, tables, equations, diagrams, figures, charts, graphs, and photographs taken from sources such as published work, like research papers, books, periodicals, Web Sites or other sources has been cited appropriately. Further, the opinions expressed or implied in the Thesis shall be entirely of the candidate.

(d) Certificate from the Research Centre that there are no arrears of dues up to the date of submission of the Synopsis/Thesis.

#### PHD-22.3

##### **Pre-Submission Colloquium**

Further, the candidate on submission of the Synopsis shall present a pre-submission colloquium before the Doctoral Committee, demonstrating his/her preparedness to submit the Thesis.

#### PHD-22.4

##### **Permission for Submission of Thesis**

Considering the research work of the candidate, his / her performance at the pre-submission colloquium and other technical aspects, the Doctoral Committee shall be free to permit the candidate to submit the Thesis.

#### PHD-22.5

##### **Pre-Submission Colloquium to be Repeated**

If the Doctoral Committee is not satisfied with the research work of the candidate, it may, in consultation with the Research Supervisor(s), recommend for improvements, if any. In such a case, the candidate shall appear for pre-submission colloquium once again before the Doctoral Committee within a period of *three* months to get permission for submission of the Thesis.

#### PHD-22.6

##### **Submission of the Thesis**

The candidate shall submit *six* hard copies and *one* soft copy of the Thesis in the prescribed format based on the research work conducted, to the Research Centre within *three* months from the date of submission of the Synopsis. The Research Centre shall send *five* hard copies and *one* soft copy of the Thesis to the Registrar (Evaluation). In case the candidate is unable to submit his Thesis within *three* months from the date of submission of the Synopsis, he / she shall be free to seek extension of time from the Vice Chancellor supported by the recommendations of the Research Supervisor(s) and the Doctoral Committee forwarded through the Research Centre. The candidate shall also pay the prescribed Thesis submission fees; and produce the "No Dues Certificates" from the Research Centre while submitting the Thesis.

- PHD-23**                    **ADJUDICATION OF Ph.D. THESIS**
- PHD-23.1**                **Panel of Adjudicators**  
The period of *three* months between the submission of Synopsis and that of the Thesis by the candidate shall be used by the University for deciding the panel of adjudicators.
- PHD-23.2**                **Selection of Adjudicators**  
The Research Centre shall arrange to send *four* hard copies and *one* soft copy of the Synopsis to the Registrar (Evaluation) along with a proposed panel of *eight* experts for adjudication of the thesis as approved by the Doctoral Committee, of whom *four* experts shall be from abroad. The complete postal address, e-mail ID, Telephone and fax numbers and the broad area of specialization of each proposed Adjudicator shall be provided along with the panel submitted. The Vice Chancellor shall choose *two* Adjudicators from the suggested panel for adjudication of the Thesis, with at least *one* being from outside the country, and send invitation letters to them along with a copy of the Synopsis in each case. Their acceptance shall be preferably obtained within *three* months from the date of invitation, before taking further steps.
- PHD-23.3**                **Appointment of Adjudicators to Evaluate the Thesis**  
The University shall arrange for the Thesis to be evaluated by the Research Supervisor (and jointly by the Co-Supervisor, if any) and *two* more Adjudicators identified as per Regulation 23.2.
- PHD-23.4**                **Dispatch of Copies of Theses to Adjudicators**  
The University shall send a copy of the Thesis to each Adjudicator for evaluation, with a request to evaluate the Thesis and send the Evaluation Report(s) preferably within a period of *three* months. If the Report is not received from the Adjudicator(s) within this period, a reminder once in a month to that effect shall be sent to the concerned Adjudicator(s).  
If any Adjudicator does not send the Report even after *three* reminders or does not reply to the communications from the University, the Vice Chancellor shall be free to identify another Adjudicator either from the panel or outside the panel under special circumstances.
- PHD-23.5**                **Receipt of Thesis Reports at the University**  
All the Adjudicators shall evaluate the Thesis and send their Reports (at least 250 words in length) independently to the Registrar (Evaluation). However, it shall be possible to submit a Joint Report in the case of Research Supervisor and Co-Supervisor adjudicating a Thesis.  
The Reports shall include:
- a) A critical analysis of the work of the candidate as embodied in the Thesis and an evaluation of the work in terms of its contribution to the advancement of knowledge.
  - b) List of questions to be asked or points to be clarified if any, at the final Viva.Voce.



- c) A definite recommendation as to whether the Thesis attains the standard for the award of Ph.D. or not.  
The Adjudicators shall make any one of the following recommendations:
- (i) That the Thesis is accepted in the present form and recommended for the award of Ph.D. Degree. OR
  - (ii) That the Thesis needs minor clarifications indicated in the Report which need to be clarified by the candidate at final Viva-Voce and it is recommended for the award of Ph.D. Degree. OR
  - (iii) That the Thesis needs minor corrections to be made by the candidate as indicated in the Report, which need to be incorporated in the Thesis and clarified at the final Viva Voce and it is recommended for the award of Ph.D. Degree. OR
  - (iv) That the Thesis needs major corrections as indicated in the Report and the revised Thesis to be referred back to the Adjudicator for fresh evaluation. OR
  - (v) That the Thesis is rejected for the reasons specified in the report and *not* recommended for award of Ph.D. Degree.

PHD-23.6

### **Consideration of Thesis Reports**

On receiving favorable recommendations from all the Adjudicators, including the Research Supervisor(s), the Registrar (Evaluation) shall convey the same to the Research Supervisor(s) along with copies of the Reports received and request to conduct the final Viva Voce of the candidate.

PHD-23.7

### **Scheduling of Final Viva Voce**

The Board for the final Viva Voce shall have the composition as specified under Regulation 3.1.3. In case, the Identified examiner informs in writing his / her inability to be present at the Viva Voce, the Research Supervisor (s) shall intimate the same to the Registrar (Evaluation), who shall nominate another examiner from the panel of examiners in consultation with the Vice Chancellor. The date/time of the Viva Voce shall be fixed by the Research Supervisor(s) in consultation with the other Member(s) of the Board, the Research Centre and the University.

The candidate shall provide suitable clarification(s) to all the queries of the Adjudicators at the time of Viva Voce.

PHD-23.8

### **Rejection of Thesis, based on Negative Reports**

If both the external Adjudicators (other than the Supervisor(s)) do not recommend the candidate for the award of the Ph.D. Degree, the Thesis shall be rejected. It shall be open for the candidate to seek registration for this Degree at the University, afresh.

PHD-23.9

### **Appointment of Additional Adjudicator, if necessary**

The Thesis shall not be accepted for awarding the Degree if any one of the Adjudicators (other than the Research Supervisor(s)) finds that the research work is not up to the expected standard, as given in his/her Report along with detailed reasons for the same. In such cases, the Report shall be

considered by the concerned Doctoral Committee for deciding on the need of appointing an additional Adjudicator. A fourth Adjudicator shall be appointed by the University from the panel, based on this decision, who shall be invited for this purpose, by following Regulation 23.2. If the fourth Adjudicator, after evaluating the Thesis gives a favorable Report, the Registrar (Evaluation) shall initiate further steps as per Regulation PHD 23.5. If the fourth Adjudicator also does not approve the Thesis, then the Thesis shall be rejected. It shall be open for the candidate to seek Ph.D. registration at the University, afresh.

## PHD-24

### CONDUCT OF FINAL VIVA VOCE

#### PHD-24.1

#### Procedure for Final Viva Voce

The final Viva Voce shall be conducted by the Viva Voce Board at a Centre approved by the University, which shall, normally be the Research Centre in which the research work was carried out or the Regional Centre of VTU or the institution where the Research Supervisor/Co-Supervisor is based. The composition of final Viva Voce Board (as per Regulation PHD-3.1.3) shall be as follows:

- |  |                |
|--|----------------|
| a) Research Supervisor,                          | Chairperson    |
| b) Co-Supervisor, if any,                        | Co-Chairperson |
| c) Adjudicator identified by the Vice Chancellor | Member         |

The procedure for conducting the Viva Voce shall be as follows:

1. The Research Supervisor(s) shall schedule a date/time for the Viva Voce in consultation with the Adjudicator selected by Vice Chancellor the Research Centre and the University and shall inform the date and time to the candidate and the Registrar (Evaluation) in advance.
2. The Research Supervisor(s) shall invite the Head of the institution, members of the teaching staff and research scholars to attend the Viva Voce. The candidate shall make a brief presentation of the research work carried out highlighting the important findings / conclusions. After the completion of the presentation, the Research Supervisor(s) shall give opportunity to the invitees to seek clarifications from the candidate.
3. After the presentation, the Board only shall examine the candidate to test his/her understanding of the subject matter of the Thesis and seek answers to the written queries of the Adjudicators in their Thesis Evaluation Reports. The candidate shall be required to produce all the documents, data and analysis in support of the research work presented in the Thesis.
4. On completing the Viva Voce, the Board shall submit a Report to the Registrar (Evaluation) indicating clearly whether the performance of the candidate was satisfactory and if so, giving specific recommendation for the award of the Ph.D. Degree to the candidate.
5. In case the performance of the candidate is not satisfactory, the Board shall report accordingly, giving reasons for the same and

recommending another Viva Voce to be conducted after *three* months. The University shall arrange another Viva Voce as required, with the composition of the Board unchanged.

PHD-24.2

## **Consolidated Report**

After successful completion of the Viva Voce, the Viva Voce Board shall prepare and forward the Consolidated Report along with duly corrected version of both the hard and the soft copies of the Thesis through the Research Centre to the University. Then the University with the approval of its Authorities shall award the Ph.D. Degree to the Candidate. The Vice Chancellor shall have the powers to constitute an Expert Committee to investigate into plagiarism issues connected with the Thesis, in the case of receipt by the University of any complaints either from the adjudicator(s), other individuals or any other sources. In the event of a Thesis being proved to be copied, plagiarized or misrepresented academically, the University shall have the powers to rescind the degree.

PHD-24.3

## **Handling of Plagiarism Issues**

The Vice Chancellor shall have the powers to constitute Expert Committees to investigate into plagiarism issues connected with any Ph.D. Thesis submitted to the University, in the case of receipt of any complaints either from the Adjudicator(s), other individuals or any other sources. In the event of a Thesis being proved to be copied, plagiarized or misrepresented academically, the University shall have the powers to rescind the Degree. Such candidates shall not be eligible for registering for any Degree programme at the University in the future.

PHD-25

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

PHD-25.1

### **Degree Certificates**

Upon the approval by the Executive Council, the University shall issue a Provisional Ph.D. Degree Certificate to the candidate certifying that the Degree has been awarded in accordance with the "VTU Regulations Governing the Degree of Doctor of Philosophy (Ph.D.) – 2011". The University shall award the Ph.D. Degree Certificate during the forthcoming Convocation. In the case of candidates for the Integrated Dual Degrees, each one shall be entitled to receive the M.Sc.(Engg.) by research, M.E./ M. Tech. or the M. Arch. Degree as the case may be, along with his/her Ph. D. Degree.

PHD-26

## **DEPOSITORY WITH UGC AND THE UNIVERSITY**

PHD-26.1

### **Submission to UGC**

Following the successful completion of the evaluation process and announcement of the award of the Ph.D. Degree, the University shall submit a soft copy of the Ph.D. Thesis to the UGC within a period of *thirty* days, for hosting the same on its Information and Library Network (abbreviated as INFLIBNET), accessible to all the Institutions / Universities. The University shall also maintain a repository of such Ph. D. Theses in its Library.

# Regulations

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- PHD-27**                    **PROHIBITIONS**
- PHD-27.1**                **Prohibition of Statutory Officers from Ph. D Registration**  
The Statutory Officers of the University shall not be permitted to register for the Ph.D. Degree of the University during the period of their tenure at the University.
- PHD-27.2**                **Prohibition of Candidates from Registering for any other Degree**  
No Ph.D. candidate of the University shall be permitted to pursue any other Degree programme within the University or at other Universities / Institutions, concurrently with his/her on-going registration as a candidate for the Ph. D Degree..
- PHD-27.3**                **Prohibition of Candidates from University Examination Work:**  
No Ph.D. candidate of the University shall be eligible to be appointed on any assignments at the University related examinations, while pursuing the course work (Part-I) of the Ph.D. programme.
- PHD-28**                    **REPEAL AND SAVINGS**
- PHD-28.1**                Notwithstanding anything contained in these Regulations, the provisions of any guidelines, orders, rules or regulations in force at the University shall be inapplicable to the extent of their inconsistency with these Regulations.
- PHD-28.2**                The University shall issue such orders/instructions, and prescribe such format/procedure, as it may deem fit to implement the provisions of these Regulations
- PHD-29**                    **INTERPRETATION**
- PHD-29.1**                Any question as to the interpretation of these Regulations shall be decided by the University, whose decision shall be final. The University shall have the powers to issue clarifications to remove any doubt, difficulty or anomaly which may arise during the implementation of the provisions of these Regulations.