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(Effective from the session _____ onwards)

REGULATIONS GOVERNING THE DEGREE OF DOCTOR OF PHILOSOPHY (Ph.D.)

1. ELIGIBILITY FOR REGISTRATION

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- (a) Any person who holds the Master's degree of a recognized University (three years of Buchelor degree followed by two years of Master degree) and has secured a first or high second class award or post-graduate degree or diploma of another University or Institute recognized by this University as equivalent thereto in the subject recognized by the University Grants Commission (UGC) may apply for registration as a candidate in his/her own subject/Faculty for the Ph.D. degree in the Faculties of Science, Social Sciences, Humanities. Commerce, Education or law.
- (b) Any person who holds the degree of Bachelor of Science (Engineering) or Bachelor of Medical Science of a recognized University or any other degree or diploma of another University or Institute recognized by this University as equivalent thereto may apply for registration as a candidate for the Ph.D. degree in the Faculties of Engineering or Medical Science.
- (c) The selection of candidates in the research programmes of the University shall be done on the basis of 'Entrance Test' to be conducted by the University every year in the beginning of academic session in the faculties of Science, Humanities, Social Sciences and Commerce. The syllabus and the guidelines governing the entrance test shall be prescribed by the Academic Council of the University.

 However, a candidate shall be exempted from the 'Entrance Test' if he/she meets any one of the following criteria:
 - (i) holds an M.Phil. degree of this University or any other equivalent degree recognized by this University.
 - (ii) has cleared the NET/SLET/JET/GATE examinations,
 - (iii) holds regular appointment as lecturer in the University Departments / Colleges of the University.
 - (iv) holds the post of Scientist in any National level research laboratories and has published at least two research papers in the refereed journals,
 - (v) holds research visa (applicable only to foreign national) issued as per the guidelines of HRD Ministry of the Government of India.
 - Provided other eligibility conditions are met.
- (d) All employees engaged in research work in various Departments of this University under sponsored research schemes/projects shall be eligible to enroll themselves as Ph.D. scholars while continuing to hold their posts provided they fulfill the conditions as laid down in regulation 1(a) or 1(b) and 1(c) and further their registration for Ph.D. will not



interfere with their normal work.

- (e) The University employees other than those covered under regulation 1(d) shall have to take leave for a year in the last year of his/her research provided they fulfill the requirements of registration as mentioned above.
- (f) A foreign national desirous of getting himself / herself registered in the research programmes of the University shall have to obtain research visa as per the guidelines of the HRD Ministry of Government of India.

2. ELIGIBILITY OF THE SUPERVISOR

Every candidate for the Ph.D. degree registered under regulations 1(a) and 1(b) shall be required to carry on research work in his/her own subject or allied subject at least for two years and three years, respectively, from the date of his/her registration under the guidance of a supervisor belonging to his/her own subject/Faculty or allied subject/Faculty to be appointed by the concerned postgraduate Research Council of the University The Research Council may permit a candidate of this University to work under an approved supervisor of allied Faculty / another

The supervisor under whom a candidate proposes to carry on research programme must satisfy the requirements as under:

- (a) The proposed supervisor must hold a substantive teaching position in University either in the cadre of Lecturer or Reader or Professor and must possess a Ph.D. degree in relevant areas of research in which he/she proposes to supervise the candidate. The proposed supervisor should have at least one year of service in the University and a minimum of two research publications in the relevant areas of the research in the refereed journals or Ph.D. guidance experience with research publication in refereed journal or successful completion of minor or major research project with research publications in refereed journal or evidence of attending at least two national or international conference with at least one research publication in refereed journal, research publication not constituting the part of his/her own Ph.D. thesis or a single-authored book of high standard not related to his/her doctoral work published by a reputed publishing home.
- (b) Teachers (Lecturer/Reader/Professor) of this University may be recognized as supervisor even if he/she does not have Ph.D. degree but have 10 years of service in the University and have valuable research contributions in the form of published research papers, at least two research publications in refereed journals.
- (c) Teachers Scientist in the cadre equivalent to Lecturer/Reader/Professor and employed in technical Institutes in the jurisdiction of the University and imparting courses leading to post graduation degree of this University and possessing a good number of published research papers in the refereed journals to his/her credit may be considered for supervising Ph.D. programme either independently or in association with the teachers of the University.
- (d) Teachers employed in Colleges/Institutes not covered by 2(a) or 2(b) or 2(c) of this regulation but affiliated to the University for imparting courses leading to honours graduation degree of this University may be considered by concerned postgraduate Research Council of the University on the recommendation of the concerned Departmental Research Council (DRC) for supervising the Ph.D. students provided teachers concerned (i)

must possess Ph.D. degree recognized by this University. (ii) must hold substantive post of either Lecturer or Reader or Professor, (iii) should have 5 years of service in the concerned College, and (iv) must have a minimum of two research publications in refereed journals, not constituting the part of their own Ph.D. thesis. The students registered under such teachers will have to work in the concerned University Department under the direct administrative supervision of the DRC.

- (e) A retired teacher of this University carrying on sponsored-research projects of the State Government/Central Government/UGC/CSIR/ICAR/ICMAR/ICSSR/ICHR etc as a Principal Investigator may also be considered for supervising Ph.D. programme.
- (f) The teachers of another University who are appointed as Scientists under research projects in this University shall be eligible to guide Ph.D. scholars provided they hold lien on their substantive posts and are otherwise qualified to do so.
 - (g) Scientists/Scientific Officers/Research Officers/ Research Fellows under research projects/research centres of this University shall be eligible to guide Ph.D. scholars provided their appointment in the University is for a period of not less than five years and are otherwise qualified to do so.
 - (h) Teachers (Lecturer/Reader/Professor) of this University shall also be permitted to guide Ph.D. scholars registered in other Universities provided (i) there is a vacancy with the guide under whom the candidate intends to work, (ii) the sponsoring University seeks previous permission in the matter, and (iii) the concerned Departmental Research Council approves il.
 - (i) Supervisor should not be related with the candidate.

3. WHERE SUPERVISOR NOT REQUIRED

Teachers (Lecturer/Reader/Professor) of this University, who have done some research work and contributed research papers on the subject in the refereed journals, may be allowed to carry on the research work without the guidance of a supervisor if the Research Council considers his her contribution sufficiently valuable.

4. INSTITUTIONS WHERE RESEARCH WORK CAN BE DONE

A candidate may be permitted to pursue research program in any of the following institutions:

- (a) The University departments of the University.
- (b) The departments of the constituent colleges with post-graduate teaching and having necessary facilities for carrying on research leading to Ph.D. in the branch of study concerned.
- (c) National or Regional Research Institutions in Public Sector or well equipped R&D department in private sector undertakings recognized by the University for the purpose of research at the doctoral level.

5. NUMBER OF CANDIDATES

(a) Ordinarily there shall not be more than six Ph.D. scholars at a time under a Professor, not more than four under a Reader and not more than two under a confirmed Lecturer.

Teachers of this University enrolled as Ph.D. scholars shall be counted within the quescribed.

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(b) The teachers of this University who have registered themselves as Ph.D. scholars shall not be assigned any Ph.D. scholar.

6. CATEGORIES OF REGISTERED CANDIDATES

There shall be three categories of registered doctoral candidates:

- (a) Full time candidate
- (b) Part time internal candidate
- (e) Part time external candidate

FULL TIME CANDIDATE: All research scholars who pursue full time study in this University shall come under this category.

PART TIME INTERNAL CANDIDATE: Candidates who are employed in the University service and are actively engaged in the research in addition of their regular work shall belong to this category.

PART TIME EXTERNAL CANDIDATE: All candidates working in the colleges of other University or in Research Organizations, Govt. Departments or Industrial units and are pursuing Ph.D. programme in the University, while continuing in their job shall belong to this category. They shall pursue research both in their place of employment and in the University. These candidates shall spend 6 months in spells of not less than one month at a time in this University with supervisor during their research period. External candidate should have a minimum of two years of professional experience after the post-graduate qualifications.

7. DURATION OF THE RESEARCH PROGRAMMES

A candidate registered for Ph.D. shall have to submit the thesis as per the following schedule.

Category of the candidate	Registered under regulation 1(a)		Registered under regulation 1(b)	
	Minimum duration	Maximum duration	Minimum duration	Maximum duration
Full time	2 years	5 years	3 years	5 years
Part time internal	3 years	5 years	4 years	5 years
Part time external	3 years	5 years	4 years	5 years

8. RESIDENTIAL REQUIREMENTS

A full time candidate registered for Ph.D. degree shall put at least two hundred days of attendance with the supervisor in the department during his/her research programme. A declaration by the candidate, countersigned by supervisor and Head of the department, drawn up on prescribed form (Appendix-B) will be part of the thesis. For other categories of registration the declaration will state the required attendance.

9. SYNOPSIS OF THE PROPOSED WORK

Every candidate shall submit his/her application for registration in the doctoral programme on the prescribed form "APPLICATION FORM FOR REGISTRATION IN RESEARCH PROGRAMMES"

per the guidelines stated in the form.

10. RECISTRATION pro-

10. REGISTRATION PROCEDURE

- (a) The applications for research programmes will be accepted in the University either in July or in January in each academic session. The dates for submission of the form, preregistration seminar in the concerned departments, and final submission of registration forms in the University shall be notified by the Registrar in the beginning of each academic session. The candidates desirous of registration in Ph.D. programme shall submit the filled-in prescribed form to the concerned department along with the necessary supporting documents.
- (b) There shall be a Departmental Research Council (DRC) in each department to scrutinize and process the Ph.D. application forms. The DRC will prepare the list giving emphasis whether the work could be carried out in the University with the available infrastructure. The DRC shall consist of a chairman and four faculty members as stipulated below.

Chairman:

Head of the Department

Members:

2 Senior Professors, by rotation according to seniority every two years

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1 Reader, by rotation according to seniority every two years
1 Lecturer, by rotation according to seniority every two years

Note: - In case the teachers in the department are not as per requirement, the DRC shall be constituted with the existing teachers in the University Department, total number of members not exceeding four.

The DRC shall appoint one of its members as Secretary and Convener.

- (c) PRE-REGISTRATION SEMINAR: After the scrutiny of the Ph.D. registration forms, the candidate will be informed at least one week in advance to present his/her synopsis in open pre-registration seminar to be held in the department, the date of which will be fixed in consultation with Dean of the Faculty concerned. Participation of the Dean of the Faculty, members of the DRC, other Faculty members of the department and the postgraduate students will be ensured by the Head of the Department. The research plan and synopsis of the proposed research programme will be discussed and, if found acceptable, shall be recommended to the concerned postgraduate Research Council of the University for final approval.
- (d) DATE OF REGISTRATION: The date of successful Pre-Registration Seminar shall be taken as the provisional date of registration subject to the approval of the Research Council.
- (e) APPROVAL OF RESEARCH COUNCIL: All the applications for Ph.D. registration will be considered by the Research Council. The Research Council will decide finally whether such permission for registration be given. The candidate will then be asked to deposit the requisite registration fee. The University will then notify the decision of the Research Council giving the name of candidate, name of supervisor, topic of research, Faculty of registration, the place work and the effective date of registration.

11. MODIFICATION OF RESEARCH SCHEME



A candidate registered for the Ph.D. degree may be permitted to modify the scheme of his research work or the nature or scope of his/her subject with the express permission of the DRC and the Research Council at least six months before the expected date of submission.

12. CHANGE OF SUPERVISOR

Only under unusual situations change of supervisor may be permitted by the Research Council subject to the 'No Objection Certificate' from the previous supervisor stating therein the reasons of change and the subsequent recommendation of the DRC. The candidate can also change his supervisor with the permission of Research Council, provided he/she submits genuine reasons for it for the consideration of Research Council. The thesis can be submitted under new supervisor only after one year of the change of supervisor. The supervisor under whom the candidate is willing to carry on his/her research project should have experience of guiding successful research work at the doctoral level.

13. MONITORING PROGRESS OF CANDIDATE

The supervisor shall arrange for the candidate to make a presentation of his/her work once in a year before the faculty members of the University department. Suggestions, if any, from the members of the DRC and the faculty present may be incorporated in the work. The DRC will prepare a progress report on the prescribed form (Appendix-C) for onward transmission to the Research Council.

14. CANCELLATION OF REGISTRATION

The registration of a candidate whose progress is not found satisfactory as per the recommendation of supervisor and the DRC will be cancelled. Also the Ph.D. registration shall be automatically cancelled if the submission date of the thesis exceeds the maximum period stipulated for the research programme as in regulations 7.

15. PRE-SUBMISSION SEMINAR

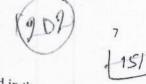
Before submission, the candidate shall be required to present his/her research findings in an open pre-submission seminar organized by the concerned department on the request of the candidate and supervisor that the research work is complete as per proposed synopsis. For the presubmission seminar, a candidate will be required to submit the following:

- (a) Five copies of the summary of the research work completed;
- (b) Draft copy of the thesis complete in all respect;
- (c) Reprints (three copies) of published/accepted research papers based on the work embodied in the thesis.

Head of the concerned department, after the receipt of the above documents, shall fix a date for presubmission seminar in consultation with the concerned Dean of the Faculty during working days of the department to ensure the presence of Dean of the Faculty, supervisor, and members of the DRC, faculty members and students.

16. THESIS GENERAL COMPOSITION

(a) A thesis for the degree of Ph.D. shall:



(ii) embody the result of research;

(i) be composed upon some special portion of the subject stated in the candidate's (iii) show evidence that it is a piece of research work characterized either by the discovery of new facts or by an attempt at a fresh interpretation of known facts and theories. It shall also demonstrate the candidate's capacity for originality, critical examination and judgments. It shall also be satisfactory in presentation

(iv) include an abstract not exceeding 700 words; The abstract should concisely state what was done, how it was done, principal results, and their significance.

- (v) include reprints of published/accepted research papers.
- (b) A candidate shall indicate clearly and extensively in the preface to his/her thesis and (i) the source from which information is taken;

- (ii) the extent to which he/she has availed himself/herself of the work of others and the portion of the thesis which he claims to be original and
- (iii) whether his/her research has been conducted independently, or under advice, or
- (c) Every candidate must also forward with his/her thesis:-

(i) A 'DECLARATION' from the Supervisor about his/her attendance at the place of

(ii) A 'CERTIFICATE' from the Supervisor drawn up in prescribed form (Appendix-D) that the subject matter of his/her thesis is a record of work done by candidate himself/herself independently under his guidance and that the contents of his/her thesis did not form a basis of the award of any previous degree to him/her or to any body else to the best of his knowledge.

(iii) The testimonies by Supervisor and the Head of the Department mentioning that the candidate, in habit and character, is a fit and proper person for the degree of

Provide that in cases of teachers, who have no recognized Supervisors, the testimonies of the Head of the Department in which he is working as well as the Dean of the Faculty shall be required.

17. THESIS FORMAT

A thesis composed as per the guidelines above must be presented for examination in a final form in typescript or print on $8.5'' \times 11''$ page with 12-point type and 1.5 lines-spaced, containing approximately 350 words with one inch margins all around and be in hard-bound form. Illustrations and tables should be preferably placed exactly where they are to appear within the text.

All thesis pages, footnotes, equations, and references should be labeled in consecutive numerical order. Illustrations and tables should be cited in text in numerical order.

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A numbered list of references must be provided at the end of the thesis. The list should be arranged in the order of citation in text, not in alphabetical order. List only one reference per reference number.

18. SUBMISSION OF THE THESIS

The concerned Head of the Department shall forward the application for submission of thesis along with the report of pre-submission seminar to the concerned Dean of the Faculty within a week and the Dean shall forward the same to the Registrar of the University. The Registrar will present the above mentioned relevant documents of the candidate before the Vice-Chancellor for his order for submission of the thesis.

Registrar after obtaining order of the Vice-Chancellor will issue a letter to the candidate concerned to submit the thesis to the Controller of Examinations within a month of the receipt of the letter. A copy of the letter shall also be sent to supervisor, concerned Head of the Department and the Dean of the Faculty. After completion of all research work, the candidate shall submit four copies, printed or typewritten, of his/her thesis along with four copies of the abstract. Examination fee should be paid by the candidate before the submission of the thesis.

The thesis will then be forwarded by Head of the Department and Dean of the Faculty concerned to the Controller of Examinations of the University for evaluation.

19. EVALUATION OF THE THESIS

- (a) After submission of the thesis, the supervisor shall submit a panel of subject experts drawn up in the prescribed format (Appendix-E), not below the rank of Reader, preferably Professor, as examiners including the supervisor. The panel as per the layout in Appendix-E shall contain the names of eight Indian and also four foreign experts, if possible, from the same area of specialization. The panel will be placed before the DRC which will recommend the panel to the Examination Board for consideration. The DRC may request the Supervisor to revise the panel if not found suitable;
- (b) For the teachers who have worked independently without the guidance of a Supervisor, the DRC shall submit the names of examiners drawn up in the prescribed format (Appendix-E) to the Examination Board/ Vice-Chancellor;
- (c) The thesis shall be examined by a Board of three examiners, one internal and two externals, appointed by the Vice-Chancellor/Examination Board; if necessary, the Vice-Chancellor shall have the option to nominate the examiner(s) from outside the panel submitted by DRC and the Examination Board. The internal examiner shall ordinarily be the person under whom the candidate has studied and worked for the Ph.D. degree;
- (d) The Controller of Examinations shall take such steps as deemed necessary to enable the reports of the examiners to be received as quickly as possible on the prescribed form (Appendix-F);
- (e) The Examiners are expected to send the reports in the prescribed form (Appendix-F) within three months from the date of receipt of the thesis;

(f) On the reports of the Examiners the thesis will be either provisionally accepted (subjected to viva-voce) or rejected. The following criteria shall be adopted for the purpose;

(i) If all the Examiners recommend the award of the degree, the thesis shall be provisionally accepted. A minor modification, typing errors etc. suggested by the Examiners shall be carried out before the oral examination is arranged;

- (ii) If all the three examiners do not recommend the award of the degree the thesis shall be rejected and the registration of the candidate shall be cancelled;
- (iii) If one examiner recommends the rejection of the degree then the thesis shall be referred to a third examiner to be nominated by the Vice-Chancellor from the panel;
- (iv) If any examiner recommends revision of the thesis the candidate shall be permitted only once to revise and submit the thesis. The thesis shall be referred to the same examiner for offering his final recommendation on the thesis which should only be either recommend for the award or reject it.
- (v) Individual cases not carried out by the above regulations shall be referred to the Examination Board for its recommendation.
- (vi) The recommendations of the examiners will be placed before the examination board which will provisionally approve the report thesis and recommendation for oral examination.

20. ORAL OR PRACTICAL EXAMINATION

- (a) If the thesis of the candidate is approved by all the examiners and the Examination Board, he/she may be required to sit for a written examination, if so required by any of the examiners, and shall submit to an oral or a practical test.
- (b) The date of oral or viva-voce examination will be fixed in consultation with the Head of the Department in consultation with the external examiner(s). The examination will be held in the department during the working days to ensure the participation of all faculty members and students.
- (c) The ORAL EXAMINATION shall be conducted as 'OPEN DEFENCE' type examination. The viva-voce or practical examination shall be with reference to the thesis and the special subject which he/she has offered. The oral or practical examination shall be conducted by the DRC with two thesis examiners (internal and at least one external) as the members.

The viva-voce is an oral defense of the candidate's thesis and its purpose can be summarized as follows:-

- (i) It is the means by which the awarding body determines whether the candidate
 has fulfilled the requirements for the award and that the thesis is of an
 appropriate standard;
- (ii) It provides a mechanism to ensure that the work is candidate's own.

- (iii) It helps the examiners determine how far the candidate is able to talk at his/her research project and enables them to seek clarification on candidate research methods and findings.
- (d) If the candidate fails to satisfy the examiners and the members of the DRC at the oral or practical examination, the Examination Board may, on the recommendation of the examiners and the DRC permit him/her to appear again at the oral or practical examination after six months, but within the period not exceeding one year following the date of his/her failure. On the second occasion, the oral or practical examination board shall include one more examiner nominated by the Vice-Chancellor. However, if the performance of the candidate on the second occasion is "NOT SATISFACTORY" the Vice-Chancellor, if he deems it fit, shall refer the remarks of the examiners drawn on the prescribed form (Appendix-G) along with the thesis to the Examination Board for the
- (e) The viva-voce or practical examination report of the examiners shall indicate whether the thesis meets the requirements specified in the regulations as appropriate and shall include a reasoned statement of the examiners' judgment of the candidate's performance.
- (f) Examiners have the right to make comments in confidence to the University in a separate report. Such comments should not normally be concerned with the performance of the candidate but may cover, for example, matters which they wish to draw to the attention of the department or of the University.

21. AWARD OF DEGREE

If the performance of the candidate at oral or practical examination is found "SATISFACTORY", the examiners who conducted the examination with the DRC shall report to the Examination Board on the prescribed form (Appendix-G). The Examination Board with its opinion shall then place the report before the Research Council whose recommendation will be placed before the Academic Council. The Vice-Chancellor on behalf of the Academic Council, if the Academic Council is not in session. shall approve the award of Ph.D. degree to the candidate and shall cause his/her name to be published with the subject and the title of his/her thesis. A degree under the seal of the University shall be subsequently delivered to the candidate.

It is a requirement for the award of the degree that one copy of a successful thesis is placed in the University Central Library and one copy in the departmental library of the concerned department.

22. PROVISIONS FOR THE INTER-DISCIPLINARY RESEARCH WORK

- (a) A candidate interested in inter-disciplinary research work and eligible for registration in research programme in this University either under regulation 1(a) or 1(b) shall be registered in the department offering Master's degree in his/her subject or allied subject.
- (b) The Departments possessing the potentiality of guiding research work of inter-disciplinary nature should define the areas of related and allied disciplines which are to be approved by the Academic Council.
- (c) Where the candidates have applied for conducting research on a topic of inter-department/ inter-Faculty areas and request for a Supervisor from another Department/Faculty the joint



DRCs will decide the topic to be allotted to the candidate, assign the Supervisor and Cosupervisor meeting the requirements as in regulation 2, fix the place of work and also the quantum of the research work to be carried out by the candidate.

- (d) The joint DRCs will assess the candidate's suitability and eligibility for registration in a department for working on an inter-disciplinary topic.
- (e) After registration of such candidates, their progress will be monitored by an Advisory Committee to be constituted by the joint DRCs and approved by the Vice-Chancellor. This Advisory Committee will consist of the Supervisor, Co-supervisor and some other teachers from the two departments belonging to the same area of research/specialization.
- (f) After the registration of such candidates, the synopsis, progress report, forwarding of thesis, evaluation of the thesis, viva-voce or practical examination, etc, is to be done by the main supervisor as well as the Co-supervisor, who would have equal status in all matters pertaining to the supervision of submission and evaluation of the thesis as per the regulations stated above for the candidates registered under one supervisor.



REGULATIONS GOVERNING THE DEGREE OF DOCTOR OF SCIENCE (D.Sc.) AND DOCTOR OF LITERATURE (D.Litt.)

1. ELIGIBILITY FOR REGISTRATION

- (a) A candidate, who has obtained the Ph.D. degree of the University recognized by the University Grants Commission (UGC), may apply for registration as a candidate for the D.Sc. or D.Litt. degree. A number of good research publications in the area of his/her research in refereed journals is essential.
- (b) A candidate without the Ph.D. degree may apply for registration for the D.Sc. or D.Litt. degree at least six sessions after he/she obtained the Master's degree securing at least 60% marks in aggregate provided, in the opinion of Research Council, the candidate has made valuable research contributions to the subject in which he/she is applying for the registration. A number of good research publications in the area of his/her research in refereed journals is essential.
- (c) All employees engaged in research work in various Departments of this University under sponsored research schemes/projects shall be eligible to enroll themselves as D.Sc. or D.Litt. scholars while continuing to hold their posts provided they fulfill the conditions as laid down in 1(a) and 1(b) of this regulation and further their registration for D.Sc. or D.Litt. will not interfere with their normal work.
- (d) The University employees other than those covered under 1(c) of this regulation shall have to take leave for a year in the last year of his/her research provided they fulfill the requirements of registration as mentioned above.
- (e) A foreign national desirous of getting himself / herself registered in the research programmes of the University shall have to obtain research visa as per the guidelines of the HRD Ministry of Government of India.

2. ELIGIBILITY OF THE SUPERVISOR

Every candidate for the D.Sc. or D.Litt. degree registered under 1(a), 1(b), 1(c), 1(d) and 1(e) shall be required to carry on research work in his/her own subject or allied subject at least for three years from the date of his/her registration under the guidance of a supervisor belonging to his/her own subject/Faculty or allied subject/Faculty to be appointed by the Research Council The Research Council may permit a candidate of this University to work under an approved supervisor of allied Faculty / another University.

The supervisor under whom a candidate proposes to carry on research programme must satisfy the requirements as under:

(a) The proposed supervisor must hold a substantive teaching position either in the cadre of Reader or Professor and must possess a Ph.D. degree in relevant areas of research in which he/she proposed to supervise the candidate. The proposed supervisor should have a minimum of five original research publications in the relevant areas of research in the

refereed journals; excluding the research papers he/she published from his/her Ph.D. thesis.

(b) Teachers of this University as defined in 2(a) of this regulation may be recognized as supervisor even if he/she does not have Ph.D. degree but have 15 years of service in the University and have valuable research contributions in the form of published research papers, at least seven original research publications in the refereed journals.

- (c) Teachers/Scientist in the cadre equivalent to Reader or Professor and employed in technical Institutes in the jurisdiction of the University and imparting courses leading to post graduation degree of this University and possessing published research papers in the refereed journals to his/her credit and having 10 years of postgraduate teaching experience may be considered for supervising Ph.D. programme either independently or in association with the teachers of this University.
- (d) A retired teacher of this University carrying on sponsored-research projects of the State Government/Central Government/UGC/CSIR/ICAR/ICMAR/ICSSR/ICHR etc as a Principal Investigator may also be considered for supervising D.Sc. or D.Litt. programme provided the sponsored project shall continue for at least two years.
- (e) The teachers of another University who are appointed as Scientists under research projects in this University shall be eligible to guide D.Sc. or D.Litt. scholars provided they hold lien on their substantive posts and are otherwise qualified to do so.
- (f) Scientists/Scientific Officers/Research Officers/ Research Fellows under research projects/research centres of this University shall be eligible to guide D.Sc. or D.Litt. scholars provided their appointment in the University is for a period of not less than five years and are otherwise qualified to do so.
- (g) Teachers of this University shall also be permitted to guide D.Sc. or D.Litt, scholars registered in other Universities provided (i) there is a vacancy with the guide under whom the candidate intends to work, (ii) the sponsoring University seeks previous permission in the matter, and (iii) the concerned Departmental Research Council approves it.
- (h) Supervisor should not be related with the candidate.

3. WHERE SUPERVISOR NOT REQUIRED

Teachers of this University, who possess Ph.D. degree and have done some research work and contributed research papers on the subject in the refereed journals (at least four single-authored papers), may be allowed to carry on the research work under 1(b) of this regulation without the guidance of a supervisor if the Research Council considers his/her contribution sufficiently valuable.

4. INSTITUTIONS WHERE RESEARCH WORK CAN BE DONE

A candidate may be permitted to pursue research program in any of the following institutions:-

(a) The University departments of the University.

(b) The departments of the constituent colleges with post-graduate teaching and having necessary facilities for carrying on research leading to D.Sc. or D.Litt. in the branch of study concerned.

(c) National or Regional Research Institutions in Public Sector or well equipped R&D department in private sector undertakings and affiliated to this University for postgraduating teaching.

5. NUMBER OF CANDIDATES

- (a) Ordinarily there shall not be more than six scholars (Ph.D., D.Sc. D.Litt. taken together) at a time under a Professor and not more than four under a Reader. Teachers of this University enrolled as D.Sc. or D.Litt. scholars shall be counted within the quota prescribed.
- (b) The teachers of this University who have registered themselves as D.Sc. or D.Litt. scholars shall not be assigned any D.Sc. or D.Litt. scholar.

6. CATEGORIES OF REGISTERED CANDIDATES

There shall be three categories of registered D.Sc. / D.Litt. candidates:

- (a) Full time candidate
- (b) Part time internal candidate
- (c) Part time external candidate

FULL TIME CANDIDATE: All research scholars who pursue full time study in this University shall come under this category.

PART TIME INTERNAL CANDIDATE: Candidates who are employed in the University service and are actively engaged in the research in addition of their regular work shall belong to this category.

PART TIME EXTERNAL CANDIDATE: All candidates working in the colleges of other University or in Research Organizations, Govt. Departments or Industrial units and are pursuing Ph.D. programme in the University, while continuing in their job shall belong to this category. They shall pursue research both in their place of employment and in the University. These candidates shall spend 6 months in spells of not less than one month at a time in this University with supervisor during their research period. External candidate should have a minimum of two years of professional experience after the post-graduate qualifications.

7. DURATION OF THE RESEARCH PROGRAMMES

A candidate registered for D.Sc. or D.Litt. shall have to submit the thesis as per the following schedule.

Category of the candidate	Minimum duration	Maximum duration
Full time	3 years	5 years
Part time internal	4 years	5 years
Part time external	4 years	5 years

8. RESIDENTIAL REQUIREMENTS

A full time candidate registered for D.Sc. or D.Litt. degree shall put at least two hundred days of attendance with the supervisor in the department during his/her research programme. A declaration by the candidate, countersigned by supervisor and Head of the department, drawn up on prescribed form (Appendix-B) will be part of the thesis. For other categories of registration the declaration will state the required attendance.

9. SYNOPSIS OF THE PROPOSED WORK



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Every candidate shall submit his/her application for registration in the doctoral programme on the prescribed form "APPLICATION FORM FOR REGISTRATION IN RESEARCH PROGRAMMES" per the guidelines stated in the form.

10. REGISTRATION PROCEDURE

- (a) The applications for research programmes will be accepted in the University either in July or in January in each academic session. The dates for submission of the form, preregistration seminar in the concerned departments, and final submission of registration forms in the University shall be notified by the Registrar in the beginning of each academic session. The candidates desirous of registration in D.Sc. or D.Litt. programme shall submit the filled-in prescribed form to the concerned department along with the necessary supporting documents.
- (b) There shall be a Departmental Research Council (DRC) in each department to scrutinize and process the D.Sc. / D.Litt. application forms. The DRC will prepare the list giving emphasis whether the work could be carried out in the University with the available infrastructure. The DRC shall consist of a chairman and five faculty members as stipulated below.

Chairman: Head of the Department

Members: 3 Senior Professors, by rotation according to seniority every two years

2 Reader, by rotation according to seniority every two years

Note: - In case the teachers in the department are not as per requirement, the DRC shall be constituted with the existing teachers in the University Department, total number of members not exceeding five.

The DRC shall appoint one of its members as Secretary and Convener.

(c) PRE-REGISTRATION SEMINAR: After the scrutiny of the D.Sc. / D.Litt. registration forms, the candidate will be informed at least one week in advance to present his/her synopsis in open pre-registration seminar to be held in the department, the date of which will be fixed in consultation with Dean of the Faculty concerned. Participation of the Dean of the Faculty, members of the DRC, other Faculty members of the department and P.G. students will be ensured by the Head of the Department. The research plan and synopsis of the proposed research programme will be discussed and, if found acceptable, shall be recommended to the Research Council of the University for final approval.

(d) DATE OF REGISTRATION: The date of successful Pre-Registration Seminar shall be taken as the provisional date of registration subject to the approval of the Research Council

(e) APPROVAL OF RESEARCH COUNCIL: All the applications for D.Sc. / D.Litt. registration will be considered by the Research Council and the Research Council will decide finally whether such permission for registration be given. The candidate will then be asked to deposit the requisite registration fee. The University will then notify the

decision of the Research Council giving the name of candidate, name of supervitopic of research. Faculty of registration, the place work and the effective date of registration.

11. MODIFICATION OF RESEARCH SCHEME

A candidate registered for the D.Sc. or D.Litt. degree may be permitted to modify the scheme of his/her research work or the nature or scope of his/her subject with the express permission of the DRC and the Research Council at least six months before the expected date of submission.

12. CHANGE OF SUPERVISOR

Only under unusual situations change of supervisor may be permitted by the Research Council subject to the 'No Objection Certificate' from the previous supervisor stating therein the reasons of change and the subsequent recommendation of the DRC. The thesis can be submitted under new supervisor only after one year of the change of supervisor. The supervisor under whom the candidate is willing to carry on his/her research project should have experience of guiding successful research work at the doctoral level and is otherwise qualified to do so. The Candidate can also change his supervisor with the permission of Research Council provided he submits genuine reasons for it for the consideration of Research Council.

13. MONITORING PROGRESS OF CANDIDATE

The DRC shall arrange for the candidate to make a presentation of his/her work once in a year before the faculty members of the University department. Suggestions, if any, from the members of the DRC and the faculty present may be incorporated in the work. The DRC will prepare a progress report on the prescribed form (Appendix-C) for onward transmission to the Research Council.

14. CANCELLATION OF REGISTRATION

The registration of a candidate whose progress is not found satisfactory as per the recommendation of supervisor and the DRC will be cancelled. Also the D.Sc. / D.Litt. registration shall be automatically cancelled if the submission date of the thesis exceeds the maximum period stipulated for the research programme as in 7 of this regulation.

15. PRE-SUBMISSION SEMINAR

Before submission, the candidate shall be required to present his/her research findings in an open pre-submission seminar organized by the concerned department on the request of the candidate and supervisor that the research work is complete as per proposed synopsis.

For the pre-submission seminar, a candidate will be required to submit the following:

- (a) Five copies of the summary of the research work completed
- (b) Draft copy of the thesis complete in all respect
- (c) Reprints (three copies) of published/accepted research papers based on the work embodied in the thesis.

Head of the concerned department, after the receipt of the above documents, shall fix a date for pre-submission seminar in consultation with the concerned Dean of the Faculty during working days of the department to ensure the presence of Dean of the Faculty, supervisor, and members of the DRC, faculty members and students.

16. THESIS GENERAL COMPOSITION

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- (a) A thesis for the degree of D.Sc. / D.Litt. shall :
 - i. be composed upon some special portion of the subject stated in the candidate's application;
 - ii. embody the result of research;
 - iii. show evidence that it is a substantial contribution towards advancement of knowledge; that it is original in the sense of discovering a new avenue of research or of making a marked and distinct advance on the result of previous investigation or of imparting a new interpretation in the facts or theories already known so as to reveal a new aspect of the knowledge. It shall also be satisfactory in presentation so far as language, style and form are concerned.
 - iv. not be a work done conjointly with any other person, but it shall be the work of the candidate alone.
 - v. be a work of high merit from all points of view.
 - vi. include an abstract not exceeding 700 words; The abstract should concisely state what was done, how it was done, principal results, and their significance.
- vii. include reprints of published/accepted research papers based on the work included in the thesis.
- (b) A candidate shall indicate clearly and extensively in the preface to his/her thesis and specifically in notes, the following:
 - i. the source from which information is taken;
 - ii. the extent to which he/she has availed himself/herself of the work of others and the portion of the thesis which he claims to be original and
 - iii. whether his/her research has been conducted independently, or under advice, or in co-operation with others.
 - iv. in what respect his/her investigations appear to him/her to tend to the advancement of knowledge.

(c) Every candidate must also forward with his/her thesis:-

- i. A 'DECLARATION' from the Supervisor about his/her attendance at the place of work' (Appendix-B);
- ii. A 'CERTIFICATE' from the Supervisor drawn up in prescribed form (Appendix-D) that the subject matter of his/her thesis is a record of work done by candidate himself/herself independently under his guidance and that the contents of his/her thesis did not form a basis of the award of any previous degree to him/her or to any body else to the best of his knowledge.
- iii. The testimonies by Supervisor and the Head of the Department mentioning that the candidate, in habit and character, is a fit and proper person for the degree of D.Sc. or D.Litt.

Provide that in cases of teachers, who have no recognized Supervisors, the testimonies of the Head of the Department in which he is working as well as the Dean of the Faculty shall be required.

17. THESIS FORMAT

A thesis composed as per the guidelines above must be presented for examination in a final form in typescript or print on $8.5'' \times 11''$ page with 12-point type and 1.5 lines-spaced,

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i. the source from which information is taken;

- ii. the extent to which he/she has availed himself/herself of the work of others and the portion of the thesis which he claims to be original and
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containing approximately 350 words with one inch margins all around and be in hard-bound form. Illustrations and tables should be preferably placed exactly where they are to appear within the text.

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All thesis pages, footnotes, equations, and references should be labeled in consecutive numerical order. Illustrations and tables should be cited in text in numerical order.

A numbered list of references must be provided at the end of the thesis. The list should be arranged in the order of citation in text, not in alphabetical order. List only one reference per reference number.

18. SUBMISSION OF THE THESIS

The concerned Head of the Department shall forward the application for submission of thesis along with the report of pre-submission seminar to the concerned Dean of the Faculty within a week and the Dean shall forward the same to the Registrar of the University. The Registrar will present the above mentioned relevant documents of the candidate before the Vice-Chancellor for his order for submission of the thesis.

Registrar after obtaining order of the Vice-Chancellor will issue a letter to the candidate concerned to submit the thesis to the Controller of Examinations within a month of the receipt of the letter. A copy of the letter shall also be sent to supervisor, concerned Head of the Department and the Dean of the Faculty. After completion of all research work, the candidate shall submit four copies, printed or typewritten, of his/her thesis along with four copies of the abstract. Examination fee should be paid by the candidate before the submission of the thesis.

The thesis will then be forwarded by Head of the Department and Dean of the Faculty concerned to the Controller of Examinations of the University for evaluation.

19. EVALUATION OF THE THESIS

- (a) After submission of the thesis, the supervisor shall submit a panel of subject experts drawn up in the prescribed format (Appendix-E), not below the rank of Professor as examiners. The panel as per the layout in Appendix-E shall contain the names of eight Indian and also four foreign experts if possible from the same area of specialization. The panel will be placed before the Examination Board/Vice-Chancellor for consideration. The DRC may request the Supervisor to revise the panel if not found suitable;
- (b) For the teachers who have worked independently without the guidance of a Supervisor, the DRC shall submit the names of examiners drawn up in the prescribed format (Appendix-E) to Examination Board/Vice-Chancellor;
- (c) The thesis shall be examined by a Board of three external examiners appointed by the Examination Board/Vice-Chancellor. If necessary, the Vice-Chancellor shall have the option to nominate the examiner(s) from outside the panel submitted by the DRC and the Research Council.
- (d) The Controller of Examinations shall take such steps as deemed necessary to enable the reports of the examiners to be received as quickly as possible on the prescribed form

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- (e) The Examiners are expected to send the reports in the prescribed form (Appendix-F) within three months from the date of receipt of the thesis;
- (f) On the reports of the Examiners the thesis will be either provisionally accepted (subjected to viva-voce) or rejected. The following criteria shall be adopted for the purpose;
 - i. If all the Examiners recommend the award of the degree, the thesis shall be provisionally accepted. A minor modification, typing errors etc. suggested by the Examiners shall be carried out before the oral examination is arranged;
 - If all the three examiners do not recommend the award of the degree the thesis shall be rejected and the registration of the candidate shall be cancelled;
 - iii. If one examiner recommends the rejection of the degree then the thesis shall be referred to a third examiner to be nominated by the Vice-Chancellor from the panel;
 - iv. If any examiner recommends revision of the thesis the candidate shall be permitted only once to revise and submit the thesis. The thesis shall be referred to the same examiner for offering his final recommendation on the thesis which should only be either recommend for the award or reject it.
 - v. Individual cases not carried out by the above regulations shall be referred to the Examination Board for its recommendation.
 - vi. The recommendations of the examiners will be placed before the examination board which will provisionally approve the report thesis and recommendation for oral examination.

20. ORAL OR PRACTICAL EXAMINATION

- (a) If the thesis of the candidate is approved by all the examiners and the Examination Board, he/she may be required to sit for a written examination, if so required by any of the examiners, and shall submit to an oral or a practical test.
- (b) The date of oral or viva-voce examination will be fixed in consultation with the Head of the Department in consultation with the external examiners. The examination will be held in the department during the working days to ensure the participation of all faculty members and students.
- (c) The ORAL EXAMINATION shall be conducted as 'OPEN DEFENCE' type examination. The viva-voce or practical examination shall be with reference to the thesis and the special subject which he has offered. The oral or practical examination shall be conducted by the DRC with two thesis examiners as the members.

The viva-voce is an oral defense of the candidate's thesis and its purpose can be summarized as follows:-

 It is the means by which the awarding body determines whether the candidate has fulfilled the requirements for the award and that the thesis is of an appropriate standard;



- ii. It provides a mechanism to ensure that the work is candidate's over
- iii. It helps the examiners determine how far the candidate is able to talk about his/her research project and enables them to seek clarification on candidate research methods and findings.
- (d) If the candidate fails to satisfy the examiners and the members of the DRC at the oral or practical examination, the Examination Board may, on the recommendation of the examiners and the DRC permit him/her to appear again at the oral or practical examination after six months, but within the period not exceeding one year following the date of his/her failure. On the second occasion, the oral or practical examination board shall include one more examiner nominated by the Vice-Chancellor. However, if the performance of the candidate on the second occasion is "NOT SATISFACTORY" the Vice-Chancellor, if he deems it fit, shall refer the remarks of the examiners drawn on the prescribed form (Appendix-G) along with the thesis to the Examination Board for the final decision.
- (e) The viva-voce or practical examination report of the examiners shall indicate whether the thesis meets the requirements specified in the regulations as appropriate and shall include a reasoned statement of the examiners' judgment of the candidate's performance.
- (f) Examiners have the right to make comments in confidence to the University in a separate report. Such comments should not normally be concerned with the performance of the candidate but may cover, for example, matters which they wish to draw to the attention of the department or of the University.

21. AWARD OF DEGREE

If the performance of the candidate at oral or practical examination is found "SATISFACTORY", the examiners who conducted the examination with the DRC shall report to the Examination Board on the prescribed form (Appendix-G). The Examination Board with its opinion shall then place the report before the Research Council whose recommendation will be placed before the Academic Council. The Vice-Chancellor on behalf of the Academic Council, if the Academic Council is not in session, shall approve the award of D.Sc. or D.Litt. degree to the candidate and shall cause his/her name to be published with the subject and the title of his/her thesis. A degree under the seal of the University shall be subsequently delivered to the candidate.

It is a requirement for the award of the degree that one copy of a successful thesis is placed in the University Central Library and one copy in the departmental library of the concerned department.

22. PROVISIONS FOR THE INTER-DISCIPLINARY RESEARCH WORK

- (a) A candidate interested in inter-disciplinary research work and eligible for registration in research programme in this University either under regulation 1(a) or 1(b) or 1(c) or 1(d) or 1(e) shall be registered in the department offering Master's degree in his/her subject or allied subject.
- (b) The Departments possessing the potentiality of guiding research work of interdisciplinary nature should define the areas of related and allied disciplines which are

to be approved by the Academic Council.



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- (c) Where the candidates have applied for conducting research on a topic of interdepartment/ inter-faculty areas and request for a supervisor from another
 Department/Faculty the joint DRCs will decide the topic to be allotted to the
 candidate, assign the Supervisor and Co-supervisor meeting the requirements as in
 2 of this regulation, fix the place of work and also the quantum of the research work
 to be carried out by the candidate.
- (d) The joint DRCs will assess the candidate's suitability and eligibility for registration in a department for working on an inter-disciplinary topic.
- (e) After registration of such candidates, their progress will be monitored by an Advisory Committee to be constituted by the joint DRCs and approved by the Vice-Chancellor. This Advisory Committee will consist of the Supervisor, Co-supervisor and some other teachers from the two departments belonging to the same area of research/specialization.
- (f) After the registration of such candidates, the synopsis, progress report, forwarding of thesis, evaluation of the thesis, viva-voce or practical examination, etc, is to be done by the main supervisor as well as the Co-supervisor, who would have equal status in all matters pertaining to the supervision of submission and evaluation of the thesis as per the regulations stated above for the candidates registered under one supervisor.