The uploaded Ph.D regulation, Forms and Ph.D thesis format available in the University Website is an authentic document which is approved by Honb'le Vice-Chancellor.

This does not require any signature.

All the addendum till 30th Academic Council have been incorporated and the documents are complete in itself.

All the stake holders may download this document for their Reference

REGULATIONS

FOR Ph.D DEGREE IN ENGINEERING,

ARCHITECTURE, SCIENCE, HUMANITIES AND SOCIAL SCIENCE



VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY SIDDHI VIHAR, BURLA, SAMBALPUR ODISHA, INDIA. PIN- 768018

CONTENTS

Regulation Sl.No	Description		
1	Introduction		
2	Eligibility		
3	Selection and Admission		
4	Supervisors		
5	Doctoral Research Committee		
6	Enrolment and Provisional Registration		
7	Residential Requirement	12	
8	Attendance and leave	12	
9	Semester Registration	13	
10	Course Work	13	
11	Registration	14	
12	Fellowship	15	
13	Withdrawal	16	
14	Pre-submission Seminar	17	
15	Submission of <i>Thesis</i>		
16	Evaluation of <i>Thesis</i>		
17	Award of Degree		
18	Quality Improvement Programme		
19	Conduct and Discipline		
20	Progress of Research Programme		
21	Termination of Studentship		
22	Transition Issues		
23	Dissemination of Information		
24	Exceptions		
25	Depository with UGC		
	<u>Appendices</u>		
	Appendix – I: List of Departments offering Ph.D Programmes	27	
	Appendix – II: Qualifying degrees for admission to Ph.D Programme	28	
	Appendix – III: Composition of Departmental Academic		
	Committee(DAC)	31	
	Appendix – IV: Composition of Research Programme Evaluation		
	Committee (RPEC)	32	
	Appendix – V: Form VSSUT/PGSR/601 to VSSUT/PGSR/629		
	Appendix – VI: Format of Ph.D thesis		

1. INTRODUCTION

- 1.1 The University provides facilities for research leading to the Doctor of Philosophy (Ph.D) in Engineering, Science, Humanities and Social Sciences in various disciplines as mentioned in **Appendix I**.
- 1.2 The Ph.D *thesis* shall be the report of the research work characterized by either discovery of new facts, new interpretation of known facts and theories, an independent design or development, development of a new instrument or technology, an exhaustive study and criticism of published work, or any applied research work that can be exploited for creation of wealth for human well-being.
- 1.3 The Programme of Research with the governing rules and regulations are formulated by the Academic Council of the University. The Academic Council can modify or change the structure, the governing rules and regulations from time to time with the recommendations of the Research Programme Evaluation Committee (RPEC). As the Ph.D. Programme is not a time bound Programme, the governing rules and regulations prevailing at the time of enrolment will be applicable to the Ph.D Scholars, in addition to other rules and regulations as applicable.

2. ELIGIBILITY:

2.1(a) Ph.D (Engineering):

The eligibility criterion for admission to Ph.D Programme in Engineering is one of the following:

- (i) (a) M.Tech/M.E/M.Sc. (Engg.) in relevant discipline with at least 60% marks in aggregate (or equivalent CGPA) at B.Tech/M.Tech level from an Institute/University recognized by AICTE/UGC/Central Government.
 - (b) In addition to (a) for Computer Science Engineering and IT, ME/M.Tech. in CSE/IT/M.Sc. (Engg.), M.Sc. in IT/CS/Data Science/ Cyber Security/AI followed by M.Tech., in CS / IT/ Relevant specialization, MCA followed by M.Tech in CS/IT/Relevant specialization will be considered.
- (ii) Faculty members employed in permanent positions of VSSUT, Burla having M.Tech in relevant discipline from an Institute/University recognized by AICTE/UGC/Central Government.
- (iii) Non-Teaching staff members employed in permanent positions of VSSUT, Burla for a period of at least 08 years out of which 03 years in existing post and having M.Tech in relevant discipline with at least 60% marks in aggregate (or equivalent CGPA) at B.Tech /M.Tech level from an Institute/ University recognized by AICTE/UGC/Central Government.

2.1(b) Ph.D(Architecture):

The eligibility criteria for admission to Ph.D Programme in Architecture is one of the following:

- (i) Master's degree in Architecture/Planning/allied specialization or equivalent from an Institution/University recognized by Council of Architecture/AICTE/UGC/Central Government with at least 60% marks in aggregate (or equivalent CGPA) at Bachelors & Masters level.
- (ii) Faculty members employed in permanent positions of VSSUT, Burla having Bachelor's Degree in Architecture /Planning or equivalent and Master's degree in Architecture/Planning/ allied specialization or equivalent from an Institution/University recognized by Council of Architecture / AICTE / UGC / Central Government.
- (iii) Non-Teaching staff members employed on permanent positions of VSSUT, Burla for a period of at least 08 years out of which 03 years in existing post and having Bachelor's Degree in Architecture /Planning or equivalent and Master's degree in Architecture/Planning/ allied specialization or equivalent in relevant discipline with at least 60% marks in aggregate (or equivalent CGPA) at Bachelor's and Master's level from an Institute/ University recognized Council of Architecture / AICTE / UGC / Central Government.

2.2 Ph.D (Science):

The eligibility criteria for admission to Ph.D Programme in Science is one of the following:

- (i) M.Phil /M.Tech. /M.S/ M.Sc. in relevant discipline with at least 60% marks in aggregate (or equivalent CGPA) in M.Sc. level from an Institute or University recognized by AICTE/UGC/Central Government.
- (ii) MCA with at least 65% marks in aggregate (or equivalent CGPA) at MCA level from an Institute or University recognized by AICTE / UGC / Central Government.
- (iii) M.Tech with MCA in relevant discipline with at least 60% marks (or equivalent CGPA) at M.Tech/MCA level from an Institute or University recognized by AICTE/UGC/Central Government.
- (iv) Faculty members employed on permanent positions of VSSUT, Burla having M.Phil/M.Sc./MCA in relevant discipline from an Institute or University recognized by AICTE/UGC/Central Government..
- (v) Non-Teaching Staff members, employed on permanent positions for a period of at least 08 years out of which 03 years in the existing post and having M.Scwith 60% marks in aggregate (or equivalent CGPA) at M.Sc level from an Institute or University recognized by AICTE/UGC/Central Government.
- (vi) Non Teaching Staff Members, employed on permanent positions for a period of at least 08 years out of which 03 years in the existing post and having M.Tech with 60% marks in aggregate (or equivalent CGPA) at MCA/ M.Tech level or with 65% marks in aggregate (or equivalent CGPA) at MCA level from an Institute or University required by AICTE/UGC/Central Government.

2.3 Ph.D (Humanities & Social Sciences):

The eligibility criteria for admission to Ph.D Programme in Humanities and Social Science is one of the following:

- (i) M.Phil /M.A/M.B.A in relevant discipline with at least 60% marks in aggregate (or equivalent CGPA) at M.A/MBA level from an Institute or University recognized by AICTE/UGC/Central Government.
- (ii) Faculty members employed on permanent positions of VSSUT, Burla, having M.Phil/M.A/MBA in relevant discipline from an Institute or University recognized by AICTE/UGC/Central Government.
- (iii) Non-Teaching Staff members, employed on permanent positions for a period of at least 08 years out of which 03 years in the existing post and having M.Phil/M.A/MBA in relevant discipline with at least 60% marks in aggregate(or equivalent CGPA) at MA/MBA level from an Institute or University recognized by AICTE/UGC/Central Government.

Essential qualification in relevant discipline for admission to various Ph.D Programme are given in Appendix-II. The equivalent CGPA shall be computed as per the VSSUT Regulations without considering the conversion formula of the respective Institute/University.

Candidates belonging to SC/ST category shall be given relaxation of 5% marks in eligibility criteria. Relaxation of 5% marks shall also be given to physically challenged/disabled candidates as per UGC guidelines.

- 2.4 In computing the percentage of marks in CGPA, all papers of a B.Tech, B.Arch., M.Tech, M.Sc./M.Phil or any other programme will be considered both in numerator and denominator
- 2.5 Universities/Institutes sometimes record their own conversion of marks to grade or vice-versa on their grade sheets. Under such circumstances VSSUT, Burla will accept only the original mode of evaluation ignoring the conversion.
- 2.6 Qualification in GATE or NET is not essential for admission to Ph.D Programme. Students applying for University or Government Scholarships/Fellowships shall need a valid NET (Lectureship or JRF) or GATE Score if required by the Government regulations. Moreover, a candidate having NET/GATE Scores/any other fellowship from any Government Agencies shall be given preference in taking admission to Ph.D Programme.
- 2.7 The various categories of candidates (with or without financial support) mentioned below are eligible for apply for admission to Ph.D Programme provided they satisfy the eligibility criteria and qualification requirements as given in Section 2.1/2.2/2.3
 - (i) Category 1 : Full time students with University Fellowship/ Assistantship (University Scholar)
 - (ii) Category 2 : Full time students with External Fellowship (UGC/CSIR/AICTE/DST, etc.)
 - (iii) Category 3 : Full time students without Fellowship (Self financed/Self supported)
 - (iv) Category 4: VSSUT faculty members
 - (v) Category 5: VSSUT regular employees (Non-Teaching)
 - (vi) Category 6: Project Scholars (JRF/SRF/RA etc.) or Project Staff members.
 - (vii) Category 7 : QIP Scholars
 - (viii) Category 8 : Sponsored students (Institute/ Research/ Organization/ Industry)

(ix) Category – 9: Sponsored students from Burla and Vicinity.

The Ph.D students under categories 1, 2, 6 & 7 have to take 10 hours of teaching load per week and assist in research and consultancy work.

- 2.8 Unlike other academic programmes, mere possession of required degrees and a superior academic record do not guarantee admission of a student to the Ph.D Programme. Apart from academic record, the Departmental Academic Committee (DAC) will take into consideration the research aptitude, ability to work in a team, subject interest, availability of supervisors, facilities in the Department and the research focus while selecting candidates to the Ph.D Programme. The composition of Departmental Academic Committee (DAC) is given in Appendix-III.
- **2.9** Research students (JRF, SRF, RA) of Government R&D Laboratories (DST, DAE, ISRO, DBT, CSIR, DOS, DRDO and similar research organizations) who are not entitled to award their own degrees engaged in full time research can be enrolled under category 2. They will need to spend at least one semester in VSSUT, Burla, while availing the fellowship from the parent organization.
- 2.10 Candidates employed as SRFs/JRFs/RAs or as full time Research Engineers/Officers in sponsored projects of the VSSUT, Burla may be admitted to the Ph.D Programme under category 6 as project scholars. They need to obtain permission of the Principal Investigator and Dean, SRIC & CE for admission. The Project should have tenure of at least 18 months beyond the date of admission of the candidate to the Ph.D programme. They also have to satisfy the minimum educational requirement and will undergo selection procedure like students of other categories. On termination of project, their status will be full time students without scholarship, unless offered another type of scholarship / fellowship / assistantship.
- **2.11** Candidates seeking admission to Ph.D Programme under category 7 as QIP scholars will be selected through QIP (Quality Improvement Programme) of Government of India. However, they have to satisfy the minimum educational qualification like the candidates under other categories.
- **2.12** The University may admit persons who are employed in other organizations (Institute/research organizations/Industries) to Ph.D Programme of any discipline under category 8 as sponsored students. Such candidates should have the following:
 - (i) These candidates must have eligibility criteria as specified in Para 2.1/2.2/2.3
 - (ii) These candidates must have a total of minimum 2 years full time experience in the sponsoring organization. The candidate must produce the evidence of their work experience along with the application form
 - (iii) Intending sponsored candidates must submit their applications in the prescribed form (Form VSSUT/PGSR/601) through their employers with suitable endorsement.
 - (iv) Intending sponsored candidates will undergo selection procedure like other students.

- (v) The sponsored candidates are normally required to stay in the University till completion of assigned work and submission of the *thesis*. However, in special case, their residential requirement can be reduced to at least six months in order to complete all the course works assigned to them.
- (vi) The selected sponsored students must submit the relieve order from their parent organization at the time of admission in order to fulfil minimum residential requirement.
- 2.13 Candidates employed in Institute/Research Organizations/ Government or public or private organizations/industries located at Burla and vicinity (within 15 Kms) may be admitted to Ph.D Programme under category 9 as sponsored students from Burla and vicinity. They need to fulfil all requirements of sponsored students (Category 8) except Para vi. They have to submit a permission letter from their parent organisation in place of relieve order at the time of admission to do the course work, appear examinations and other related activities as per the academic requirement of University. The candidate is required to give an undertaking in a non-judiciary stamp paper to complete all the academic requirements, which will be assigned to him/her by DRC(Doctoral Research Committee).

3. SELECTION & ADMISSION:

- **3.1** Ordinarily, University shall advertise for admission of Ph.D scholar twice a year once in December and next in June every year. Candidates interested to take admission to Ph.D Programme at VSSUT, Burla in any category shall have to submit applications in the Prescribed Form (**Form VSSUT/PGSR/601**) as per the advertisement.
- 3.2 All categories of candidates except the categories 2, 4 and 7 need to undergo the process of selection through the Departmental Academic Committee (DAC) on the basis of overall academic career, written test and interview. The candidates who have qualified GATE/NET/Inspired fellowship (DST)/Teacher fellowship (UGC)/other fellowships from any Govt. Agencies are exempted from the Written Test and they will be given preference in the selection of Ph.D admission they are required to appear only interview before DAC to assess their research aptitude, ability to work in a team, subject interest and availability of Supervisors, facilities in the Department and research focus before final selection. A formal selection procedure for the selection of Ph.D candidates in each category shall be framed by the Dean, PGS&R and approved by the Vice-Chancellor from time to time depending upon the need of the time in order to enhance the research activities. Reservation for SC/ST candidates shall be as per the VSSUT Rules.

SELECTION CRITERIA:

- 1. Ph.D candidates shall be screened as per the prevailing selection criteria to be mentioned in the advertisement for admission into Ph.D programme (Autumn & Spring) of the University.
- 2. However, the candidates qualified with GATE/NET/DST Inspire Fellowship / QIP / Any other State/Central Government Scholarship shall be exempted from written test. In this case, the merit list will be prepared by combining weightage of Academic Career and Viva-voce as 60:40. The weightage of viva-voce includes; clarity of

research proposal, publication in journals of previous works, if any, and interview performance at the ratio of 10:10:20.

- **3.** The candidates in the categories 2 and 4 are exempted from the Written Test. However, they need to undergo the process of selection through career and an interview. They may be selected by considering the research aptitude, previous work, ability to work in a team, subject interest, availability of supervisors, facilities in the Department and research focus.
- **4.** Non-Teaching staff of the University seeking permission to join the Ph.D Programme under following terms and conditions:
 - i) A member of non-teaching staff seeking permission to join the research programme must hold a permanent post in the University for a period of at least 08 year's service in the UCE/VSSUT and 03 years in the existing post.
 - ii) The employee must be engaged in research as a part of his normal duty so that his work output can qualify for the degree of Ph.D. Study towards Ph.D cannot be done on a part time basis outside the working hours of the University.
 - iii) The application for administrative permission to join a Ph.D programme by a member of Non-Teaching staff must be submitted to the Vice-Chancellor through the Head of the Department/Centre or Section incharge, as the case may be where the candidate is employed. While submitting the application he/she must give an undertaking to the effect that he/she will abide by all rules and regulations.
 - iv) Administrative permission by the Vice-Chancellor for prosecuting Ph.D Programme does not constitute academic approval for admission.
 - v) The applications will be examined by the Departmental Academic Committee of the Department where the candidate wants to be enrolled. The committee will interview the candidate to ascertain his suitability for the programme.
 - vi) Every application for admission under this category shall be examined by Departmental Academic Committee (DAC) taking into account whether the proposal for joining the programme for which permission is sought for arises out of genuine interest and ability, and whether the normal job assignment of the applicant sufficiently overlaps with the proposed research programme. The final approval shall be given by the Vice-Chancellor on behalf the Academic Council considering all aspects and merits of the case.

Every application for admission under this category shall be examined by Departmental Academic Committee (DAC) taking into account whether the proposal for joining the programme for which permission is sought for arises out of genuine interest and ability, and whether the normal job assignment of the applicant sufficiently overlaps with the proposed research programme. The final approval shall be given by the Vice-

Chancellor on behalf the Academic Council considering all aspects and merits of the case.

- vii) The members of the non-teaching staff applying for Ph.D Programme must satisfy the minimum qualification requirement as mentioned in eligibility criteria and should undergo the process of selection through academic career, written test and interview.
- 3.3 The regular faculty of VSSUT, Burla, employed in permanent position desirous of enrollment in Ph.D Programme are exempted from written test. However, they need to undergo the process of selection by the DAC through an interview only considering the research aptitude, ability to work in a team, subject interest, availability of supervisors and facilities in the Department.
- 3.4 The members of the non-teaching staff applying for Ph.D Programme must satisfy the minimum qualification requirement as mentioned in Paras 2.(iv), 2.2(iv) and 2.3(iv) and should undergo the process of selection through academic career, written test and interview.

 The composition and function of the Research Programme Evaluation

Committee(RPEC) are given in **Appendix-IV**.

3.5 Candidates desirous of pursuing Ph.D Programme must apply in prescribed form (Form VSSUT/PGSR/601) to Dean, PGS&R against an official advertisement. These applications will be scrutinized by the Departmental Academic Committee (Form VSSUT/PGSR/602) of the concerned Department. The recommended candidates, on approval of Dean, PGS&R will be called for personal interview with the Departmental Academic Committee (DAC).

Application for research programme sent to Departments for scrutiny must be returned by the Departments within a week.

The Committee, through evaluation as per the guidelines, shall ascertain suitability of the candidates to the Ph.D Programme and give its recommendation to the Dean, PGS&R for final approval of Vice-Chancellor (Form VSSUT/PGSR/603)

The Departmental Academic Committee (DAC) shall also ascertain that at least one faculty member of the Department is available and willing to act as supervisor of the candidate if selected in his/her chosen field. A candidate, even if qualified, should not be selected if the Department does not have physical resources and supervising faculty to do justice to the candidate's academic interest.

- 3.6 The offer of admission letter (Form VSSUT/PGSR/604) will be issued by the Dean, PGS&R to a successful candidate on the basis of recommendation of the Departmental Academic Committee (DAC) and consequent approval of the Vice-Chancellor.
- 3.7 After receiving the offer letter, a selected candidate has to report PGS&R Section in stipulated time and to collect application form for enrolment in Ph.D Programme (Form VSSUT/PGSR/605). Thereafter, he/she will report to the concerned Head ofthe Department for forwarding of the enrollment form. After duly forwarded by the Head of the Department and paying prescribed fees, the

candidate will be enrolled and assigned a Registration Number by the PGS&R Section.

3.8 The PGS&R Section will allot the candidate to a hall of residence depending upon the availability. Students not desirous of staying in a hall must seek permission from the Dean, Students Welfare to stay outside.

4. **SUPERVISORS**:

- 4.1 All candidates for Ph.D degree are required to carry out their research work under the guidance of ONE/TWO supervisors, to be appointed by the Academic Council or Dean, on its behalf, on recommendation of the Departmental Academic Committee (DAC). Ordinarily the DAC will recommend one Supervisor. However, in case of inter-disciplinary research (within the same Department or across two Departments) a second supervisor may be appointed as Co-Supervisor preferably from the same or different Department/ School of VSSUT and from other institutes of national repute such as NITs, IITs, Central/State universities/ Govt. Colleges or any other Institutes having NIRF Ranking below 100. However, the Co-supervisor has to submit; (i) Resume, (ii) proof of relevance of research area and (iii) no objection certificate from the parent institute.
- 4.2 When there are two supervisors, one of them will be called the Principal Supervisor. Ordinarily the Principal Supervisor will be a faculty member of the registering Department. However, in deserving cases the DAC may recommend a faculty member of another Department of the VSSUT as Co-Supervisor.
- 4.3 Principal Supervisors shall be regular faculty member of this University with Ph.D degree and Co-Supervisor shall be chosen from the faculty members of this University with Ph.D degree or other Government Institutions/Universities/ R & D Organizations/Industries with the approval of the Vice-Chancellor.
- 4.4 Regular faculty members of the VSSUT with 05 years' experience alongwith adequate research publication as permanent teacher of VSSUT enrolling in Ph.D programme may be self-guided. Such cases should be examined by RPEC and put up to the Academic Council for approval
- 4.5 If the Principal Supervisor proceeds on long leave for a period exceeding one year, then DAC may recommend a second supervisor from the University depending on the research interest of the scholar, who will serve as Co-Supervisor, when original supervisor returns.

If the Principal Supervisor is suspended/dismissed/removed, then the Dean, PGS&R shall appoint a second supervisor, who will serve as Co-Supervisor, when original supervisor exonerated / reinstated. If there will be a Co-Supervisor, he/she will serve as Principal Supervisor till the original supervisor returns.

If the Principal Supervisor is compulsorily retired from service or leaves the University permanently after superannuation/completion of tenure/deputation to other Institute for two years or more then the Ph.D scholar working under him/her who has registered after defence of registration seminar, then DAC may recommend a new Supervisor from the University depending on the research interest of the scholar and Principal Supervisor may act as Co-Supervisor. If there will be a Co-Supervisor, he/she will serve as Principal Supervisor. If the Co-supervisor is from other institute or University then in such cases DAC may recommend a new principal Supervisor from the University and the Co-supervisor will continue.

If the Principal Supervisor leaves the University permanently after superannuation/completion of tenure/deputation to other Institute for a period of two years or more than two year and the scholar has not defended his/her registration seminar, then DAC may recommend a new Supervisor(s) (*in place of previous Principal Supervisor*) from the University depending on the research interest of the scholar. If a scholar already has a Co-supervisor, then he/she will continue as the Principal Supervisor. However, a scholar should have at least one Supervisor/Co-Supervisor at the University before his/her registration seminar.

If Principal Supervisors passed away during his/her tenure then substitute Supervisor shall be appointed by recommendation of DAC with respect to the research interest and present work of the candidate. If candidate has already a cosupervisor then he/she shall be continued as principal supervisor.

- 4.6 If a Principal Supervisor leaves the University permanently, and the Ph.D scholar working under him/her has already been registered and is able to submit his/her Ph.D *thesis* within six months, then he/she will continue as the Principal Supervisor. If the registered Ph.D scholar requires more than 06 months to submit his/her *thesis* then DAC may recommend a new Supervisor depending on the research interest of the scholar and Principal Supervisor may act as Co-Supervisor. If there will be a Co-Supervisor, he/she will serve as Principal Supervisor and the Principal Supervisor may act as Co-Supervisor.
- **4.7** Persons from outside the University joining as Chair Professors/Emeritus Scientists can be appointed as Co-supervisors for new scholars only jointly with a regular teacher, but not as principal supervisors.
- 4.8 After superannuation from service if a person joins the VSSUT on re-employment as Emeritus Professor, Scientist or on some scheme of UGC/AICTE, then he will continue to be the principal supervisor or as joint supervisor as he was before superannuation.
- **4.9 A)** During the course of a Ph.D programme, if the supervisor feels the necessity of a second supervisor, an appropriate proposal must be prepared and placed with full justification before the DRC within 5 years from the date of enrolment. The recommendation of DRC will be further considered by the Departmental Academic Committee (DAC). If agreed by the DAC, the proposal may be placed to the Academic Council through RPEC for its approval.

However, following extension in the early submission of Ph.D thesis may occur:

- One year extension in earliest date of thesis submission is applicable if Co-Supervisor is chosen after one year from the date of his/her enrolment/after registration seminar.
- Two year extension if Co-Supervisor is chosen before one year of earliest date of submission of Ph.D *thesis*.
- Lateral entry Co-supervisor must work minimum of 2 years with Ph.D scholar before submission of *thesis*.
 - **B)** However, under unavoidable circumstances such as suspension / dismissal / removal / untimely death of Principal Supervisor OR If the Principal Supervisor leaves the University permanently after superannuation / completion of tenure/deputation/lien to other Institute, then Co-supervisor may be allotted at any

instance of time during Ph.D. programme. Under these circumstances, no extension (as per 4.9 A) will be applicable.

- **4.10** The allocation of the Supervisor(s) for a selected student shall be decided by the Departmental Academic Committee (DAC) in a formal manner depending on the number of students per faculty member, available specialization among the faculty supervisors, and the research interest of the student as indicated during interview by the student. The allotment/allocation of Supervisor shall not be left to the individual student/teacher.
- **4.11** A regular teacher on permanent employment of VSSUT, Burla with a Ph.D degree can normally guide Ph.D scholars as per UGC guidelines.
- **4.12** Research supervisor or Co-Supervisor who is a Professor can guide maximum 8 Nos. of Ph.D Scholars at any point of time. Similarly, Associate Professor and Assistant Professor can guide maximum of 6 & 4 Nos. of Ph.D scholars respectively at any point of time. However, after submission of Ph.D thesis of any scholar, the Principal Supervisor/Co-supervisor may take a Ph.D scholar against him/her.
- 4.13 Any regular Professor of the University with at least 05 publications in referred journals and any regular Associate Professor/Assistant Professor of the University at least 02 publications in referred journals with a Ph.D degree may be recognized as research Supervisor/Co-Supervisor. Minimum waiting period for a regular faculty to be the Principal Supervisor/Co-supervisor is one year after the date of award of his/her Ph.D degree.

5. DOCTORAL RESEARCH COMMITTEE (DRC):

5.1 A Doctoral Research Committee (DRC) shall be constituted by the Dean, PGS&R for each candidate admitted to the Research Programme leading to Ph.D degree on recommendation of the DAC of the Department.

The DRC shall consist of the following members:

1.	Head of the Department (Ex-Officio)	-	Chairman
2.	Principal Supervisor	-	Convener
3.	Co- Supervisor (if applicable)	-	Member
4.	One faculty member from the Department where the candidate is enrolled to be nominated by DAC	-	Member
5.	One faculty member from the same or a related Department	-	Member
6.	One faculty member from another Department of the University/other University nominated by Dean, (PGS&R)	-	Member

If the Head of the Department is a supervisor, the Chairman of the DRC will be nominated by Dean, PGS&R from within or outside the Department, who will serve as Chairman of DRC as long as the supervisor is the HOD. When a supervisor assumes the charge of a HOD, he will request Dean, PGS&R to nominate the Chairman of DRC in his place.

5.2 All the members of the DRC must have Ph.D degree. If the sufficient numbers of teachers with Ph.D are not available in the Department, the Dean, PGS&R can nominate the required number/Chairman of the DRC from other related Departments.

- 5.3 The composition of the DRC shall be proposed by the DAC (except for the member from outside the Department) when a student joins the Department and the recommendation shall be sent to the Academic Section. The Academic Section shall obtain approval of Dean, PGS&R and bring out an office order on (Form VSSUT/PGSR/606) stating the constitution of the DRC. The Committee will hold its first meeting immediately on formation to process the formalities of provisional registration for "allotment of course works and other pre-registration works". This process will be completed ordinarily within a month of a student's joining.
- 5.4 The Principal Supervisor, acting as the member convener of the DRC, will normally organize the meetings of the DRC after obtaining suitable dates from the Chairman and the members. Minimum four (04) members of DRC including supervisor (member convener) and chairman need to be present to make a quorum for DRC meeting. In case of difficulties in finding time convenient to members or when a DRC is unable to reach a consensus, the Dean, PGS&R may nominate additional members with relevant expertise from the same or other Departments to assist in the specific task with approval of the Vice-Chancellor.
- 5.5 The DRC shall always record its recommendations with appropriate reasoning and enclosures, and formal minutes should be drawn and signed during the meeting. There shall be neither any provision for delayed preparation of minutes nor for confirmation of minutes.
- 5.6 The DRC of each Ph.D student shall meet once in a semester to review of the progress of the student. The DRC shall monitor the progress and ensure that Ph.D regulations on the matter are strictly adhered to.
- 5.7 For quorum, the presence of the Chairman, Supervisor(s), and at least one subject expert is necessary. HOD is the Ex-officio Chairman of the DRC. However, if HOD is the Supervisor, then senior most faculty shall act as the Chairman till completion of the tenure of the Headship.

6. ENROLMENT AND PROVISIONAL REGISTRATION:

- 6.1 On receiving the letter of offer for admission, every candidate joining the Ph.D programme shall meet the Head of the Department and submit an application for enrolment in (Form VSSUT/PGSR/605) The application shall contain details of student's career and his broad area of research. The HOD will call the meeting of DAC and assign him one or two supervisor(s) as decided by the DAC at the time of his selection and will recommend the structure of the DRC. The recommendation of the Department shall be forwarded to the Dean, PGS&R who will permit him to pay the fees and assign a Regn. number. The Head of the Department ordinarily complete the process of forwarding duly signed form (Form VSSUT/PGSR/605) within 03 working days.
- All the candidates admitted to the Ph.D Programme are required to enroll in the programme on payment of the prescribed fees and to carry out research work under a supervisor (or two supervisors) as mentioned in Clause 4. The enrolment will be with effect from the date on which a student is assigned a Registration number (Form VSSUT/PGSR/606)
- 6.3 Within two weeks of enrolment, the student shall submit an application (Form VSSUT/PGSR/607) for provisional registration, in consultation with the

- Supervisor. The application contain details of a student's career and his broad area of research.
- 6.4 The Doctoral Research Committee will examine the application in its 1stmeeting and recommend "Provisional Registration". The Provisional Registration will record the area of research and course works assigned. The Academic Section will being out an office order in (Form VSSUT/PGSR/608). The process should normally be completed within one month of a student's joining in the Ph.D Programme.
- 6.5 The date of Provisional Registration shall normally be the date of enrolment. The DRC may extend the date if a student does not initiate his/her research work/course work immediately on enrolment.

7. RESIDENTIAL REQUIREMENT:

- 7.1 Normally all candidates admitted to the Ph.D Programme will be required ordinarily to stay in the University till they complete all assigned work and submit *thesis*. In any case, a candidate other than a candidate with Scholarship / Fellowship must stay at least for one semester to complete his/her course work allotted by the DRC.
- 7.2 Candidates employed in teaching or R&D Institutions within Burla or in the vicinity within 15 Kms. and permitted by the employer to spend sufficient time on research at VSSUT may be exempted wholly or partially from the compulsory residential requirement. In this case the candidate and his/her employer must give permission to the University so that the candidate can take the course work and attend the examinations and other academic related works as per the University guidance without any hindrance. The candidate is required to give an undertaking in a non-judiciary stamp paper to complete the academic requirements, which will be assigned to him/her by DRC.

8. ATTENDANCE AND LEAVE:

- **8.1** A research student, except when granted withdrawal by the University must attend to his work on a whole time basis. The Department will maintain attendance record of all the student, irrespective of whether the student is getting a scholarship or not. The DRC will examine the attendance record of students, and if it is found unsatisfactory, will recommend extension of the minimum duration for submission of *thesis* or deregistration or termination of studentship as it thinks fit.
- **8.2** A candidate taking a course may be debarred from appearing in examination on ground of unsatisfactory attendance, i.e., less than 75%. In case of medical case, it is 65%.
- **8.3** The working hours of Ph.D students is generally permitted to be flexible, but not lower than that of a full time employee. It is the supervisor's legal and moral responsibility to ensure that proper work environment is made available to the student. The students are encouraged to discuss such issues with their supervisors, with HOD and higher authorities.
- **8.4** A research scholar other than the University staff is eligible for following leave per academic year to be permitted by the Head of the Department on recommendation of the supervisor (s).
 - i) For incidental purposes, CASUAL LEAVE 15 working days

ii) For treatment on illness, MEDICAL LEAVE - 15 days (including intervening holidays)

Dean, PGS&R may sanction casual leave and medical leave upto 15 additional days each in deserving cases. However, leave beyond 15 days C.L and 15 days M.L will be without fellowship. Vice-Chancellor may approve leave beyond this period, the excess leave being without fellowship and the minimum period of stay being extended accordingly. If a student falls ill outside the University (only if he is out of station on approved leave or deputation), the Medical Certificates must be seconded by the University Medical Officer. The student must prove the genuineness of the illness by submitting medical attendance slip, referrals, diagnostic reports, medicine purchase receipts and all other medical papers in original before the University Medical Officer and/or Dean, PGS&R.

There is no summer or winter vacation for research students (**Form VSSUT/PGSR/609**) may be used by the research scholars for taking leave.

9. **SEMESTER REGISTRATION:**

- **9.1** A student enrolled in the Ph.D programme will be required to register (**Form VSSUT/PGSR/610**) every semester by paying University dues and other fees.
- **9.2** Students who have been sanctioned withdrawal also need to do semester registration. Thus a student taking withdrawal must register in person each semester.
- **9.3** Failure to do semester registration for two consecutive semesters will result in termination or cancellation of Ph.D registration, which can be restored by the Academic Council on consideration of all circumstances, payment of arrear fees and extension of *thesis* submission date.
- 9.4 It shall be the responsibility of the student to bring any deviation in his status in matters of course works registration, withdrawal etc. to the attention of Dean, PGS&R at the time of semester registration, if he has not done so earlier.
- 9.5 A student may be exempted from semester registration by Dean (PGS&R) /Vice-Chancellor if he submits *thesis* within 60 days of scheduled semester registration. If he fails to submit *thesis* after 60 days, he must do semester registration before the *thesis* is accepted for evaluation.

10. COURSE WORK:

- **10.1** After having been admitted, each Ph.D student shall be required to undertake coursework for a minimum period of one semester. The course work shall be treated as pre Ph.D preparation. DRC of each Ph.D student shall decide the minimum qualifying requirement keeping the guidelines given below for allowing a student to proceed further with the registration.
- **10.2** The **Research Methodology & IPR** is a 3 credit course which **is compulsory** to all Ph.D Scholars.

A Ph.D scholar has to take minimum of 4 Ph.D course works (subjects) including Research Methodology & IPR, if enrolled in the same discipline. Further, a Ph.D scholar has to take minimum of 5 Ph.D course works including Research Methodology & IPR, if enrolled in another related discipline.

The DRC, at its discretion, may recommend additional courses, in addition to above requirements. All the course works (subjects) must be relevant to proposed research area and must be chosen from PG level.

- 10.3 The course work may be chosen from the existing PG programme of the registering Department or from those of other Departments. If a student joins the Ph.D programme in the middle of a semester, he must take courses in the following semester. Delay of maximum 10 working days can be condoned in joining a course. If a student needing course work does not get one full semesters to complete the courses, he may take one or more semesters to complete the course which should be approved/ratified (if allowed by Dean, PGSR) in the next RPEC.
- 10.4 The specific course work shall be decided by the DRC on recommendation of the supervisor(s). When a student joins at the beginning of a semester, he may be advised by his supervisor(s) to attend classes of recommended courses even before the provisional allotment process is officially complete. In case the courses approved by the RPEC are different from the courses being taken by the student, the student may at his choice discontinue or complete the courses recommended by the supervisor(s).
- 10.5 The candidate has to obtain an average grade point of not less than 7.00 in course credit with an individual grade not less than C in each subject in the ten point grading system. A course can be repeated to improve the grade, if necessary.
- 10.6 In special circumstances if no appropriate course is offered under formal instruction, existing courses may be taken in "guided self study" mode, where a student studies the course from approved text and reference books. Formal classes will not be required in such courses. All such self-study courses shall be evaluated based on a written examination like regular offered M.Tech / M.Sc. / MCA/ M.Phil courses. Ordinarily, a student should not be registered in more than two courses in self-study mode. The objective of course work is to enhance the breadth of knowledge. They should be relevant to the research area, but need not be repetition of the research subject. This should be done with prior approval of Dean, PGSR. Ordinarily the "guided self study" mode will be discouraged.

11. **REGISTRATION:**

11.1 A doctoral student will be formally registered for the degree of Ph.D on completion of certain steps. The registration can be done only after (a) the candidate has successfully completed all the assigned course works, (b) worked out a road map of his doctoral programme, and (c) delivered an open seminar talk.

After satisfactory clearance of the assigned course work, the scholar has to prepare a registration report (including Introduction, Literature Review,

Objectives, Materials/Methodology, Results & Discussion (if any), Summary, Road Map) of approximately 10 pages.

The scholar has to submit an application through proper channel to Dean, PGS&R for seeking permission to deliver registration seminar along with a copy of registration report, his/her Ph.D course work grade sheet, and Xerox copies of the up to date semester registration fees (and Hostel fees, if regular boarder).

After the approval of Dean, PGS&R, the Department shall arrange the registration seminar by taking into consideration of the consent of all DRC members with a prior notice of 7 days. The registration report should also be supplied to all DRC members at least a week before the registration seminar. It should be an open seminar in the Department, with invitation extended to students and faculty of all Departments of the University. The written document and the seminar should outline the planned research wok and identify the milestones. The supervisor, co-supervisor (if any) and all DRC members must remain physically present during registration seminar.

Normally the registration should be completed after elapse of 12 months from date of enrolment/admission, but not later than 18 months. If the seminar performance is unsatisfactory, he/she may be re-evaluated after a lapse of 3 months or more. If he/she cannot clear the course work and seminar within 2 years from the date of admission, he will be required to **leave the Ph.D programme**. In special cases with mitigating circumstances, the Academic Council can grant extra time.

The earliest date of Thesis submission is 2 years for the Ph.D. scholar with M.Tech./M.Phil., and 3 years for the Ph.D. scholar with the other degrees with effect from the date of registration seminar.

- 11.2 The Head of the Department will send the application for registration (Form VSSUT/PGSR/611) to Dean, PGS&R along with a copy of the student's written report and recommendation of the DRC. The matter will be reported before the Academic Council through RPEC.
- 11.3 The PGS & R Section shall bring out an office order (Form VSSUT/PGSR/612) confirming the registration.

12. **FELLOWSHIP**:

A doctoral student may be self-financed or can get a scholarship. In case of students awarded a scholarship by an external agency or from research project operating in the VSSUT, the rules shall be governed by the provisions specified by the sponsor. VSSUT doctoral fellowships shall be governed by the rules of MHRD/AICTE/UGC/Central Government/State Government.

When the number of University fellowships is limited, they will be distributed among different Departments by the Vice-Chancellor on recommendation of Dean, PGS&R. Generally, the number of fellowships will be proportional to the faculty strength, but changes can be made to ensure that the positions are filled to the extent possible.

- 12.2 Students who join with fellowship from sponsored projects or with external fellowships, and become self financed on termination of the project, may get preference in award of University fellowships, if their academic performance is satisfactory and they have drawn fellowships from the project for at least 18 months. The total duration of scholarship, however, shall not exceed the limit set by MHRD/AICTE/UGC/ Central Government/State Government.
- 12.3 University fellowships may not be awarded to candidates above 32 years of age (35 years for SC/ST and women candidates) on the date of selection. The restriction shall not apply to scholarships awarded by external agencies or sponsored projects.

13. WITHDRAWAL

A student, pursuing Ph.D by staying on campus, can become non-resident by taking withdrawal from the programme. Such programme can be granted on one of the following grounds:

- (a) When a sponsored/self-financed student wishes to return to his place of work on completion of at least six months (one semester) of residence requirement.
- (b) When, on the certification by the supervisors, the DRC is satisfied that most of the experimental/computational work has been completed and that the student can finish the rest of the project from outside. In this case the student shall submit a long report for scrutiny by the DRC.
- (c) When a regular student returns to his original place of employment or secures new employment and the DRC is satisfied that adequate facility exists in his place of work to carry out the project.
- (d) When a student, for personal or financial reasons, intends to take a temporary break and return to the University for completion of the work, [The minimum period of work before submission of *thesis* is extended by the period of absence], or
- (e) Any other circumstances, which in the opinion of the Academic Council, justifies withdrawal.

For withdrawal under clause (a), (b) or (c) above, a student should have completed one semester residential requirement and course work assigned to him/her.

The following rules shall govern the withdrawal process:

- (i) The student shall do semester registration regularly, personally visiting the University at every semester.
- (ii) He shall pay all applicable fees every semester,
- (iii) He completes the programme within the stipulated period (8 years) including the withdrawal period.

A student must apply to Dean, PGS&R through his supervisor(s) and HOD for withdrawal in prescribed form (Form VSSUT/PGSR/613), alongwith a report on the work done so far and plan of activities in future. The Supervisor will state the status of the project and the DRC will examine the proposal. Withdrawal can be granted provisionally by Vice-Chancellor if satisfied, and afterwards be presented

to Academic Council for final approval. The Dean, PGS&R will issue withdrawal order on **Form VSSUT/PGSR/614.**

14. PRE-SUBMISSION SEMINAR:

- **14.1** A Ph.D scholar can be eligible to present his/her pre-submission seminar of the thesis after elapse of at least 02 years (in case the scholar has M.Tech /M.Phil. degree registering in the same discipline) and after 03 years in all other cases. However, the scholar should also satisfy following criteria;
 - Minimum two research papers as first author in unpaid SCI/SCOPUS Index Journal (without Article Processing Fee / Annual Processing Charge, etc.) are required to be published before submission of *thesis*.

"The research scholar has to publish minimum two journal papers in Scopus Indexed Journals out of which one must be SCI Indexed". This line of modification for submission will be applicable for those research scholars who have registered in the academic year 2019-20 onwards.

- Scholars have to present minimum of two papers as first author in National/International Conference. Two conference certificates must not be from same event and venue.
- The scholar must have paid all the semester registration fees (and Hostel dues, if regular boarder) from the date of joining into Ph.D programme.
- 14.2 The scholar has to prepare a synopsis report of approximately 15 pages. The synopsis report should include; *Introduction, Literature Review, Objectives, Materials/Methodology, Organization of the thesis, Chapter wise results and discussion, Summary, Future Scope of the Work, References, List of publications, List of the conferences presented/attended.*

For presenting Pre-Submission Seminar, a scholar has to take permission from the Dean, PGS&R. The application of the scholar for seeking permission to deliver pre-submission seminar should be duly forwarded and recommended by HoD/Chairman DRC.

Before recommending and forwarding the application of the scholar (for presubmission seminar) to the Dean, PGS&R office, the DRC at its discretion must verify that, (i) scholar has done adequate research work related to his/her Ph.D thesis, (ii) the publication and conference requirements are fulfilled as per point 14.1, and (iii) presented three progress seminars at least in an interval of six months.

To take permission for pre-submission seminar, a scholar has to submit following documents to the Dean PGS&R through proper channel. The required documents are:

- (i) Application of the scholar for seeking permission to deliver pre-submission seminar, duly forwarded and recommended by HoD/Chairman DRC
- (ii) Draft copy of the synopsis report
- (iii) Reprint of two publications in Unpaid Scopus/SCI, as applicable
- (iv) Xerox copies of two conference certificates, showing the scholar has presented his/her research work as first author in National/International Conference.

- (v) Proceedings of three progress seminars (presented at least in an interval of six months)
- (vi) Xerox copies of semester registration fees (and Hostel dues, if regular boarder)
- (vii) Xerox copy of form VSSUT/PGSR/612
- (viii) Filled in Form No. **VSSUT/PGSR/615** with duly signed by all DRC members & chairman.

After the approval of Dean, PGS&R, the Department shall arrange the presubmission seminar by taking into consideration of the consent from all DRC members with a prior notice of 7 days. This synopsis report should also be supplied to all DRC members at least a week before the pre-submission seminar. The rough draft copy of the thesis must be placed before DRC on the day of presubmission seminar to check the extent of work done. It should be an open seminar in the Department, with invitation extended to students and faculty of all Departments of the University. The supervisor, co-supervisor (if any) and all DRC members must remain physically present during registration seminar.

14.3 If the DRC is satisfied with the extent of work done, the candidate will be allowed to submit the *thesis*. Then the DRC will recommend for the submission of *thesis* in **Form VSSUT/PGSR/616** and the names of five Foreign and five Indian External Examiners in **Form VSSUT/PGSR/617**. Foreign External Examiners be in the rank of either Professor or Associate Professor, whereas, the Indian External Examiners must be in the rank of Professor from outside the home state. If the DRC is not satisfied with the progress of work, the candidate has to appear again after the lapse of 03 months or more.

After the successful completion of pre-submission seminar, the scholar has to submit:

- (i) Proceedings of DRC duly signed by all DRC Members
- (ii) Hard Copy of Synopsis of PhD. Thesis (two nos.) duly signed by scholar, Supervisor, and DRC members
- (iii) Soft copy of Synopsis of Ph.D Thesis in CD. (Two nos.)
- (iv) Recommendation of DRC to submit thesis in form VSSUT/PGSR/616 (one page) duly signed by DRC
- (v) Recommendation of composition of Board of Examiners in form **VSSUT/PGSR/617** duly signed by DRC Members and Dean, PGS&R.

The Dean, PGS & R will send the copy of Synopsis (hard copy & soft copy), Form **VSSUT/PGSR/616** to the Controller of Examinations for necessary action at his end. The Form **VSSUT/PGSR/617** will be intact and handed over to the Controller of Examinations with closed cover.

15. SUBMISSION OF THESIS:

15.1 A scholar has to submit his/her Ph.D thesis within two months from the date of pre-submission seminar. If a candidate requires more time for the submission of his/her thesis, then he/she has to clear all the semester registration fees (referring to point 9.5) along with the applicable fine. A scholar can be allowed for an extension of maximum of one month by the Dean PGS&R (with effect from date of completion of two months from date of the pre-submission seminar). If he/she will be unable to submit the thesis within the extension period, then the pre-submission will stand cancelled and he/she has to again take permission from Dean, PGS&R to re-deliver pre-submission seminar.

It should be noted that the minimum period (as per point 14.1) is applicable to students with exceptionally brilliant career or cases where a student has achieved an unusual success. In most cases the duration of work should be 03 years or higher after M.Tech/M.Phil and 04 years or higher after B.Tech / B.Arch. / M.Sc / MCA / MA / MBA. The maximum period for submission of *thesis* is 08 years from the date of enrolment for all candidates. In all cases, the Doctoral Research Committee must be satisfied that adequate work has been done by the candidate. After 8 years from the date of enrolment the Ph.D registration stands cancelled. A student will be required to apply for fresh registration if the period exceeds 08 years. In special cases with mitigating circumstances, the Academic Council can grant extra time.

If the DRC feels appropriate, at its discretion may examine the full draft *thesis* before a student is permitted to submit thesis for evaluation. The *thesis* must be submitted within 02 months after the DRC approves the synopsis unless extra time is granted by Dean, PGS&R. Extension of the period beyond 08 years from the date of enrolment is not permitted.

15.2 The *thesis* must contain;

- An abstract of the *thesis* (about 500 words) with key words (Maximum 10).
- A preface/introduction in which the candidates shall state whether the *thesis* is based on discovery of new facts or new interpretation of established facts, or exhaustive study and critical analysis of published work of other, or design or development work undertaken or applied research work.
- Chapters of Introduction, Literature Review, Materials/Methodology, Contributory / Technical chapters, Summary & Future Scope of the Work, Bibliography, List of publications, and List of the conferences presented/attended., It is suggested to make four contributory/technical chapters out of the research work of the scholar (excluding chapters of Introduction, Literature Review, Materials & Methods, and Conclusion & Future Scope of the work).
- Bio-data of the candidates within one page (i.e. name, date of birth, educational qualification, research experience, professional experience, if any, and permanent home address)
- **15.3** A candidate shall submit following documents within two months from the date of pre-submission seminar:
 - Forwarding Letter of HoD and Chairman DRC to Dean, PGS&R mentioning the list of enclosures.
 - Duly signed Form **VSSUT/PGSR/618** (related to Submission of thesis by Ph.D. student)
 - Five copies of the *thesis* in case of single supervisor and six copies in case of two supervisors neatly typed or printed and bound in an appropriate manner.
 - Form **VSSUT/PGSR/619** (certificate from Supervisor(s) and Scholar).
 - Form **VSSUT/PGSR/620** (declaration of plagiarism free content) duly signed by supervisor (s) and scholar.
 - Form **VSSUT/PGSR/621** (plagiarism verification) duly signed by scholar, supervisor(s), DRC members, and Dean, PGS&R.
 - Two copies of the *thesis* in electronic form and permit the University to use it in any manner that the University thinks fit. For the present, the electronic text should be submitted as two folders. One containing MS-WORD files and another PDF files. On completion of oral examination, a fresh CD may be submitted if any changes are made. One printed copy and one electronic copy shall be archived in University's Central Library, while another set shall be kept in the Department.

- Bank challan of Rs. 13,000/- towards Thesis submission & evaluation fees.
- Clearance from all concern Departments/ Sections (VSSUT/PGSR/622)

The candidates shall submit the requisite number of copies of *thesis* with Form **VSSUT/PGSR/623** to the office of Dean, PGS&R. Thereafter, Dean, PGS&R will send the *thesis* to the Controller of Examinations for further action at his end.

- 15.4 Format of the *thesis* should be uniform across all Departments. Students are expected to use only S.I. units in reporting of all experiential and computational data, and to maintain appropriate number of significant figures.
- 15.5 The synopsis and the *thesis* of Ph.D work are to be uploaded to UGC website Sodhganga (INFLIBNET). Students are required to submit separate file for each chapter in pdf form in a CD for onward transmission to UGC Website (Shodhganga).
- **15.6** The guidelines for use of anti-plagiarism software for the Ph.D/M.Phil *thesis* are as follows:
 - (i) The scholars have to certify that the Plagiarism Checker was used for checking the plagiarism. The name of the software used for checking plagiarism should be clearly mentioned and to this effect a declaration be attached in the *thesis*.
 - (ii) The guide has to ensure checking against plagiarism through the software before submission of Ph.D/M.Phil *thesis* and endorse the undertaking of the scholar.
 - (iii) As per the Academic Regulations a maximum of three chances will be given to the research scholar, if the percentage of plagiarism exceeds the approved limit.

Keeping in view of recent trends in academic circles all over the world, the limits of similarity index are as follows:

- a) The overall similarity index shall not exceed 10%.
- b) The similarity index from a single source(other than authors publication) shall not exceed by 3%.
- c) The similarity index must be verified by taking nine (09) consecutive words from a single source, and by excluding the Bibliography, References, and the Publications of the scholar relevant to the Ph.D thesis.
- d) The plagiarism of the thesis will be rechecked by the Dean PGS&R office.
- e) The revised softcopy of the *thesis* after removing the plagiarism materials must be submitted by research scholar or 2nd or 3rd verification within maximum two months. If the *thesis* is not found within the approved similarity index mentioned above(a) the candidate be asked to submit the revised *thesis* with similarity index within limit after one year(provided it does not exceed the maximum period of 8 years as per Ph.D regulation).
- 15.7 It is mandatory to clear the plagiarism of whole *thesis* before the Ph.D Viva-voce of the candidate. The final *thesis* to be submitted for library and uploaded to UGC should have the similarity Index as per the rules of the University.

16. EVALUATION OF *THESIS*

- 16.1 The DRC will suggest Form VSSUT/PGSR/617 a list of 10 Examiners (five from the country, outside state and five from foreign countries). After successful completion of the synopsis seminar by the candidate the Examiner's list along with a copy of the synopsis will be placed to the Chairman, Academic Council to select the External Examiners under both categories (Indian and Foreign) in order of preference. The Chairman, Academic Council may add any name to or delete any name from the list suggested by DRC. The supervisor(s) will also serve as Examiner(s) in addition to the two external Examiners.
- The Controller of Examinations(COE) will send a formal letter to the Examiners along with a copy of the synopsis requesting for acceptance of Examinership. After receiving the consent, the *thesis* will be mailed along with proforma of Examiner's report (Form VSSUT/PGSR/624). In case of refusal, the second Examiner in order as ticked by the Chairman Academic Council will be contacted and so on. If in this process, the list is exhausted, the Dean, PGS&R may ask the DRC to submit another list. The internal Examiners (supervisors) will also be sent copies of the *thesis* along with the proforma of Examiner's report (Form VSSUT/PGSR/624). All Examiners shall submit the report to COE individually and confidentially.
 - 16.3 The report of the Examiners shall be submitted to Dean, PGS & R by the Controller of Examinations. The Dean, PGS & R shall summarize and place before the Vice-Chancellor (Form VSSUT/PGSR/625). After obtaining Vice-Chancellor's approval, the reports shall be forwarded to the DRC. After receiving the examiner's report from the Dean PGS&R office, the DRC Chairman will conduct a meeting in physical presence of all DRC members. All the DRC members should thoroughly go through the point-by-point comments of the external examiner's. If DRC thinks fit, the report may be given to the scholar through his/her supervisor (member convener) without disclosing the name and affiliation of the external examiners. There may be four possible situations arising out of the nature of the reports. The steps to be taken, appropriate to the circumstances, are laid down below.
 - a. The Examiners are unanimous in recommending the award of the degree without any modification of the *thesis* (as per point I or II as mentioned in form No. **VSSUT/PGSR/624**). This is a clear case for going for the final requirement of viva-voce.
 - b. The external Examiners are unanimous in recommending the award of the degree but least one of the Examiners has suggested modification and/or has asked for clarifications (as per point III, as mentioned in Form. VSSUT/PGSR/624). The candidate in that case shall make modifications and a minimum time of one month will provided to the scholar to make adequate modification / clarification / revision. In such cases, the scholar can submit two copies of the revised thesis, along with revised plagiarism report and compliance report attached at the end of the thesis.
 - c. The external Examiners are unanimous in recommending the award of the degree but least one of the Examiners has suggested further work / modification / substantial revision (as per point IV, as mentioned in Form VSSUT/PGSR/624).

- In such cases, the duration for submission of revised thesis will be fixed by the DRC. Also, the revised thesis will be sent to the Examiners.
- d. One of the external Examiners does not recommend the award of the degree and rejects the *thesis* whereas the other external Examiner recommends the award. In such cases, the thesis will be sent to two other external Examiners (One Inside India and other Outside India) from the same list (Form. VSSUT/PGSR/617) without providing the evaluation reports of the previous examiners.
- e. Both the external Examiners reject the *thesis*, and then the student is declared, "failed".
- 16.4 In the event of a *thesis* being rejected by both the external Examiners the Academic Council may, on the recommendation of the DRC, permit submission of a revised *thesis* on an additional payment of the prescribed fee, after a suitable time to be fixed by the Academic Council (Not less than one year from the date of the intimation to the student and within 08 years from the date of enrolment). The observations and comments of the Examiners, if any, without names may be copied and given to the candidate on request. In no case should a resubmission of the *thesis* without modification along the lines of criticism made by the earlier Examiners be allowed. The revised *thesis* shall be referred for assessment to two external Examiners selected from a new panel of ten experts recommended by the DRC (one foreign and one Indian). The new Examiners will be provided with copies of earlier *thesis*, Examiner's reports and details of changes made, in addition to the revised *thesis*.
- After the recommendations of the DRC (either for acceptance of the *thesis* for the Ph.D degree or for its rejection/modification) and accepted by the Academic Council (or its Chairman on its behalf) Form VSSUT/PGSR/626 a copy of the reports of the Examiners may be issued to the candidate at his request. However, the names of the Examiners are not to be disclosed.
- 16.6 Once the reports of the Examiners have been accepted as satisfactory, the candidate will have to defend the *thesis* before a viva voce board consisting of all DRC members and an 'external' Examiner. The defence will be open where faculty members and students of the parent Department as well as other Departments will be invited. The evaluation, however, will be done by the DRC along with the external Examiner. *The supervisor, co-supervisor (if any) and all DRC members must remain physically present during registration seminar.* The 'external' Examiner may either be one of the experts who have already adjudicated the *thesis* or be another expert appointed for the purpose. The viva voce board may recommend changes in the *thesis*.
 - If the viva voce board is not satisfied, the candidate has to appear again before the board after elapse of three months. The DRC shall recommend to the Academic Council the award of the Ph.D degree if the viva voce is satisfactory and all other requirements have been fulfilled in **Form VSSUT/PGSR/627**.
- 16.7 On completion of the viva voce, the student will submit two copies of the revised *thesis*, two copies in electronic media, which, will be archived in University and Departmental Libraries. The scholar has to submit Form. VSSUT/PGSR/628 and required follow the splitting of Ph.D thesis as mentioned in this form, while preparing the electronic copy for uploading to UGC website Sodhganga

(INFLIBNET). Out of the two final revised hardcopy of the thesis; one will be forwarded to the Library and other will be given to the Department of the scholar. The Scholar and Supervisor(s) have to make separate hard copies of the revised thesis for their reference.

17. AWARD OF DEGREE:

- 17.1 On the recommendation of the Doctoral Research Committee, the Academic Council or the Chairman, Academic Council (when the Academic Council is not sitting early) shall decide whether the candidate should be awarded the degree of Doctor of Philosophy. If the Chairman, Academic Council has approved the award of degree the award must be confirmed by the Academic Council.
- 17.2 Normally a student will be awarded Ph.D degree in Engineering / Science / Humanities and Social Scince in which he/she is enrolled. The name of the department will also be reflected in the award notification.
- 17.3 The scholar may apply for provisional certificate in Form VSSUT/PGSR/629 along with Xerox copy of Result publication circular, Xerox copy of HSC/10th Pass Certificate showing father's name and date of birth. The provisional certificate may be issued by the Dean, PGS&R to the student on approval of Vice-Chancellor. The final degree certificate will be issued in the convocation or by the other mode after approval of Academic Council and Board of Management of VSSUT.

18. QUALITY IMPROVEMENT PROGFRAMME (QIP) :

The QIP is a programme of the Government of India administered through the All India Council for Technical Education. The programme covers education of engineering college teachers for M.Tech and Ph.D degrees.

- **18.1** The studentship programme under the QIP will be administered as per the rules set by AICTE
- 18.2 The students admitted under the QIP will be treated at par with the regular students of the University as far as their academic programme is concerned. It will be administered by the academic Section of the University. The PGS&R Section will also look after their admission, stipend and release.
- 18.3 The research expenses of QIP students will be met from Departmental grants 50% of the contingency grant will be transferred to the Departmental Operating grant for maintenance of equipment and computing facilities provided to QIP students, and for research consumables. In addition, the students will use the contingency grant provided by AICTE towards travel for data collection and attending conferences, conference registration fees, procurement of books, stationery, printer cartridges, compute consumables, Xeroxing etc.
- 18.4 Contingency expenses incurred in one academic year must be claimed within the same year, unless approved by Dean, PGS&R in advance.
- **18.5** The travel and daily allowances of QIP students will be same as that of other sponsored students of the University.

- 18.6 All travel for data collection or presentation of papers must be approved by Dean, PGS&R. The TA claims are to be approved by the respective Heads of the Departments/Centres and attached to contingency bills of the students through Principal Supervisor.
- 18.7 QIP students will be entitled to casual and medical leave at par with regular students of the University. Casual leave will be sanctioned by the Heads of the Departments and the records will be maintained by the Departments. Medical leave will be sanctioned by Dean, PGS&R on the basis of recommendation of Head. The University Medical facility and records will be maintained by the academic Section. Leave is not transferable to or from their parent institutions.
- 18.8 QIP students on the Ph.D contact programme will not be considered as regular students. They will, however, be permitted to use University Library (without borrowing facilities) and Departmental facilities.
- 18.9 If a QIP student cannot complete his academic programme before the end of his period of deputation (from his parent institution), he is required to seek withdrawal from the University to join his parent institution, prior to the expiry of his deputation. His request for withdrawal will be examined by his DRC and its recommendations will be forwarded to the academic Section. The student should make arrangement for completion of his Academic programme.
- **17.10** A QIP student will be given release order by the Dean, PGS&R on completion of or taking withdrawal from the academic programme, surrendering accommodation, and clearing all dues to the University.

19. CONDUCT AND DISCIPLINE:

- 19.1 Students shall conduct themselves within and outside the campus of the University in a manner befitting the students of an Institution of National standing.
- 19.2 Ph.D students shall be guided as per the rules of conduct and discipline of the University.

20. PROGRESS OF RESEARCH PROGRAMME:

The progress of the Ph.D programme of a student shall be continuously monitored by the Doctoral Research Committee. In practice, the committee will depend on inputs from the supervisors, HOD and the student. It will be the responsibility of the student to ensure that his papers remain up to date in matters of registration, course work, extension of fellowship, withdrawal and other formalities. In case of any deficiency, he should draw attention of his supervisor(s) and HOD, and if unsuccessful, that of the Dean, PGS&R and Vice-Chancellor.

Although rare, sometimes there may be a breakdown of communication between a student and his supervisor due to physical distance or due to personal reasons. It shall be the responsibility of the student to bring such matters to the attention of HOD, Dean, PGS&R and Vice-Chancellor. The University shall do the needful to establish communication on or to make alternative arrangement.

According to Gazettee of India of UGC, New Delhi Ph.D regulation, 2016 para 8.2 "A research scholar shall appear before the Doctoral Research Committee(DRC) once in six months to present the progress of his/her Ph.D work for valuation and further guidance". However, each research scholar has to submit at least three progress report before his/her submission of Ph.D *thesis*.

21. TERMINATION OF STUDENTSHIP:

The studentship of a Ph.D student may be terminated by the Academic Council on exceptional grounds. They are:

- 1. Recommendation of University Disciplinary Committee.
- 2. Poor progress as noted by the Doctoral Research Committee and Departmental Academic Committee. Such a decision may be implemented only after approval of the Academic Council.
- 3. Failure to do semester registration for two consecutive semesters.
- 4. Prolonged absence (exceeding three months) from the University without sanctioned leave or withdrawal.

22. TRANSITION ISSUES:

These regulations shall come into effect from the academic year 2012-13 Odd Semester (July-December). Students enrolled prior to this date shall also be covered under these regulations, except when the implementation of these regulations leads to obvious anomalies and serious hardship to the students. The final decision on each specific issue will be taken by the Academic Council or Chairman, Academic Council on its behalf on case-to-case basis.

23. DISSEMINATION OF INFORMATION:

- 23.1 A copy of this document will be made available on the University Website. Not possessing a copy, however, shall not exempt a student from complying with these regulations.
- 23.2 On publication of final results a student will be issued a provisional certificate and a University Leaving –Cum-Migration Certificate signed by Dean, PGS&R on behalf of the Vice-Chancellor, while Conduct Certificate will be signed by Dean, SW. The final degree certificate will be signed by the Vice-Chancellor.

24. EXCEPTIONS:

Notwithstanding anything stated in the rules, the Academic Council can make special provisions and exceptions depending on the merit of a case. Such cases shall not be cited as precedence in future occasions of similar nature, because two situations appearing similar may not be identical.

In emergency situations, the Vice-Chancellor in capacity of the Chairman, Academic Council, can exercise powers of the Academic Council and discharge the functions of the Academic Council. Such decisions must be reported to the Academic Council at its next meeting.

25. DEPOSITORY WITH UGC:

Following the successful completion of the evaluation process and announcement of the award of Ph.D, the University shall submit a soft copy of th Ph.D *Thesis* to the UGC within a period of thirty days, for hoisting the same through the repository called "Shodhganga" maintained in INFLIBNET, accessible to all Institutions/Universities,

Research students / their supervisors are encouraged to submit approved synopses/research proposals and register their priority on a research proposal through the repository called "Shodhgangotri"

Alongwith the Degree, the University shall issue a Provisional Certificate certifying to the effect that the Degree has been awarded in accordance with the provisions of the UGC Regulations.

BY ORDER OF VICE-CHANCELLOR Sd/-DEAN, PGSR

APPENDIX – I

LIST OF DEPARTMENTS OFFERING Ph.D PROGRAMMES

Discipline	Sl. No.	Nomenclature of the Deptt.	Name of the Deptt.
	1	ARCH	Architecture
	2	CE	Civil Engineering
	3	СНЕ	Chemical Engineering
	4	CSE	Computer Science & Engineering
	5	EE	Electrical Engineering
ENGINEERING	6	EEE	Electrical & Electronics Engineering
	7	ETC	Electronics & Telecomm. Engineering
	8	IT	Information Technology
	9	ME	Mechanical Engineering
	10	MME	Metallurgy & Materials Engg.
	11	PE	Production Engg.
	1	СН	Chemistry
	2	MA	Mathematics
SCIENCE	3	CA	Computer Applications
	4	PH	Physics
	1	HS	Humanities & Social Science
HUMANITIES &		(ENG,	(English,
SOCIAL SCIENCE		ECO)	Economics)

APPENDIX – II

QUALIFYING DEGREES FOR ADMISSION TO Ph.D PROGRAMME

Sl.No.	Disciplines	Relevant Discipline or equivalent
1		B.Tech/BE/B.Sc.(Engg) followed by M.Tech/ME/
	Civil Engineering (CE)	M.Sc.(Engg) in Civil Engineering/ Environmental
		Engineering/ Naval Architecture & Ocean Engg/Aero-
		space Engg./ Building Science & Technology/
		Construction Management
		B.Tech/BE/B.Sc.(Engg) followed by M.Tech/ME/
		M.Sc.(Engg) in Mechanical Engg./ Production
2	Mechanical Engineering (ME)	Engineering/ Manufacturing Science & Engg./Industrial
2		Engg./Metallurgy & Materials Engineering/Power Plant
		Engg.,/Industrical Design/ Marine Engg./Automobile
		Engg./ Aerospace Engg.
3	Electrical Engineering (EE)	B.Tech/BE/B.Sc.(Engg) followed by M.Tech/ME/
		M.Sc.(Engg) in Electrical Engg. Electrical & Electronics
		Engg./Electronics & Electrical Engg./ Instrumentation
		Engg. & Electronics & Instrumentation Engg.
		B.Tech/BE/B.Sc.(Engg) followed by M.Tech/ME/
	Electrical & Electronics Engg. (EEE)	M.Sc.(Engg) in Electrical Engg./ Electrical &
4		Electronics Engg./Electronics & Electrical Engg/
4		Instrumentation Engg. & Electronics & Instrumentation
		Engg.
5	Electronics & Telecomm.	B.Tech/BE/B.Sc.(Engg) followed by M.Tech/ME/
		M.Sc.(Engg) in Electronics & Instrumentation Engg./
		Electronics & Telecommunication Engg/ Electronics &
	Engg.(ETC)	Communication Engg / Electrical & Electronics Engg./
		Electronics & Electrical Engg.
1		

M.Sc.(Engg) in Computer Sc. & Engg./Information Technology ME/M.Tech. in CSE/IT/M.Sc. (Engg) M.Sc. in IT/CS/Data Science/ Cyber Security/AI followed by M.Tech. in CS / IT/ Relevant specializa MCA followed by M.Tech. in CS/IT/Relevant specialization B.Tech/BE/B.Sc.(Engg) followed by M.Tech/ME/ M.Sc.(Engg) in Information Technology/ Computer & Engg.
Computer Science & Engg. (CSE) ME/M.Tech. in CSE/IT/M.Sc. (Engg) M.Sc. in IT/CS/Data Science/ Cyber Security/AI followed by M.Tech. in CS / IT/ Relevant specialization MCA followed by M.Tech. in CS/IT/Relevant specialization B.Tech/BE/B.Sc.(Engg) followed by M.Tech/ME/ M.Sc.(Engg) in Information Technology/ Computer & Engg.
6 Computer Science & Engg. (CSE) M.Sc. in IT/CS/Data Science/ Cyber Security/AI followed by M.Tech. in CS / IT/ Relevant specializa MCA followed by M.Tech. in CS/IT/Relevant specialization B.Tech/BE/B.Sc.(Engg) followed by M.Tech/ME/ M.Sc.(Engg) in Information Technology/ Computer & Engg.
M.Sc. in IT/CS/Data Science/ Cyber Security/AI followed by M.Tech. in CS / IT/ Relevant specializa MCA followed by M.Tech. in CS/IT/Relevant specialization B.Tech/BE/B.Sc.(Engg) followed by M.Tech/ME/ M.Sc.(Engg) in Information Technology/ Computer & Engg.
MCA followed by M.Tech. in CS/IT/Relevant specialization B.Tech/BE/B.Sc.(Engg) followed by M.Tech/ME/ M.Sc.(Engg) in Information Technology/ Computer & Engg.
specialization B.Tech/BE/B.Sc.(Engg) followed by M.Tech/ME/ M.Sc.(Engg) in Information Technology/ Computer & Engg.
B.Tech/BE/B.Sc.(Engg) followed by M.Tech/ME/ M.Sc.(Engg) in Information Technology/ Computer & Engg.
M.Sc.(Engg) in Information Technology/ Computer & Engg.
& Engg.
MEM Took in CSE/IT/M So (Eggs)
7 Information Technology (IT) ME/M.Tech. in CSE/IT/M.Sc. (Engg)
M.Sc. in IT/CS/Data Science/ Cyber Security/AI
followed by M.Tech. in CS / IT/ Relevant specialization
MCA followed by M.Tech. in CS/IT/Relevant
specialization
B.Tech/BE/B.Sc.(Engg) followed by M.Tech/ME/
M.Sc.(Engg) in Production Engg./ Mechanical
8 Production Engineering (PE) Engineering/ Manufacturing Science & Engg./ Indu
Engg./ Metallurgy & Materials Engg/Industrical De
Engg./ Production & Industrial Engg/ Mechatronics
Engg.
B.Tech/BE/B.Sc.(Engg) followed by M.Tech/ME/
Metallurgy & Materials Engg. M.Sc.(Engg) in Metallurgy & Materials Engg/
(MME) Production Engg. / Manufacturing Science and
Engineering/ Mechanical Engg./Industrial Engg.
10 Chemical Engineering (CHE) B.Tech/BE/B.Sc.(Engg) followed by M.Tech/ME/
M.Sc.(Engg) in Chemical Engineering
Bachelor's Degree in Architecture/Planning or
11 Architecture equivalent followed by Master's degree in Architec
Architecture equivalent followed by Master's degree in Architecture Planning/allied specialization.
Planning/allied specialization.

13	Chemistry (CH)	M.Sc./M.Sc.(Tech) in Chemistry, Environmental Science/ Material Science/Polymer/Plastic Technology/ Nano Chemistry.
14	Mathematics (MA)	M.Sc. in Mathematics/Statistics/ Computer Science.
15	Computer Application (CA)	MCA/ M.Sc./M.Tech in Computer Science/ Computer Application /Information Technology
16	Humanities and Social Science(HS) English(ENG) Economics(ECO)	MA/M.Phil/MBA in Relevant subjects

APPENDIX – III

COMPOSITION OF DEPARTMENTAL ACADEMIC COMMITTEE

The following are the members of the Departmental Academic Committee (DAC):

1. Head of the Department : Chairman (Ex-Officio)

2. Four Faculty members nominated by Department on rotation basis

Membership will be limited to regular faculty members having Ph.D degree preferably among Professor/Associate Professor. The HOD shall ensure that all academic groups of a Department are well represented. In the Departments with less than four eligible faculty members, the Dean, PGS & R shall choose the rest of the members from the related Departments.

The committee shall be reconstituted at the beginning of every Academic Session.

The functions of the committee are as follows:

- 1. The conduct of the process of selection of Ph.D Scholars according to the regulations, and to recommend candidates for admission.
- 2. To recommend the deserving cases for University Scholarship
- 3. To recommend supervisors for the Ph.D candidates
- 4. To constitute Doctoral Research Committee (DRC)
- 5. Any other duty assigned by the Academic Council/Vice-Chancellor/Dean, PGS & R/HOD, related to the University research programme.

When the committee is unable to reach a decision, the Chairman should clearly write down the issue at hand, with alternative decisions and place before the Vice-Chancellor through the Dean, PGS & R. The decision of the Vice-Chancellor in capacity of Chairman, Academic Council shall be binding on all members.

APPENDIX – IV <u>COMPOSITION OF</u> RESEARCH PROGRAMME AND EVALUATION COMMITTEE (RPEC)

Member

1. Dean, PGS & R - Chairman

2. Dean, Academic Affairs - Member

3. Three members of Academic Council to be nominated by the Academic Council for a period of two years on rotation basis. Out of three members two members to be nominated from Engineering discipline and one member from Science or Humanities and Social Science.

4. Two/Three invitees among Associate & AssistantProfessors Engg., Science & Humanities.Invitee

5.Heads of the Departments concerned to be co-opted - Invitee whenever necessary.

Functions:

- i) To suggest the norms of admission of scholars to various research programmes leading to Ph.D degree of the University.
- ii) To scrutinize and recommend on the proposals of the Departmental Committee for Post graduates Studies and research in respect of offering research scholarships, fellowships and associateships.
- iii) To recommend draft regulations pertaining to academic and residential requirements for research programme leading to Ph.D degree.
- iv) To scrutinize and recommend on the proposals of Doctoral Research Committees in respect of registration progress and continuance of research programmes for individual scholars, and award of degrees on the basis of adjudication of *thesis* and viva voce.
- v) To ensure that all norms of academic and residential requirements for each research scholar/fellow are strictly followed.
- vi) To advice the Doctoral Research Committee on any matter relating to the research programme of the students.
- vii) To examine and recommend cases of advancement of *thesis* submission proposed by DRC.
- viii) To recommend to the Academic Council the award of the doctoral degree on the basis of academic norms and regulations laid down for the purpose.
- ix) Frequency of the Meetings: Before every Academic Council
- x) Any other function assigned by the Academic Council or by the Vice-Chancellor on behalf of the Academic Council.

APPENDIX - V

LIST OF FORMS

(Ph.D. Programme)

Form No.	Form Title
VSSUT/PGSR/601	APPLICATION FOR ADMISSION TO Ph.D. PROGRAMME
VSSUT/PGSR/602	SCRUTINY OF APPLICATIONS FOR ADMISSION TO Ph.D. PROGRAMME
VSSUT/PGSR/603 RECOMMENDATION FOR ADMISSION TO Ph.D. PROGRAMME	
VSSUT/PGSR/604	OFFER OF ADMISSION TO THE Ph.D. PROGRAMME
VSSUT/PGSR/605	APPLICATION FOR ENROLMENT IN Ph.D. PROGRAMME
VSSUT/PGSR/606	OFFICE ORDER FOR ENROLMENT OF Ph.D. STUDENT
VSSUT/PGSR/607	APPLICATION FOR PROVISIONAL REGISTRATION (FIRST DRC MEETING) IN Ph.D PROGRAMME
VSSUT/PGSR/608	OFFICE ORDER FOR PROVISIONAL REGISTRATION OF STUDENT FOR PH.D. DEGREE
VSSUT/PGSR/609	LEAVE APPLICATION FOR Ph.D SCHOLARS
VSSUT/PGSR/610	SEMESTER REGISTRATION (FOR Ph.D. STUDENTS)
VSSUT/PGSR/611	APPLICATION FOR REGISTRATION OF STUDENTS FOR Ph.D. DEGREE
VSSUT/PGSR/612	OFFICE ORDER FOR REGISTRATION OF STUDENTS FOR Ph.D. DEGREE
VSSUT/PGSR/613	APPLICATION FOR WITHDRAWAL AND SUBMISSION OF THESIS FROM OUTSIDE
VSSUT/PGSR/614	OFFICE ORDER FOR WITHDRAWAL AND SUBMISSION OF THESIS FROM OUTSIDE
VSSUT/PGSR/615	VERIFICATION OF RESEARCH PAPERS PUBLISHED IN REFERRED JOURNALS
VSSUT/PGSR/616	PROPOSAL FOR SUBMISSION OF SYNOPSIS OF Ph.D THESIS
VSSUT/PGSR/617	RECOMMENDATIONS ON COMPOSITION OF BOARD OF EXAMINERS FOR ADJUDICATION OF Ph.D. THESIS
VSSUT/PGSR/618	SUBMISSION OF THESIS BY Ph.D STUDENTS
VSSUT/PGSR/619	CERTIFICATE FORMAT FOR SOFT COPY OF THE SYNOPSIS AND THESIS
VSSUT/PGSR/620	DECLARATION OF SUPERVISOR & SCHOLAR FORPLAGIARISM FREE THESIS
VSSUT/PGSR/621	PLAGIARISM VERIFICATION FORMAT WITH SOFTWARE
VSSUT/PGSR/622	CLEARANCE FROM ALL CONCERNED SECTIONS
VSSUT/PGSR/623	ACKNOWLEDGEMENT ON RECEIPT OF Ph.D THESIS FOR EXAMINATION
VSSUT/PGSR/624	RECOMMEDATION OF EXAMINERS ON Ph.D THESIS
VSSUT/PGSR/625	SUMMARY OF EXAMINERS' REPORTS ON Ph.D THESIS
VSSUT/PGSR/626	RECOMMENDATION OF THE DOCTORAL RESEARCH COMMITTEE ON REPORTS OF EXAMINERS
VSSUT/PGSR/627	REPORT ON DEFENCE OF Ph.D DEGREE
VSSUT/PGSR/628	FORMAT FOR SUBMISSION OF Ph.D. THESIS IN SHODHAGANGA
VSSUT/PGSR/629	APPLICATION FOR ISSUE OF PROVISIONAL CERTIFICATE



Post-Graduate Studies & Research (PGS&R)

Form: VSSUT/PGSR/601

No. VSSUT/ / /20 Date:

	For office use only Serial No. of the Applicant: Dealing Assistant					
Recommendation of Departmental Academic Committee The candidate may be called for Written Test/Interview. The candidate is not suitable for admission to Ph.D. programme of the Department (Give reason). Does not satisfy short listing criteria. Others (specify)						
			Head of the Department			
	Applica	ntion for Admi	ission to Ph.D. Programme	1		
1. 2.	Programme of study Department to which Applying	: for :	Ph.D.(Engineering/Science/Hum)			
 4. 	Name of the candidate in full Capital letters) Father's Name	:				
5.	Proposed Research Area (Broa	d area only):				
6.	Address for Communication	:				
	Telephone:	Mob:	Email:			
			Male/Female 9. Marital status: Marrid status: Marri			

- 1. Full Time student with University Fellowship/Assistantship 6. Project scholars/staff of VSSUT
- 2. Full time student with External Fellowship (UGC/CSIR etc.) 7. QIP Scholar
- 3. Full time student without Fellowship

8. Sponsored student

4. VSSUT Faculty members

13. Category of studentship:

- 9. Sponsored student from Burla and vicinity
- 5. VSSUT regular employees(Non-teaching)
- > Candidates applying for more than one department are required to submit photo copies of application form and certificates for each department applied for.
- > VSSUT regular employees must enclosed administrative permission from the institute.
- ➤ Project staff and fellows must enclose administrative permission from Dean, (SRIC/CE); the project must have tenure of at least 18 months beyond the expected date of joining in the Ph.D. Programme.
- > In case of candidates belonging to categories 8, Part-II of the application form filled up by the sponsoring authority must be attached.
- ➤ In case of candidates belonging to category 9, Part-III of the application form filled up by the sponsoring authority must be attached. The candidate is also required to give an undertaking in a non-judicial stamp paper to complete all the academic requirements of the University related to the Ph.D Programme while working at his/her parent organization at the time of admission.

14. Academic career:(Enclose attested copies of the certificates and mark sheets/grade cards showing the percentage of marks (CGPA) from H.S.C Examinations or equivalent)

Name of Exams I		Institute/University	te/University Year of passing Branch/Su studie		Percentage of Marks/CGPA
15.	☐ Gate ☐ NET	Score: Subject:		Score:	Year:
16.	Experience if any:				
	Organization	Position		Duration	Nature of job
17.	Previous Research	work and publication, if	any: (Enclose	e copies of publi	shed or unpublished work
18.	Record of past stud	dy as a sponsored candida	nte, or other c	ontractual oblig	ation, if any:
knov	vledge and belief. If at	the information furnish admitted, I shall abide bormation furnished in this me any time in future and	y rules and r is application	regulations of the	ne University and Hall untrue, I am liable to
Date				Full signatur	e of the Applicant

Enclosures:

- 3 -

PART – II (Category-8)

For Sponsored candidates only (To be filled up by the employer sponsoring the candidate)

1. Name of the Employer	:
2. Name, Designation and Address:	
of Administrative Officer/HR	
Manager	
	Phone : Fax :
	Email:
3. Name of the employee seeking	
Admission at VSSUT	:
4. Designation (Regular)	:
5. (a) First joined on(date)	:
(b) Holding the present position	:
since(date)	
(c) Nature of Job	÷
b) (d) Brief description of job Assignment for the next	(R &D, Design, Production, Marketing, Administrative, Other)
three year	
(Relevant assignment only)	:
, 5	
6. Reasons for sponsoring the candida	te:
to Ph.D. Programme	:
_	ith deputation from the organization (3 years for Ph.D.) ing at our organization after satisfying the minimum residential
Certified that Mr./Ms.	employed as
	r admission to the Ph.D. Programme of VSSUT, Burla. This
organization recognizes that his/her	education and the consequent least two year in a regular cadre.
During his/her studies at VSSUT, he/s	she will be on deputation from this organization 3 years/6 months
_	a. On completion of the programme he/she will continue to be

Date.....

Signature of the Competent Authority with seal

- 4-

PART – III (Category-9)

For Sponsored candidates only (To be filled up by the employer sponsoring the candidate)

	ne of the Employer: ne, Designation and Address	•	
of A	Administrative Officer/HR		
Ma	nager		
		Phone	e: Fax:
			:
	ne of the employee seeking mission at VSSUT	:	
4. Des	ignation(Regular)	:	
5. a)	First joined on(date)	:	
b)	Holding the present position	:	
	since(date)		
-1	Noting of Joh		
c)	Nature of Job		(R & D, Design, Production, Marketing, Administrative, Other)
d)	Brief description of job Assig for the next Three years (Relevant assignment only)	nment :	
6. Rea	sons for sponsoring the candid	ate:	
to	Ph.D. Programme		
	ř	ng at ou	ation from the organization (3 years for Ph.D.) ar organization after satisfying the academic to the Ph.D Programme.
Cert	ified that Mr./Ms		Employed as
	in this org	anizatio	n is permitted for admission to Ph.D Programme of
VSS	UT, Burla. This organization	recogniz	es his/her education and consequent at least two years in
regu	lar position. If selected, he/sh	e shall b	be given a permission letter from this organization at the
time	of admission to do the course	work, a	ppear examinations, and other related activities as per the
			ile working at our organization.
2.200		<i>yy</i>	5 5
Date	•••••		Signature of the Competent Authority with seal



Post-Graduate Studies & Research (PGS&R)

Form: VSSUT/PGSR/602

No. VSSUT/ / /20Date: Scrutiny of Applications for Admission to Ph.D. Programme No. VSSUT/PGSR/ Applications for admission into Ph.D Programme are sent to your Department for scrutiny and recommendation for Written Test/Interview. Number of applications: Please return them with your recommendation before / / (Recommendation should be given on the application forms and a summary be given in this sheet). Date of interview/Written Test: Dean, PGS & R To Department Please send your recommendation before the due date, so that candidate may be given enough time to make their travel plan for the Written Test/Interview. Recommendation of the Departmental Academic Committee 1. Short listing criteria 2. Serial Nos. recommended for Written Test & interview (Separate by comma) 3. Serial Nos. recommended for interview (separate by comma) 4. Serial Nos. **not** recommended for Written Test/Interview (reasons to given in the application forms) Names & Signatures of DAC Members **HOD & Chairman, DAC** To Section Officer (PGSR) The applications of the following candidates may be called for Written Test /Interview... Written Test & Interview: Sl. No. Approved/Not Approved

Dealing Assistant Dean, PGS &R



VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA Post-Graduate Studies & Research (PGS&R)

(स्प्रियंगित अन्तर	B]	Form: VSSUT/P	GSR/603
. VS	SUT/	/	/20					Date:	
	R	ECOMMEN	DATION FOR	R ADM	ISSION TO	Ph.D. PROG	RAM	IM E	
o. V	SSUT/PGS	R/	/20				D	Pate:	
our d er th	lepartment l	nave been ca	lled for the sel	lection :	process. Kin	dly conduct w	vritte	nts for admission and /or oral test	st as
Department :									
ate a	and time of	written test/i	nterview :	Date:		Tir	ne:		
umb	er of applic	ants called fo	or written /inte	rview:_					
0	Head,		Depar	tment			<u>Se</u>	ction Officer (P	GS&R)
he de	epartmental	Academic C	ndidates, in ord	luated the	he candidate	es as per the U	h.D. colar en the t	Programme. Has the allotment been as per the Ph. D Regulation of the University vide Clause No.4.11	Remarks
1								(Yes/No)	
2									
3									
4									
5									
6									
7									
8									
9									
of th At 1 stud	e University east one face ent opts for	y.	er of the depar upervisor.					ria set in the Ph.I	O. regulat
]hair	man, DAC					<u> </u>	Head	d of the Departi	nent

Serial Nos	_in the list are recommended for given admission.

Dean (PGS & R)

Approved as suggested/Approved as per the following modifications

Vice-Chancellor

*Category of student:

- (1) Full time student with University Fellowship/Assistantship.
- (2) Full time student with External Fellowship.
- (3) Full time student without Fellowship.
- (4) VSSUT Faculty.
- (5) VSSUT regular employees (Non teaching)
- (6) Project Scholars / Staff members
- (7) QIP Scholars
- (8) Sponsored student
- (9) Sponsored student from Burla and vicinity.



VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA Post-Graduate Studies & Research (PGS&R) Form: VSSUT/PGSR/604

o. VSSUT/ / /20	Date:
OFFER OF ADMISS	ION TO Ph.D. PROGRAMME
No. VSSUT/PGSR/ /	Date:To
	_
Sub : Offer of Admission to Ph.D	<u> </u>
Programme	
Dear Student,	
I am happy to inform you that, on the approval	of competent authority, the University is pleased to
•	ne in the Department of
	under category""
with/without fellowship of Rsper	month, and enhancement as per rules.
You are advised to report to the PGS&R Section	onin working hours and to
collect the prescribed form VSSUT/PGSR/605	(Application for enrollment in Ph.D Programme).
Thereafter, you are required to report the Hear	d of Department for verification of your academic
qualifications, allotment of supervisor(s), and nor	mination of DRC members.
Then, the application forms for enrolment (VS	SSUT/PGSR/605) duly completed by you and the
concerned Head of the Department shall be subm	itted to Academic Section within 03 working days for
enrolment after depositing necessary fees.	
You are required to bring all the original documents	ments with one set of xerox copy and required fees
while reporting for admission into Ph.D Programs	me as furnished overleaf.
With best wishes,	Yours sincerely,

Dean, PGS&R

LIST OF DOCUMENTS TO BE PRODUCED AT THE TIME OF PROVISIONAL ADMISSION

High School Certificate Examination or other equivalent Examination Certificate		
Memorandum of Marks of High School Certificate Examination or equivalent Examinations		
Pass Certificates of I.Sc/+2 Science/Diploma (Engg. Etc.) Examinations		
Memorandum of Marks of I.Sc/+2 Science/Diploma (Engg. Etc.) Examinations		
Pass Certificate of BE/B.Tech/B.Sc or other equivalent Examinations		
Memorandum of Marks of BE/B.Tech/ B.Sc. or other equivalent Examinations		
Pass Certificate of M.E/M.Tech/M.Sc./M.Phil/M.A/MBA Examinations		
Memorandum of Marks of M.E/M.Tech/M.Sc./M.Phil/M.A/MBA Examinations		
College Leaving Certificate in original issued by the institution last attended		
Conduct Certificate in original issued by the institution last attended		
Certificate in support of SC/ST Category as the case may be		
Migration Certificate in original		
Medical Fitness Certificate from a registered doctor of Government Hospital		
Two recent passport size & two recent stamp size colour photographs		
Relieve Order from the Employer in original		
Offer Letter from VSSUT in original		
University Dues (Bank challan to be prepared at SBI or Syndicate Bank, Burla/ University Money Receipt)		

FEES TO BE DEPOSITED AT THE TIME OF PROVISIONAL ADMISSION

Category	Partic	Amount	
	ulars		
	Admission Fees (one time)	250	
	I.S.T.E.(one time)		
	Tuition Fee (per annum)	12000	
	University Development Fee (per annum)	7000	
	Hostel Development Fee for boarders (per annum)	1000	
D 1 D 1	University Fee (one time)	3500	
Regular Boarder	Caution Money (one time) (refundable)	2500	
	Internet Charges (per annum)	2000	
	Students Activity fee (per annum)	1500	Demand Draft in favour
	Seat Rent/Elect.& Water charges (per annum)	3600	of VSSUT, Burla is to be prepared in any Nationalized Bank payable at Burla
	Horticulture Fees (per annum)	250	
	Total	33,740	
	Admission Fees (one time)	250	
	I.S.T.E. (one time)	140	
	Tuition Fee (per annum)	12000	
	University Development Fee (per annum)	7000	
Regular	University Fee (one time)	3500	
Day Scholar	Caution Money (one time) (refundable)	2500	
	Internet Charges (per annum)	2000	
	Students Activity fee (per annum)	1500	
	Horticulture Fees (per annum)	250	
	Total	29,140	
Internal Candidate of VSSUT, Burla	Tuition Fee (per annum)	12,000	



Post-Graduate Studies & Research (PGS&R)

No. VSSUT/ / /20 Date:

/20Date: APPLICATION FOR ENROLMENT INTO PH.D. PROGRAMME 1. Academic Programme: Ph.D(Engg/Science/Hum.) 2.Department 3. Full name of the candidate:Mr/Mrs/Miss___ (As per 10th Certificate) (IN BLOCK CAPITAL LETTERS) 4. Father's/Husband's Name 5. Mother's Name 6. Permanent Address _____(b)Blood Group_ 7. (a) Date of Birth (c) Student Category___ Nationality____ 8. 9. Caste Status: SC ST General 10. Academic Qualification: % of Marks **Board Subjects** Standard Year University/Institute Degree or CGPA of Study H.S.C H.S.S.C Graduation Post-Graduation Any other Relevant Working/Research Experience (if any) Organization From To Position held 1. 2. Copies of Documents (published or unpublished) may be enclosed for record. 12. Details of present employer (if any) and financial support. 13. Broad area of research proposed 14. Category of studentship: 1. Full time student with Institute Fellowship/ 5. VSSUT regular employees (Non teaching) Project Scholars (JRF/SRF/RA etc.) or project Assistantship (University Scholar) 6. Full time student with External Fellowship staff 7. members (UGC/CSIR etc.) OIP Scholars Full time student without Fellowship Sponsored student (Institute/Research 8. (self financed/self supported) Organization/Industry) Sponsored local VSSUT Faculty student (Part Time) Sponsored student from Burla & vicinity **15.** (a) Assigned to Hall(If yes, order/permission letter to attach) (b) Permitted to stay outside Hall(Yes/No)_ (If yes, Xerox copy of permission letter should be attached) Date..... Full Signature of the Candidate

The application of the Candidate is verified in the Department.

1		ng faculty members w	1		
,	ne DAC should	ld be satisfied that the	proposed Co-superv	isor meets the criteria	set under the
The	following men	mbers are recommend	ed for the Doctoral R	Research Committee o	f the student:
1		Head of	f the Department		
			=		
				ment where the candid	late is enrolled)
5		(from the De	partment where the c		r related Department)
То	Dean, PGS &	(Signature of Me	embers, DAC)	Head o	of the Department
1.	Prof./Dr		he Department of	is nominat	ed as member of DRC
2.	Prof./Dr			is nominate	
3.		e of the DRC as recong modification:	nmended by the DAC	C is approved as such	approved with
4. 7	The admission	n with all details may p	please be reported to	the Academic Counci	l in its next meeting.
То	Dealing Ass	t. (Dean PGS&R) for	records and necessar	y action.	Dean, PGS &R
	-	d Rs& tl	-	No./Bank Challan TIE ceipt/Bank) No&
		nt is assigned the follo			
Pr	ogramme	Session	Department	Student Category	Registration No.
The en	nrolment of th	e student is approved	with effect from		



Post-Graduate Studies & Research (PGS&R)

Form: VSSUT/PGSR/ 606

Date:

No. VSSUT/ / /20

OFFICE ORDER ENROLMENT OF Ph.D. STUDENT

The undersigned is pleased to convey the enrollment of the following student in the Research Programme of the Institute:

	(<u>To l</u>	oe filled by the candidate)
1.	Name of Candidate	·
2.	Registration No.	·
3.	Department to which admitted	·
4.	Date of Enrolment	·
5.	Father's Name	·
6.	Permanent Address	
7.	Date of Birth	
8.	Category (SC/ST/GEN)	
9.	Category of studentship (1-9)	
10.	Highest Academic Qualification	·
11.	Regular Boarder/Day Scholar	·
12.	For sponsored student:	
	(a) Place of Employment	<u>:</u>
		be filled by the Office)
14.	Doctoral Research Committee of the supervisor till he/she is in 2	is Chairman or Prof./Dris Chairman Headship] Principal Supervisor Co-Supervisor Member Member Member Member
15.	The Chairman, DRC is requested to he actions as per Ph.D regulation.	old the meeting of the DRC for assigning course work and other
	Dealing Assistant	Dean, PGS&R
Memo	No.VSSUT/PGSR/	Date:
Copy 1	to:	
1.	Student concerned	5. Prof. I/c VSSUT, Library
2. 3.	All members of DRC Head, Department of	6. For sponsored students(Employer with address):
4.	Dean, Student's Welfare	



VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA Post-Graduate Studies & Research (PGS&R)

Form: VSSUT/PGSR/607

No. VSSUT/

/20

Date:

APPLICATION FOR PROVISIONAL REGISTRATION (FIRST DRC MEETING) IN Ph.D **PROGRAMME**

(This form must be submitted within one month of a stude	ent joining the programme)
1. Name of the Student	2.Regn. No
3. Name of the Department	4. Date of Enrolment:
5. Caste Status:GEN/SC/ST6. Category of studentship	0:
7. Broad Area of Research proposed:	
8. Brief description of research work proposed: (To be filled jointly by the student and the supervisor(s) on a separate	sheet)
Major equipment/facilities necessary to carry out the project and mean filled jointly by the student and the supervisor(s) on separate sheet)	ns of obtaining them. (To be
10. Research work already completed by the student (if any) (Attach pub	lished or unpublished document)
 11. (a) Request for early submission (if any) based on work already done (Relevant documents enclosed.) 12. for sponsored students only (as per original application) Does the student intend to carryout his/her work at the place of emplication. 	loyment? Yes/No.
13. Proposed place of work	
(For category 8 and9)	
14. Facilities available	
15. Plan of residence on campus:	
16. Signature of student:	Date:
Recommendation of the Supervisor(s): 1. Date of commencement of Research work: 2. Comments:	
Signature of Principal Supervisor	Signature of Co-Supervisor
Name, Designation & address:	Name, Designation & address:

Recommendation of the Doctoral Research Committee:

The DRC is satisfied that the proposed programme is prima facie, feasible to implement and adequate for the degree intended.

17. Course work recommended:

Sl.	Subject-Code	Course Title			Credits	Remarks
No.						
1						
2						
3						
4						
18. Pasi wor		ments examined	l:	Total	course Cred	dits =

19. Comments on place of work and facilities: Adequate/Inadequate

(DRC Member)

(Chairman, DRC) (Head of the Department)

(DRC Member)

FOR OFFICE USE

Based on the recommendation of the DRC the candidate's provisional registration for Ph.D. is recommended.

Dean, PGS &R

(Co-Supervisor)

(Supervisor)

Dealing Assistant

(DRC Member)

Approval of Vice-Chancellor

Note: The Academic Council should be informed on the Name of Student and Supervisor(s)



Post-Graduate Studies & Research (PGS&R)

No. VSSUT/ / /20 Date:

OFFICE ORDER

Provisional Registration of student for Ph.D. Degree

The undersigned is pleased to convey the approval of the Vice-Chancellor for provisional registration of the following candidate for the Ph.D. Degree.

1. Name of the Student.			
6. Supervisor(s): (1)		(Principal S	Supervisor)
		(Co-Supervisor)
7. Whether registering Humanities & Social	for Degree is Engineering/Science/ Science		
8. Broad Area of Resear	rch		
9. Course Work Assign	ned:		
Sl.No. Subject Code	Course Title	Credits	Remarks (Semester)
1 2			
3			
4			
10. Effective date of Pro	visional Registration :		
11. Earliest date of thesi	s submission :		
Dealing Assistant		Do	ean, PGS&R
Memo No. VSSUT/PGS		De	an, i usak
3. Supervisor(s)	Date: Copy to: hrough HOD)Department		

Form: VSSUT/PGSR/608



To

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA

Post-Graduate Studies & Research (PGS&R)

Form: VSSUT/PGSR/609

Date:

No. VSSUT/ / /20

APPLICATION FOR LEAVE OF ABSENCE FROM CLASSES

[To be submitted in duplicate to the Department Office, Please do not submit to Dean (PGS&R) Section]

(Please do not use this form for visiting other institutions/industry for academic work)

Type of Leave ☐ Casual Leave Medical Leave ☐ Station Leaving on Duty (Attach approval) Name: 1. Registration No.______3. Department:_____ 2 4. Reasons for seeking leave (Give details): 5. Period: From to _____(for medical leave) No. of working days absence: 6. _____(for casual leave) No. of working days absence: 7. Leave already availed during the year: Medical_____:Casual_____ 8. 9. Address during the leave with Tel. No. I understand that this leave does not entitle me to extra classes, alternative 10 examination or credit for class tests/home assignments. Date..... Signature of the student Photocopy of medical certificate endorsed by University Medical Officer. In case of out station illness, all relevant medical papers are also enclosed along with endorsement by University Medical Officer. Recommended for approval: ☐ Noted in appropriate Leave Register (Department Office Assistant) (Supervisor) (Head of the Department) Approved Approved (Up to 30 days) Approved (Up to 15 days CL & ML) Recommended (Beyond 30 days) Recommended (Beyond 15 days CL & ML) **Dealing Assistant** Dean, PGS& R **Head of the Department**

Head of the Department of for records (Ph.D Students)

Copy to: Students concerned (through HOD)



VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA Post-Graduate Studies & Research (PGS&R)

Form: VSSUT/PGSR/610

No. VSSUT/	/	/20	Date:

SEMESTER REGISTRATION FOR Ph.D SCHOLARS

1. Name (in ca	apital letters):					2. Regi	stration No:	
3. Department	t	4. Sem	ester: Odd/Ev	ven:	5. Stude	ent Cate	egory (1-9)	
6. Date of Enr	rolment:	7. Hall of R	tesidence:				R	oom No
8. Withdrawal	l 🔲 not gra	nted granted vide Office Or	der No:				Date:	
9. Broad area	of research:							
1	o be registered f			опрет.	1001			
CLNI	Sub	Name of the artificial			tact hou		Con His	D
Sl.No	Code	Name of the subject		L	Т	P	Credits	Remarks
1								
3								
4								
For Full t Months el Days of le Days of u Registrat: Office As:	ime students lapsed since enieave taken: nauthorized absion up to date: st. copy of Fee Rece	ried out during current semester rolment: sence: /es/No Supervisor ipt for Institute dues om Hall (in case of withdrawal) Date:	For studer Office Ord Date of wi Organizati Registratio	er No. thdrav on whe on up t	o have t and Da val: ere wor o date	aken w ite	ithdrawal O	
			Signatu	re of stu	ıdent:			
The student is r The student, gra registration stat	regular in attendar anted withdrawal, aus is up to date; S	the Supervisor and the Head of the Dence and work; Semester registration is is continuously in contact and is regular registration is recommended. Ite, but necessary steps are being taker	recommended. lar in is work;	Registr				
(or Co-Supervi	e Principal Supervisor in his/her abs	ence) For Office	ce use only	Sig			ead, Deptt/Cent	
Semester Regis	tration implement	ted			/	Approve	d/Not Approve	d

Dealing Assistant



Office Asst

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA Post-Graduate Studies & Research (PGS&R) Form: VSSUT/PGSR/611

o. VS:	SU1/	/ /20			Date:
		APPLICATIO	N FOR REGISTRATIO	N SEMINAR OF	Ph.D DEGREE
Part-A			e and submitted along with seve e for each DRC member, Depar		supervisor) copies of a report on the on copy.
	Name of the can BLOCK CAPI		(As per 10 th Certifica		
2. Regi			` 1	Ź	
•			Catego	ry of studentship	
5. Eff	fective Date of P	rovisional Registration	nvi	de Office Order No	
6. Re	gistration for Ph.	.D Degree in So	cience,	Social Sciences	s
	-	pleted: (including rese		_	
Su	bject Code	Name of the subject	S	Credits	Grade Obtained
10.	2				
11.	Place(s) whe	ere the research wo	ork is being/will be carri		
12.	(b)Name and a (in case of s) (c) Whether with	ddress of the Organisa ponsored candidates) hdrawn after completion	ation: of Course Work: Yes/No (if Yo	es, attach the copy of of	
Encl:	Copies of repo		and road map for future wo	•	
Date				Signature o	f the Candidate
	I time students			who have taken withd	rawal
		nrollment		No. and Date	
Days of Days of	i ieave taken f unauthorized al	bsence	Date of withd Organisation	rawal where working	
,				quirement completed	months

Supervisor

Office Asst

Supervisor

PART-B: RECOMMENDATION OF DRC

1. 2. 3. a) c) d)	Performance (i) in terms of quality(ii) in term	Grade obtained		
4.	Quality of report submitted:			
5.	Recommendation of DRC (a) The work done, if any, prior to joining the pro	gramme is worth/not worth.		
	(b) The candidate be registered effective from	for Ph.D Degree in		
6.	Signature of DRC members with date :			
	Name 1	Signature		
	2			
	4. (Supervisor)			
	5. (Co-Supervisor) 6. (Chairman, DRC)			
		Head of the Department		
	PART – C	(OFFICE USE ONLY)		
Bas	sed on the recommendation of the DRC, the candida m is recommended/ Not recomm			
De	ealing Assistant			

Dean, PGS &R



Post-Graduate Studies & Research (PGS&R)

Form: VSSUT/PGSR/612

Date:

No. VSSUT/ / /20

OFFICE ORDER

Registration Certificate of students for Ph.D. Degree

The undersigned is pleased to convey the approval for registration of the following candidate for the Ph.D Degree.

1. Name of the Student:		Regn. No	
2. Department:		Student Category (1	-9)
3. Date of Enrolment:			
4. Registration effective from:			
5. Earliest Date of Thesis Submiss			
6. Supervisor(s): (1)			
(2)		•••••	
7. Whether registering for Degree	is Engineering/Science/Humanit	ies & Social Science:	
B. Broad Area of Research:			
9. Course Work Completed:	O T'		
Sl. Subject Code No.	Course Title	Credits	Remarks
1			
2			
3 4			
4			
11. For sponsored candidates:		.	
- Whether permitted	to work outside the Institute:(Ye	s/No)	
- Residential requires	ment completed in mo	onths	
Dealing Assistant			
		De	ean, PGS &R
Memo No.VSSUT/PGSR/	/20		
Copy to:	Date:		
	gh Head of the Department)		
2. Head,	Department		
3. Supervisor(s)			
4. Employer:			



15. Signature of the student_____

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA Post-Graduate Studies & Research (PGS&R) Form: VSSUT/PGSR/613

10. V5501/ / /20	No. VSSUT/	/	/20		Date:
------------------	------------	---	-----	--	-------

Application for withura		Thesis from outside (To be submitted only after successful ork and residential requirement)
. Name:		2. Regn. No
. Category of studentship_		4. Ph.D. Programme(Engg./Sc./HSS):
. Date of Enrolment:		6. Date of Registration:
. Department:		
. Name of Thesis Supervisor	or(s):	
. Date from which withdra		
O. Reason for withdrawal:		
☐ To pursue research	programme at the place of emp	oloyment.
☐ To write and submi	it thesis from outside (Research	work already completed)
☐ To take a temporary	y break and return to the Univer	rsity for completing the research programme
☐ Any other(specify)		
	ne of admission (For sponsored	
As per original requat the place of empl		of admission, the student is expected to pursue research work
☐ The student is supp	osed to work full time in the U	niversity till completion of the project.
2. Arrangement made, or	to be made for completion of the	nesis:
3. Address for communication	ation:	
Phone :	_Fax:	E-mail:
4. Undertaking:		
I undertake to do semes	ter registration in time by payin	ng all applicable dues every semester till submission of thesis.
	in touch with my supervisor(s)	continuously for carrying out my project. I shall abide by all

16.	Comn	nents of Supervisor(s):	
	(a)	The student has worked for years months on his/her project	
	(b)	Coursework: All assigned course work completed	
	(c)	Experimental work%completed	
	(d)	Collection of data from outside the institute,%completed	
	(e)	Computational work:%completed	
	(f)	Data analysis and interpretation:%completed.	
		 I am satisfied with the arrangement made proposed for carrying out the project. Withdrawal recommended. 	
		Supervisor	
17.		mmendation of Doctoral Research Committee:	
	(DRC	C Member) (DRC Member) (DRC Member) (DRC Member) (DRC Member) (DRC Chairma	n)
18.	Recor	mmendation of the Head of the Department:	
. • •		•	
	⊔ W	Tithdrawal recommended	
		Head of the Department	
 19.	Obsei	rvations of PGS&R Section:	
	_	The student has completed assigned course work.	
	_	The student is a sponsored candidate, and as per enrolment record, he is supposed to carry out His/her work	ζ
	a	t place of employment. he Student is <u>not</u> a sponsored student, but has completed the residential requirements of 06 months.	
	Ш 1	ne Student is <u>not</u> a sponsored student, but has completed the residential requirements of 06 months.	
		Dealing Ass	istant
20.	Recoi	mmendation of Dean (PGS &R)	
	D	Dealing Assistant Dean, PGS &F	₹
21.	Appro	oval	
	П	Withdrawal approved	
		from supervisor is selected rejected rejected	
	•	The state of the s	
		(Date) Vice-Chancellor	
To	Deali	ng Assistant (PGS&R)	



Post-Graduate Studies & Research (PGS&R)

Form: VSSUT/PGSR/614

Date:

No. VSSUT/ / /20

7. Student's personal records.

OFFICE ORDER

Permission of Withdrawal and Submission of thesis from outside by Ph.D Students

The undersigned is pleased to convey the approval of competent authority for withdrawal of the following student from the Research Programme of the institute and submit thesis from outside:

1.	Name of the Candidate:		
2.	Registration No. :	3. Ca	ategory of studentship
4.			
5.	Date of Enrolment :	6. Academic Pro	ogramme: Ph.D Engg./Sc./HSS
7.	Thesis Supervisors : (1)		(Principal Supervisor)
			(Co-Supervisor)
8.	Date from which withdrawal		
9.	Reason for withdrawal:		
10.	Address for communication:		
	Phone/Mobile No		Email
11.	Special points (if any)		
shall ı	*	٤	ester as per prevailing regulations and he thesis must be submitted within the
Dea	ling Assistant		
Memo	o No.VSSUT/PGSR/		Dean, PGS& Date:
Сору			
1.	()		
2.	Supervisor(s):		
3.	Head, Department of:	1. 11.)	
	Employer of the student (if a		
	Accounts Section/Central Lib	orary	
6.	Registrar/Dean(SW)		



Post-Graduate Studies & Research

Form:	VSSUT/PGSR/615	
T'UI III.	V0001/1 G010/010	

No. VSSUT/ / /20 Date:

Verification of Research Papers Published in Referred Journals

Recommendation sheet to be accompanied once with the application for pre-submission seminar

Title of the Thesis (in Block Capital Letters)	
· · · · · · · · · · · · · · · · · · ·	
Name of Scholar (in Block Capital Letters)	<u> </u>
Supervisor(s) (1)	
* · · · · · · · · · · · · · · · · · · ·	
Department	

This is to certify that the above thesis is thoroughly verified for the **Research Papers Published in Referred Journals.** The outcome is given below:

Details of Research papers published:

S1. No.	Title of paper(s) published by the Ph.D Scholar as FIRST AUTHOR (related to the Ph.D Scholar's own research work)	Name of the Journal, Volume, Number, pp	Name of the Publishing House with Date and year of publication	Co-author(s) (If applicable)	Whether SCI or SCOPUS Indexed (Printout of the Proof is to be enclosed)	Whether UNPAID and without Processing/ Handling/ Annual Processing Charge/ Fees (Printout of the Proof, if available are to be enclosed)
1						
2						
3						
4						

The complete report is submitted for review by the Supervisor(s). (Printout of the first page of the Research paper(s) and the printout of the proof of indexing in SCOPUS/SCI downloaded from SCOPUS / SCI site(s) are to be enclosed. Also the printout of the proof regarding Journal is UNPAID.) In addition to this, I have presented two research papers as FIRST AUTHOR in conferences (Proof are enclosed).

(Signature of Ph.D Scholar)

Approval of the Dean PGS&R

	` 2
The complete report of the above thesis related to the Verification of Research proof regarding Journal is UNPAID, and proof of presenting two research precommended to Dean (PGS & R) after thorough checking and review by the und	apers as FIRST AUTHOR in conferences are forwarded and
\Box The research papers are satisfying the accepted norms of this University. (R	ef.: Clause No. 14.1 of Ph.D Regulation)
☐ The research papers are NOT satisfying the accepted norms of this University	y because of the following reasons:
1	
2	
The thesis may be considered for the award of relevant Degree applied for. (Relevan	Signature of Supervisor (s)
The above thesis related to the Verification of Research Papers Published in printout of the proof regarding Journal is UNPAID, and proof of presenting two rand recommended to Dean (PGS & R) after thorough checking and review Date(Proceedings of DRC is enclosed).	Referred Journals and presentation in Conferences with the esearch papers as FIRST AUTHOR in conferences are forwarded
Signature of the DRC members	Signature of the Chairman DRC



Post-Graduate Studies & Research (PGS&R)

Form: VSSUT/PGSR/616

No. VSSUT/ / /20 Date:

Proposal for Submission of Synopsis of Ph.I	<u>O Thesis</u>
Certified that research work of Shri/Ms./Mrs	
a student in the Department of	is nearly complete and
the candidate will be able to submit his/her dissertation v	within the time limit of two
months prescribed under the regulations. A synopsis of his/h	ner proposed thesis may kindly
be accepted for initiating the evaluation process.	
Encl:(1) 02 copies of synopsis (2) 02 copies of synopsis in electronic media (MS Wo	ord and PDF format)
Date:	Signature of Supervisor(s)
The student has made an oral presentation before the DRC DRC members have reviewed the synopsis and heard the oral completed the required number of course works and other registrations. The DRC is satisfied that he/she can submit the of possible external examiners (Form VSSUT/PGSR/617) is The thesis will be / need not be seen by the Committee before	al presentation. The student has elated works as per provisional are thesis in 02 months. The list is enclosed for approval.
Chairman,DRC	Head of the Department
Forwarded to the Controller of Examinations to submit the list of Approval and serialization of list of examiners.	of Examiners to Vice-Chancellor for
Dealing Assistant	Dean, PGS &R
Submitted to Vice-Chancellor for approval and serialization of	the list of Examiners.
	Controller of Examinations

Vice-Chancellor

N.B: This proposal is required to be sent to the PGSR Section with the panel of examiners on (**Form VSSUT/PGSR/617**) recommended by the DRC along with 02 copies of the synopsis.

Approved/Not Approved



Post-Graduate Studies & Research (PGS&R)

Form: VSSUT/PGSR/617

No. VSSUT/ / /20 Date:

Recommendations on Composition of Board of Examiners for <u>Adjudication of Ph.D. Thesis</u>

	Date:
1. Name of the candidate(Full)	:Regn. No
2. Department	<u> </u>
3. Effective Date of Registration	:
Subject of Research/	4
Title of the Thesis	<u>:</u>
Degree for which the thesis is to be submitted Name(s)of Supervisor(s)	:Ph.D. in
7. Panel of names for composition	
A For adjudication of thesis:	
(a) External Examiners Panel 1:	[From outside India] Detailed address given in Separate page.
(i) Name :	
	Specialisation:
	specialisation.
	, Telephone (Office)
(ii) Name:	
	Specialisation:
Affiliation Address:	
	, Telephone (Office)
(iii)Name :	
Designation:	_Specialisation:
Affiliation Address:	
	, Telephone (Office)
(iv)Name:	
	Specialisation:
Affiliation Address:	
	, Telephone (Office)
(v) Name :	
	Specialisation:
Affiliation Address:	
Email ID:	Talanhona (Offica)

Provide detailed information such as: (i) Name (ii) Designation (iii) Postal Address (iv) Telephone-Office (v) Telephone-Residence (vi) Fax (vii) E-mail (viii) Website of organization, of all proposed examiners in separates sheets.

	Name	
	Designation	Specialisation
	Affiliation Address	, Telephone (Office)
(ii)		, relephone (Office)
(11)		Specialisation
	-	Specialisation_
	Email ID:	, Telephone (Office)
(iii)	Name	
. /		Specialisation
	Affiliation Address	, Telephone (Office)
	Email ID:	, Telephone (Office)
(iv)	Name	
•		Specialisation
	Affiliation Address	
	Email ID:	, Telephone (Office)
(v)	Name_	
		Specialisation
	Affiliation Address	
	Fmail ID:	
	Eman ID	, Telephone (Office)
	ucting the Viva-Voce :	
cond		
	ucting the Viva-Voce :	ollowing:
	External member: any one of the fo	ollowing: judicated the thesis
(i) (ii) The comp	External member: any one of the formula. Examiner from Panel II who add 2. All members of the Doctoral Resear Doctoral Research Committee certification.	ollowing: judicated the thesis rch Committee. es that the candidate named above duly appeared at
(ii) The comparison of the standard forms and standard forms are stan	External member: any one of the formula. Examiner from Panel II who add 2. All members of the Doctoral Resear Doctoral Research Committee certific prehensive viva-voce held today, the factory. committee has also scrutinized the system.	pollowing: judicated the thesis The Committee. The candidate named above duly appeared at the candidate named above duly appeared at the candidate and his/her performance was found the candidate and certifies that the work is of the thesis and certifies that the work is of
(ii) The compatis	External member: any one of the formula. Examiner from Panel II who ad 2. All members of the Doctoral Research Committee certifications viva-voce held today, the factory. committee has also scrutinized the syllard required. We recommended the coven in A & B above.	pollowing: judicated the thesis The Committee. The candidate named above duly appeared at the candidate named above duly appeared at the candidate and his/her performance was four synopsis of the thesis and certifies that the work is of
(ii) The comp satist The stand as gi	External member: any one of the formula. Examiner from Panel II who ad 2. All members of the Doctoral Resear Doctoral Research Committee certific prehensive viva-voce held today, the factory. committee has also scrutinized the syllard required. We recommended the coven in A & B above. NATURE OF THE MEMBERS OF THE	pillowing: judicated the thesis rch Committee. es that the candidate named above duly appeared at e20 and his/her performance was four ynopsis of the thesis and certifies that the work is of omposition of the Board of Examiners and viva-voce Board of E
(ii) The compatist. The standas gi SIGN	External member: any one of the formula. Examiner from Panel II who ad 2. All members of the Doctoral Resear Doctoral Research Committee certification prehensive viva-voce held today, the factory. committee has also scrutinized the syllard required. We recommended the coven in A & B above. NATURE OF THE MEMBERS OF THE	judicated the thesis rch Committee. es that the candidate named above duly appeared at e20 and his/her performance was four ynopsis of the thesis and certifies that the work is of omposition of the Board of Examiners and viva-voce Board of Examiners and viva-voce Board OCTORAL RESEARCH COMMITTEE

Vice-Chancellor



Post-Graduate Studies & Research (PGS&R)

Form: VSSUT/PGSR/618

No. VSSUT/ / /20 Date:

Submission of Thesis by Ph.D. Student

Name of the student:			Regn. No		
Department:_					
Date of Enrol	llment	:Date	e of Registration:	Date of Submission	
Title of the th	nesis:				
I hereby subn	nit my	thesis to the Institu	ute for consideration ar	nd award of Ph.D Degree	
 (c) Similarity index (over (d) Library requirement f (e) Certificate from the S (f) Bank Challan of Rs.130 			(overall not exceeding 10 ent format the Supervisor(s)/Scholar	xam. Fee & issue of Degree Certificate	
Date				Signature of student	
				ce for the purpose of evaluation.	
Principal S (or Co-Super		isor n his/her absence)	Chairman, DRC	Head of the Department	
T. (71 F	Dean, P	GS&R			
To: The D					
	ed for t	he purpose of eval			

10

The Controller of Examinations



VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLAPost-Graduate Studies & Research (PGS&R)

Form: VSSUT/PGSR/619

No. VSSUT/ /20 Date:

CERTIFICATE

Certified that the contents of the soft copy of	of the Synopsis and Thesis titled
"	
submitted by	me is the same as that of the hard copy.
Date	Full signature of the Scholar
	Address:
CERTII	FICATE
I do haraby give my consent to unload m	y Ph.D thesis titled "
I do hereby give my consent to upload m	y I II.D thesis titled
	in the
site of the Sodhganga (INFLIBNET)	
Name &Address of the Supervisor (s)	
1.	
2.	Full of an atom of the
Date	Full signature of the Scholar Address:
	Scholal Addless.



Post-Graduate Studies & Research (PGS&R)

Form: VSSUT/PGSR/620

Date:

No. VSSUT/ / /20

DECLARATION OF RESEARCH SUPERVISOR FOR PLAGIARISM FREE CONTENT IN THE DOCTORAL THESIS

I Dr	Certify that the thesis entitled
	Bearing Regn. No
under my guidance and supervis	ion is free from plagiarism to the best of my knowledge and belief.
Date:	(Signature of the Guide)
	Address:
	Mobile No.
	Email Id:
DECLARATION OF RESEA	ARCH SCHOLAR FOR PLAGIARISM FREE CONTENT IN THE DOCTORAL THESIS
I Sri/Smt./Ms	bearing Regd. NoUndertake
that the thesis entitled"	
	"under the guidance and supervision of
Dr	(GUIDE) and Dr. (CO-GUIDE)
submitted by me for Ph.D Exam	ination does not use any source or material without acknowledgement
and with any plagiarized conte	nt. If any act of Plagiarism is proved in future the degree awarded
consequent to evaluation would	be liable to be withdrawn.
Date:	(Signature of the Research Scholar) Address: Mobile No. Email Id:



Post-Graduate Studies & Research

तानिकी अल्ल			Form: VSSUT/PGSR/621
No. VSSUT/	/	/20	Date:
Recommendati		•	with the Ph.D / MPhil./ M.Tech /M.Sc./ Integrated MSc. / Dual Degree thesis / Dissertation pursuance to the provision of the relevant Regulation of the University.
			Plagiarism Verification
		· · · · · · · · · · · · · · · · · · ·	
			Total no of Pages
•			
(2)			
Department			
-			canned for similarity detection. Process and outcome is given below: Date
The overall simila Total word count.	•		ighest similarity index from a single source (other than author's publication)
The complete repo	ort as genera	ted by the softwar	re is submitted for review by the Supervisor/ HOD/ Chairperson, DRC.
			(Research Scholar)
	-		ated to the Verification of Plagiarism is forwarded and recommended to Dean (PGS & R) ersigned. (Tick mark in the Check Box, whichever is applicable)
\Box The content	nts of the Ha	rd Copy and Soft	Copy of the above <i>thesis</i> are the same.
☐ The Simila	arity index is	below accepted r	norms.
☐ The simila	rity index is	above accepted n	norms, because of the following reasons:
	-	•	-

1	
Signature of Research Scholar	Signature of Supervisor (s)
	agiarism is forwarded and recommended to Dean (PGS & R) after thorough checking the DRC held on Date(Proceedings of DRC is enclosed).
Signature of the DRC members	Signature of the Chairman DRC
	Approval of the Dean PGS&R

**NOTE: 14.6.3 of Ph.D Regulations of VSSUT Burla:

The guidelines for use of anti-plagiarism software for the Ph.D/M.Phil thesis are as follows: (i) The scholars have to certify that the Plagiarism Checker was used for checking the plagiarism. The name of the software used for checking plagiarism should be clearly mentioned and to this effect a declaration be attached in the thesis, (ii) The guide has to ensure checking against plagiarism through the software before submission of Ph.D/M.Phil thesis and endorse the undertaking of the scholar, and (iii) As per the Academic Regulations a maximum of three chances will be given to the research scholar, if the percentage of plagiarism exceeds the approved limit.

Keeping in view of recent trends in academic circles all over the world, the limits of similarity index are as follows:

- a) The overall similarity index shall not exceed 10 %.
- b) The similarity index from a single source (other than author's publication) shall not exceed by 3%.
- c) The revised softcopy of the thesis after removing the plagiarism materials must be submitted by research scholar or 2nd or 3rd verification within maximum two months. If the thesis is not found within the approved similarity index mentioned above (a) the candidate be asked to submit the revised thesis with similarity index within limit after one year (provided it does not exceed the maximum period of 8 years as per Ph.D regulation).



VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA Post-Graduate Studies & Research (PGS&R) Form: VSSUT/PGSR/622

				FOIII. V5501/1 G5R/022					
o. VSSUT/	/	/20		Date:					
Mr./Miss			Registra	tion.No					
Branch		Semester	of	Progrmme for the Academic					
Session:		has applied for issue of Ph.D. Thesis Submission. Any dues outstanding against							
him/her may j	please be r	eported. If there is nothing	g outstanding pl	ease indicate 'Nil '.					

Dealing Assistant

DEAN, PGS&R

NO DUES CERTIFICATE

Sl. No.	Name of the Department/Section	Dues Outstanding (if any)	Signature of concerned Officials	Signature of Departmental Head			
1	Civil Engineering						
2	Mechanical Engineering						
3	Electrical Engineering/EEE						
4	Electronics & Telecomm Engg.						
5	Computer Science & Engg.						
6	Information Technology						
7	Production Engg.						
8	Metallurgical & Materials Engg.						
9	Chemical Engg.						
10	Architecture						
11	Physics						
12	Chemistry						
13	Mathematics						
14	Humanities						
15	Master in Computer Applications						
16	Central Library						
17	Accounts Section						
18	Dean, Students Welfare						
19	Workshop						
20	N.C.C.						
21	Athletic						
22	University Canteen						
23	Central Computer						
24	Central Internet Facility						
Hall of	Hall of Residence						
25	Name of Hall of Residence:						



VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA

Post-Graduate Studies & Research (PGS&R)

Form: VSSUT/PGSR/623

Date:

No. VSSUT/ / /20

Acknowledgement of Ph.D thesis received for Examination

No.VSSUT/PGSR/		Date:
Name of the student :		
Registration No.	:	
Department	:	
Name of the Supervisor(s)	:	
Title of the thesis :		
		entioned thesis from the Head, Department of on
		Ph.D Regulations of the University. The
		status of examination in due course.
	t has completed all formalitieg adjudication of his/her thesis.	es related to his/her academic Programme and may
Dealing Assistant	t	Dean, PGS&R
То		
(1) Head, Depart	ment of	
(2) Student conce	erned.	
(3) Employer of s	student (if applicable)	
(4) Warden,		Hall.



Form: VSSUT/PGSR/624

Date:

/20 No. VSSUT/

RECOMMENDATION OF EXAMINERS ON Ph.D THESIS

Name o	of the Car	ndidateRegn. No	
Title of	the thesi	is	
(Pleas		detailed report on the thesis on separate sheet, and specific recommendation by any one of the following option)	—
I.	degree	hesis meets the academic standard necessary for award of Ph.D e in Institutions of higher learning around the world. It may be accepted for award Ph.D degree in its present form. OR	
II.	The the	desis is acceptable subject to clarification of certain points at the time of viva-voce (List of points enclosed) OR	
III.		esis is acceptable subject to modification/clarification/revision, as per enclosed After modification the thesis need NOT be referred back to me. OR	
IV.	of text,	esis is acceptable subject to further work/modification/substantial revision, as per enclosed details. After modification the thesis should be referred back to me all assessment. OR	
V.		esis does not meet the standards of comparable work in institutions of learning. It is rejected.	
		aminer	
Designa	ation:	Signature of Examiner	
Place:_ Date			
N.B :	1. 2. 3.	A detailed Report should be enclosed in a separate sheet It is expected to receive the report within six weeks counting for the date of receiving the hard copy of the thesis. (Thesis need not be returned unless it contains instructions for corrections). The University requires a signed report from the examiner. Please return it to: Controller of Examinations, VSS University of Technology, Burla PO-Burla Engineering College Dist- Sambalpur – 768018, Odisha (India) E-mail: coe@vssut.ac.in	



VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA

Post-Graduate Studies & Research (PGS&R)

Form: VSSUT/PGSR/625

No. VSSUT/ / /20 Date:

SUMMARY OF EXAMINERS' REPORTS ON Ph.D THESIS

No.VSSUT/PGSR/		Date
Name of the Candidate	:	
Regn. No.	:	
Department/Centre	:	
Title of thesis	:	
Date of registration	:	
Date of submission	:	
External examiners	:	(1)
		(2)
Supervisor(s)	:	(1)
		(2)
Reports on the Ph.D thes herewith for review.	is of the	candidate have been received from the examiners and are enclosed
		CONTROLLER OF EXAMINATIONS
REMARKS OF DEAN. Summary of reports:	, PGS&R	t .

Dean, PGS&R

REMARKS OF VICE-CHANCELLOR

The reports of the examiners may be reviewed by the DRC in light of the observations of Dean, PGS&R and the recommendations of the DRC be sent to the Vice-Chancellor for approval. The HOD may, if the DRC thinks fit, give copies of the reports to the student to make necessary changes in thesis if so advised by the examiners.

Vice-Chancellor



No. VSSUT/ / /20	Date:
------------------	-------

RECOMMENDAT	ION OF THE DO	CTORAL RESEA	RCH COMMITTI	EE ON REPORTS	OF EXAMINERS

1. Department		
2. Name of the Candidate :		Regn. No
3. Date of Registration :		
4. Title of the Thesis		
5. Whether Adjudicator's Report unanimous and favorable, if not state		
difference		
6. Observations if any, of the Committee		
the Commune		
7. Changes made in the thesis, if	any (Attach separate sheet)	
3. Proposed date, time, venue		
of Viva Voce Examination : O. We have considered the reportmay now be asked to appear for hat on the favourable report of	s of the members of the Board of Exam a viva-voce examination by the Boar the viva-voce Board one candidate b	iners and recommend that the candid d already formed. We also recomme
of Viva Voce Examination : O. We have considered the report may now be asked to appear for hat on the favourable report of Philosophy in	s of the members of the Board of Exam a viva-voce examination by the Boar the viva-voce Board one candidate b	iners and recommend that the candid d already formed. We also recomme e admitted to the Degree of Doctor
of Viva Voce Examination : O. We have considered the report nay now be asked to appear for that on the favourable report of Philosophy in	s of the members of the Board of Exam a viva-voce examination by the Boar the viva-voce Board one candidate b	iners and recommend that the candid d already formed. We also recomme admitted to the Degree of Doctor
of Viva Voce Examination : O. We have considered the report may now be asked to appear for hat on the favourable report of Philosophy in	s of the members of the Board of Exam a viva-voce examination by the Boar the viva-voce Board one candidate b	iners and recommend that the candid d already formed. We also recomme admitted to the Degree of Doctor
of Viva Voce Examination : O. We have considered the report may now be asked to appear for hat on the favourable report of Philosophy in O. Proposed Name, Designation and Address of External	s of the members of the Board of Exam a viva-voce examination by the Boar the viva-voce Board one candidate b	iners and recommend that the candid d already formed. We also recomme admitted to the Degree of Doctor
of Viva Voce Examination : O. We have considered the report may now be asked to appear for hat on the favourable report of Philosophy in O. Proposed Name, Designation and Address of External Viva-Voce Examiner	s of the members of the Board of Exam a viva-voce examination by the Boar the viva-voce Board one candidate b	iners and recommend that the candid d already formed. We also recomme admitted to the Degree of Doctor
of Viva Voce Examination : O. We have considered the report may now be asked to appear for hat on the favourable report of Philosophy in O. Proposed Name, Designation and Address of External Viva-Voce Examiner	s of the members of the Board of Exam a viva-voce examination by the Boar the viva-voce Board one candidate b	iners and recommend that the candid d already formed. We also recomme admitted to the Degree of Doctor
of Viva Voce Examination : O. We have considered the report may now be asked to appear for that on the favourable report of Philosophy in	s of the members of the Board of Exam a viva-voce examination by the Boar the viva-voce Board one candidate b n: s of the Doctoral Committee:	iners and recommend that the candid d already formed. We also recomme admitted to the Degree of Doctor
of Viva Voce Examination : O. We have considered the report may now be asked to appear for that on the favourable report of Philosophy in	s of the members of the Board of Exam a viva-voce examination by the Boar the viva-voce Board one candidate b	iners and recommend that the candid d already formed. We also recomme admitted to the Degree of Doctor

Dean, PGS&R

Vice-Chancellor



Form: VSSUT/PGSR/627

/20 Date:

REPORT ON DEFENSE OF Ph.D DEGREE

Depa	ırtment	:			
Nam	e of the Scholar	<u>:</u>		Regn. No	
Title	of the Thesis	:			
Revie	ew of Examiners' re	enort :		-	
1.	Examiner I				
2.	Examiner II	:Prof./Dr			
3.	Supervisor(s)				
Date	of Viva-Voce	:	Number of persons	s present in Seminar:	
Reco	mmendation	:			
(a) P	erformance	:			
(b) I	Degree (if recomme			amme IN ENGINEERING/SCIENCE/HSS	
Subin	nitted. Signature	e of members of Do	octoral Research Committee/ boar	rd of viva-voce examiners: Member Member	
	Supervi	sor	Supervisor	External Examiner	
	Chairma	nn, DRC		Head of the Department	
2 3 4	 Received tw The copies of Detailed rep 	o soft copies of the copies of the copies in paper and electors of viva-voce by the copies of the co	ected bound thesis signed by all DRC corrected thesis in the form of CD coctronic form will be sent to Central Librar the Examiners & DRC members. participants in open viva-voce).	ontaining MS-WORD and PDF files.	
	The recomm	nendation of the Pa	anel of examiners may be accepte	Dealing Assistanted for award of Ph.D Degree.	t
Т	The student is provision	nally accepted for av	ward of Ph.D degree, subject to appro	_Dean, PGS&R oval by the Academic Council and BOM.	

Vice-Chancellor



Form: VSSUT/PGSR/ 628

Date:

/20 No. VSSUT/

VSS UNIVERSITY OF TECHNOLOGY, ODISHA, BURLA **FORMAT FOR SUBMISSION OF THESIS**

University Name	: Veer Surendra Sai University of Technology, Odisha, Burla
Department	:
GUIDE/RESEARCHER	
Name of Researcher	:
Name of Guide	:
<u>DEGREE</u>	
Type of Degree (Ph.D./M.Phil./PG)	:
Registration Date (DD/MM/YYYY)	:
Completed Date (DD/MM/YYYY)	:
Awarded Date (DD/MM/YYYY)	:
THESIS DETAILS	
Title (with Subtitle)	:
Alternative Title (If Any)	:
Abstract (Maximum characters: 2048)	
Note (If Any)	I
Keywords (At least10 keywords)	I
Language	I
Coverage (Reference to the broader s	subject area of the Thesis) :
Citation Reference (Total number of	References in the Thesis) :
SUBMISSION DETAILS	
Size (e.g., initial page: xii; all pages:	315) :
Dimensions (e.g., 35 cm):	
Accompanying Material (CD/DVD)	:

Please submit the soft copy of the Thesis to the Central Library, VSSUT, Burla as per the following format. Creation of Metadata:

Proper metadata creation is very important for locating as well as for inters changing Resources between systems. Filling upon the data is to be done with care and diligence any error entered during the creation of metadata will lead into wrong display of thesis information. Special characters need to avoided during entry else data base will not accept the metadata and it will be stored in trash and system will not generate any auto feedback for such entry so that will make it difficult to our technical person to identify such unfinished and special character field metadata.

Splitting and Naming Convention:

In order to maintain quality, standards and uniqueness in all theses INFLIBNET Centre devised standards and formats based on international practices. This will give a proper photo print of physical appearance of the thesis with the same template available for individual thesis. Kindly Note that file name should be start with serial number like 01_title.pdf, 02_prelim pages.pdf, 80_Recommendation ..etc. An example of split files along with chapter wise naming is given below:

THESIS SPLITING AND NAMING CONVENTION:

In order to maintain quality, standards and uniqueness in all theses INFLIBNET Centre devised standards and formats based on international practices. This will give a proper photo print of physical appearance of the thesis with the same template available for individual thesis. Kindly Note that file name should be start with serial number like 01_title.pdf, o2_certificates.pdf .etc. An example of split files along with chapter wise naming is given below:

EXAMPLE OF SPLIT FILES FOR UPLOAD IN "SHODHGANGA"

Name	Date modified	Туре	Size
🔁 01_title.pdf	12-03-2022 11:46	Adobe Acrobat D	45 KB
🟂 02_prelim pages.pdf	12-03-2022 11:48	Adobe Acrobat D	17 KB
🔁 03_content.pdf	12-03-2022 11:51	Adobe Acrobat D	12 KB
₹ 04_abstract.pdf	12-03-2022 11:52	Adobe Acrobat D	25 KB
🔀 05_chapter 1.pdf	12-03-2022 11:55	Adobe Acrobat D	13 KB
🔁 06_chapter 2.pdf	12-03-2022 11:57	Adobe Acrobat D	18 KB
🔁 07_chapter 3.pdf	12-03-2022 12:00	Adobe Acrobat D	881 KB
🟂 08_chapter 4.pdf	12-03-2022 12:02	Adobe Acrobat D	5,259 KB
🔁 09_chapter 5.pdf	12-03-2022 12:04	Adobe Acrobat D	123 KB
10_annexures.pdf	12-03-2022 12:06	Adobe Acrobat D	56 KB
2 80_Recommendation.pdf	13-03-2022 16:32	Adobe Acrobat D	352 KB

- * (Note: Add more files as per requirement; follow the Thesis files/chapters order.)
- * prelim pages to be clubbed as (title + declaration + dedication + certificate + acknowledgment + list of table + graphs files)
- * annexure files to clubbed as (bibliography + references +questionnaire +maps + publications, etc)

N.B.: Please send the soft copy of thesis in spitted format as mentioned above as well as the whole thesis in a single file (both PDF and Word File) in a good quality CD/DVD (such as Meyerbeer, Sony, etc.) compact disc. The CD/DVD should be submitted with the CD case.



Form: VSSUT/PGSR/629

Date:

/20 No. VSSUT/

APPLICATION FOR ISSUE OF PROVISIONAL CERTIFICATE

1.	Name of the student (in block letters	<u> </u>
2.	Father's Name	
3.	Registration No	3.Branch
4.	Date of Enrolment	5. Student Category
5.	Date of Programme Completion	
6.	Name of the Supervisor(s)	
_	ture of HOD	Full Signature of the Applicant with date
_	The following documents must be su	ubmitted with the application.
_	The following documents must be su	ubmitted with the application.

Dean, PGS & R

Appendix - VI

Standard format for Preparation of Thesis/Dissertation/Report

for

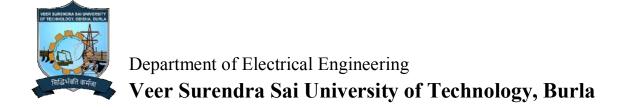
Ph.D./M.Tech./M.Phil./Int. M.Sc./M.Sc/MCA Students



Veer Surendra Sai University of Technology (VSSUT) Siddhi Vihar, P.O.: Engineering College, Burla Sambalpur-768018, Odisha, India www.vssut.ac.in

Title of the Dissertation

Abhishek Pandey



Title of the Dissertation

Dissertation submitted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

in

Electrical Engineering

By

Abhishek Pandey

(Registration Number: xxxxxxxxxxx)

based on research carried out under the supervision of

Prof. xxxxxxxxx

and

Prof. xxxxxxxxxx



January, 2023

Department of Electrical Engineering **Veer Surendra Sai University of Technology, Burla**

January 05, 2023

Certificate of Examination

Registration Number: xxxxxxxx

Name: Abhishek Pandey

Title of Dissertation: xxxxxxxxx

We the below signed, after checking the dissertation mentioned above and the official record book (s) of the student, hereby state our approval of the dissertation submitted in partial fulfillment of the requirements of the degree of *Doctor of Philosophy* in *Electrical Engineering* at *Veer Surendra Sai University of Technology, Burla*. We are satisfied with the volume, quality, correctness, and originality of the work.

Prof.xxxxxxxxx	Prof.xxxxxxxxx
Co-Supervisor	Supervisor
Prof.xxxxxxxxx	Prof.xxxxxxxxx
Member, DRC	Member, DRC
Prof.xxxxxxxxx	Prof.xxxxxxxxx
Member, DRC	External Examiner
Prof.xxxxxxxxx Chairman, DRC	Prof.xxxxxxxxx Head of the Department

Prof. xxxxxxxxxProfessor

Prof. xxxxxxxxxProfessor

January 05, 2023

Supervisors' Certificate

This is to certify that the work presented in the dissertation entitled, "Title of the Dissertation" submitted by Abhishek Pandey, Registration Number xxxxxxxxx, is a record of original research carried out by him under our supervision and guidance in partial fulfillment of the requirements of the degree of Doctor of Philosophy in Electrical Engineering. Neither this dissertation nor any part of it has been submitted earlier for any degree or diploma to any institute or university in India or abroad.

Prof.xxxxxxxxx	Prof.xxxxxxxxx
Co-Supervisor	Supervisor

Dedication

You may dedicate your dissertation in this page.

Dedication should be no more than one page.

You may choose your preferred font and size.

Signature

Include this page in the pretext page count, but do not place a page number on it.

Declaration of Originality

I, Abhishek Pandey, Registration Number xxxxxxxxxhereby declare that this dissertation

entitled, "Title of the Dissertation" presents my original work carried out as a doctoral

student of VSSUT Burla and, to the best of my knowledge, contains no material

previously published or written by another person, nor any material presented by me for

the award of any degree or diploma of VSSUT Burla or any other institution. Any

contribution made to this research by others, with whom I have worked at VSSUT Burla

or elsewhere, is explicitly acknowledged in the dissertation. Works of other authors cited

in this dissertation have been duly acknowledged under the sections "Reference" or

"Bibliography". I have also submitted my original research records to the scrutiny

committee for evaluation of my dissertation.

I am fully aware that in case of any non-compliance detected in future, the degree

awarded to me may be withdrawn on the basis of the present dissertation.

January 05, 2023

Abhishek Pandey

VSSUT Burla

Regd. Number xxxxxxxx

νi

Acknowledgment

This section shows the essence of the student's journey during the course of the research

work and the role of other individuals in shaping his/her academic life.

Acknowledgments are non-consequential in that a student is not evaluated on them. An

acknowledgment has typically three sections —

• Reflection: Narration of the student's journey through his/her research career.

• Thanking: Expression of gratitude to those who have helped in the student's

journey.

• Announcement: Accepting responsibility for the work and/or dedication of the

dissertation to someone. This in fact is a repeat of declaration and dedication pages.

January 05, 2023

Abhishek Pandey

VSSUT Burla

Regd. Number xxxxxxxx

vii

Abstract

Write the abstract of the dissertation followed by 3 to 7 keywords or phrases. An abstract

is a micro dissertation. Both the dissertation and abstract should answer the following few

questions —

• What was done?

• Why was it done?

• How was it done?

• What was found?

• What is the significance of the findings?

In the abstract section, one should answer the above questions in short paragraphs. The

totallength of the abstract should typically be limited to two pages.

Mention 3 to 7 keywords, phrases, or index terms in **bold-italics** separated by semicolons.

These words should be carefully chosen in a manner that they convey sufficient

informationon what the dissertation is all about. These words help other researchers to

search and findyour work.

Keywords: KW1; KW2; KW3; KW4; KW5.

viii

Contents

Cert	ificato	e of Examination	11
Supe	erviso	rs' Certificate	iii
Dedi	icatio	n	iv
Decl	aratio	on of Originality	V
Ack	nowle	dgment	vi
Abst	ract		vii
Con	tent		viii
List	of Ab	breviations	ix
List	of Syı	mbols	X
List	of Fig	gures	xi
List	of Tal	bles	xii
1	Int	roduction	1
	1.1	Introduction	
	1.2	Problem Statement of the Thesis	
	1.3	Objectives of the Thesis	
	1.4	Organization of the Thesis	
2	Lite	erature Review	8
	2.1	Introduction	
		2.1.1 Literature Review (Sub-sub-section)	
	2.2	Future Scope of the Research Work	
3	Ma	terials and Methods	9
	3.1	Introduction	

	3.2	Summary	
4	Nam	ne of the Chapter (Contributing Chapter 1)	10
	4.1	Introduction	
	4.2	Results & Discussion	
		4.2.1 Sub-sub-section	
	4.3	Summary	
5	Nam	ne of the Chapter (Contributing Chapter 2)	11
	5.1	Introduction	
	5.2	Results & Discussion	
		5.2.1 Sub-sub-section	
	5.3	Summary	
6	Nam	ne of the Chapter (Contributing Chapter 3)	12
	6.1	Introduction	
	6.2	Results & Discussion	
		6.2.1 Sub-sub-section	
	6.3	Summary	
7	Nam	ne of the Chapter (Contributing Chapter 4)	13
	7.1	Introduction	
	7.2	Results & Discussion	
		7.2.1 Sub-sub-section	
	7.3	Summary	
8	Conc	clusion & Future Scope of the Work	14
	8.1	Conclusion	
	8.2	Future Scope of the Work	
	Refe	erences	
	Ann	endices (if any)	ĭ

Index	II
Curriculum Vitae	III
List of Publications (Journal and conference in separate list)	IV
Reprints of published papers related to thesis	V
Plagiarism Report	VI

List of Abbreviations

Abbreviations should be alphabetically written

Abbreviation	Description
AGC	Automatic Generation Control
AHCM	Agglomerative Hierarchical Clustering Method
CAISO	California Independent System Operator
CONOPT	Continuous Nonlinear Optimizer

List of Symbols

Symbols should be alphabetically written

Symbol	Nomenclature	Unit (MKS/CGS)
A	Area	m^2
ν	Frequency	Hz, s ⁻¹

List of Figures

1.1	Role of DR in Energy Balancing for a Typical Power System	10
1.2	Schematic of V2G Power Flow in the Smart Grid	12
1.3	EV Load by an Hour of the Typical Day	14

List of Tables

1.1	Charging technologies	11
1.2	Types and Specifications of EVs	13
1.3	Simulation Parameters	15



Introduction

1.1 Introduction

A treatise advancing a new point of view resulting from research is one of the compulsory requirements of an academic degree of VSSUT, Burla. Undergraduate students submit a project report in support of their candidature for B.Tech. degree. Similarly, Masters students submit theses, and doctoral students submit dissertations. Unless otherwise stated explicitly, henceforth in this document the word "dissertation" will be used as a synonym for "report" and "thesis".

This document is intended to provide a guideline to students in the preparation of their dissertations. A dissertation is expected to have ethical standards and uniform format with readability.

1.2 Dissertation Arrangement

Each dissertation must be arranged in the following serial order. Optional pages may not be included.

i. Cover Page

The cover page comprises the dissertation title, author's name, and institutional details. This page is excluded from page number counter. A sample cover page design and spine design is shown in Figure 1.1.

ii. Title Page

The title page includes the title of the dissertation followed by submission month-year, department, degree, author's name, and supervisors' names. Include this page in the pre-text page count, but do not place a page number on it. The top margin on this page shall be 60mm. [Sample Included]

iii. Certificate of Examination

Include this page in the pre-text page count, but do not place a page number on it. If the Chairman of the DRC is the HoD then he will sign twice. The top margin on this page shall be 60mm. [Sample Included]

iv. Supervisor's Certificate

Two samples are given; appropriate sample may be used depending on the number of supervisors. Include this page in the pre-text page count, but do not place a page number on it. The top margin on this page shall be 60mm. [Samples Included]

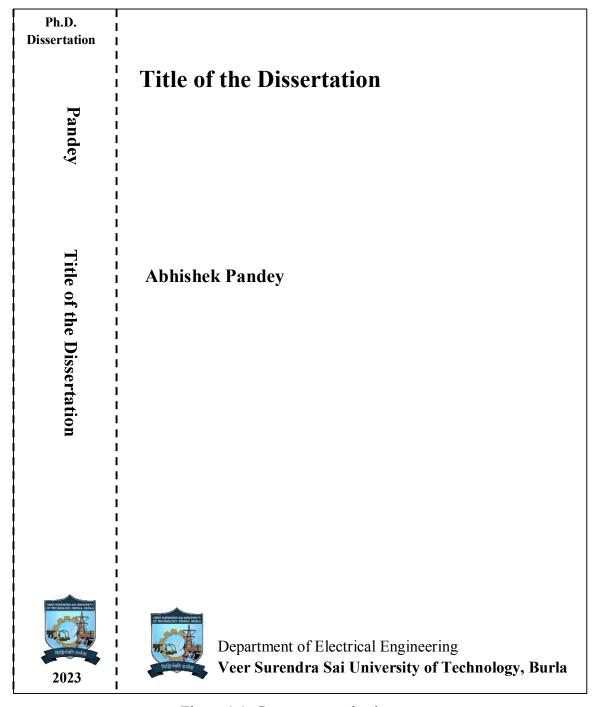


Figure 1.1: Cover page and spine.

v. **Dedication** [Optional]

This dedication page should be limited to one page. The author may choose his/her preferred font and size. Include this page in the pre-text page count, but do not place a page number on it. The top margin on this page shall be 60mm.

vi. Declaration of Originality

The student is expected to declare that the work and ideas in his/her dissertation are all his/her own and original. Include this page in the pre-text page count, but do not place a page number on it. A sample declaration is included. The top margin on this page shall be 60mm. [Sample Included]

vii. Acknowledgment [Optional]

Include this page in the pre-text page count, but do not place a page number on it. The top margin on this page shall be 60mm.

viii. Abstract

Abstract followed by three to seven keywords/phrases should be written in this section in no more than two pages. One may follow single line spacing in this section. Include this page in the pre-text page count, but do not place a page number on it. The top margin on this page shall be 60mm.

ix. Contents

Begin placing the page numbers at the bottom of this page, counting all preceding pages except the cover page. This counting should continue up to the page precedingthe first page of the first chapter. Numbers should be in lower case Roman numerals. Page numbers are centered 15mm from the bottom of the page. The content pages should be generated automatically with the aid of software used for dissertation preparation. [Sample Included]

x. List of Abbreviations [Optional]

This section should be generated automatically with the aid of software used for dissertation preparation. Continue the page numbering with lower case Roman numerals and place it 15mm from the bottom of the page. [Sample Included]

xi. List of Symbols [Optional]

This section should be generated automatically with the aid of software used for dissertation preparation. Continue the page numbering with lower case Roman numerals and place it 15mm from the bottom of the page. [Sample Included]

xii. List of Figures [Optional]

This section should be generated automatically with the aid of software used for dissertation preparation. Continue the page numbering with lower case Roman numerals and place it 15mm from the bottom of the page. [Sample Included]

xiii. List of Tables [Optional]

This section should be generated automatically with the aid of software used for dissertation preparation. Continue the page numbering with lower case Roman numerals and place it 15mm from the bottom of the page. [Sample Included]

xiv. Chapters

All pages from the first page of the first chapter through the Vita should be numbered consecutively in Arabic numerals, beginning with numeral "1". [Samples Included]

xv. References

References may be in one of the two commonly used styles: (a) numbered in sequence following the order of appearance, or (b) author and year of publication arranged alphabetically, depicting on the style used in the dominant journal in your field.

Please give names of ALL authors, surname first, title, name of journal, volume (bold), page numbers (start - end), and year of publication. Do not use "et al" in this section. You may use "et al." while referring to article in the main text.

This section should be generated automatically with the aid of software used for dissertation preparation. There should be only one "Reference" section in a dissertation and should be placed after the Conclusion Chapter and before Appendices, if any. Continue page numbering with Arabic numerals. [Sample Included]

1.3 Dissertation Layout

Students are advised to adhere to following points while writing their dissertation.

a) Institute logo

It is a matter of pride to print the Institute logo in the dissertation. The printed logo should be contained in a square of 25mm each side. Students are advised to use high resolution logo. A logo is provided in the dissertation writing template.

b) Font

The entire dissertation must be written using only a single font including all the texts inside graphs, figures, block diagrams, *etc*. While writing captions of tables and figures, the font size should be decreased by one point. Similarly, the font size of bibliography and index should also be lessened by a point. Students are advised to use the following in the body text —

serif fonts like Times New Roman (TNR) of size 12pt or

sans-serif fonts like Arial of size 11pt.

Needless to say that the use of font should be uniform throughout. Headings, Titles *etc.* should use fonts as given below in Table 1.1.

Item	Arial	TNR	Justification
Main Text	11 normal	12 normal	Justified
Sub-sub Heading	11 bold	12 bold	Left
Sub Heading	13 bold	14 bold	Left
Heading#	16 bold	17 bold	Left
Chapter Title	22 bold	24 bold	Center
Chapter Number	16 bold	17 bold	Left

[#]Add serial number with one decimal place.

c) Table and Figure

All tables, figures, and other such illustrations referenced in the text should be numbered for unique identification. The number format should be p.q with p signifying the chapter number where the illustration appears and q denoting the serial number of that illustration in the chapter p. The serial number should be set to 1 at the beginning of a new chapter. A table caption should be placed at the top of the table, and a figure caption should be placed at the bottom of the figure. The caption should

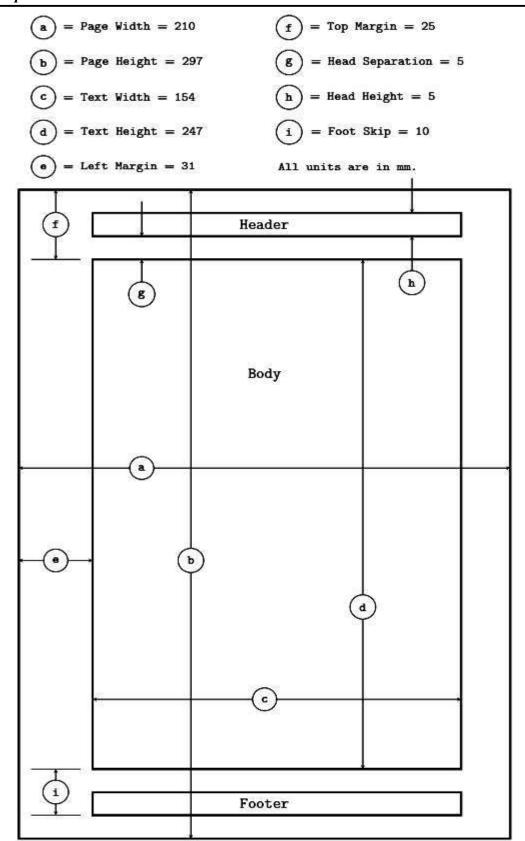


Figure 1.2: Page size and margin follow the unique number p.q. The size of the font in the caption of tables and figures

should be one less than the text font size.

d) References

"References" should be treated as the last chapter and placed at the end of the dissertation. It should not be numbered like other chapters. Texts within the references should have single spacing. The size of the font may be reduced by a point or two. Journal article [1, 2], Patent [3, 4], book [5, 6], conference article [7, 8], online 7 resource [9, 10], Ph.D. dissertation [11, 12] are usually referred in the text. Some samples of various bibliographic styles are included in this guideline for illustration. You are advised to follow one reference format of any dominant journal of your field.

1.4 Chapters

In the text of the dissertation, each chapter should begin on a fresh page. They should also be designated in the Table of Contents along with other major sections of each chapter. The page numbers listed on the Table of Contents must correlate with the beginning of each section or chapter. All texts should be written with 1.5-spacing. Each chapter should begin with a chapter number in Arabic numerals (font size: Times New Roman 17 points or Arial16 points, Bold) followed by the chapter title in bold face of size 24 points in Times New Roman font or 22 points in Arial font.

The first level section should have number of format *a.b*, where the number *a* is an Arabic number denoting the chapter number and *b* is also an Arabic number starting from 1 and counting up for each section. For example 3.1, 4.2, or 1.5, *etc*. The section title should follow the section number. Both the title and number should be in the bold face of size 17points in Times New Roman font or 16 points in Arial font.

The second level section should have number of format *a. b. c*, where *c* is an Arabic number. For example 3.1.1, 4.2.1, or 1.5.2 *etc*. The sub-section title in bold letters should follow the number in bold. The font size should be 14 points Times New Roman or 13 points Arial. Except when it is commonly followed in your field, it is suggested not to give serial number beyond *a.b* stage, *i.e.* serializing like *a.b.c* is discouraged. The third level section should have no number. The sub-sub-section title should be in bold letters. The font size should be 12 points Times New Roman or 11 points Arial.

Literature Review

2.1 Introduction

The "Literature Review" is a very useful section of Indian theses. This section should citemost of the publications in the field including all related past work done. Several common mistakes found in recent theses from our country should be avoided. Some theses reproduce, albeit using the author's own language, a large amount of textbook information. While for the sake of readability some basic ideas of the field may be articulated, it is certainly improper to reproduce large sections of text books. A reader is expected to have prior knowledge of the general field. Authors sometimes summarise articles in serial order but neither bring out the link between one article and its following one, nor bring out the relation the article in question has with the main title of the thesis.

2.2 Sub-Sections as per the requirement

Materials and Methods

3.1 Introduction

Experimental research in several research fields, particularly those dealing with material science, food technology, biotechnology *etc*, invariably contain a chapter on "Materials and Methods" which describe the instruments and chemicals used in the experiments, plus the processing techniques. This chapter is usually irrelevant in theses in electrical sciences and those relying on mathematical analysis. Use the practice followed in dissertations of your field.

3.1.2 Sub-Sections as per the requirement

Name of the Chapter

(Contributing Chapter – 1)

4.1 Introduction

There should be at least four contributing chapters starting from **Chapter 4 to Chapter 7**out of the research work of the Ph.D scholars.

4.2 Results & Discussion

Name of the Chapter

(Contributing Chapter – 2)

5.1 Introduction

There should be at least four contributing chapters starting from **Chapter 4 to Chapter 7**out of the research work of the Ph.D scholars.

5.2 Results & Discussion

Name of the Chapter

(Contributing Chapter – 3)

6.1 Introduction

There should be at least four contributing chapters starting from **Chapter 4 to Chapter 7**out of the research work of the Ph.D scholars.

6.2 Results & Discussion

Name of the Chapter

(Contributing Chapter – 4)

7.1 Introduction

There should be at least four contributing chapters starting from **Chapter 4 to Chapter 7**out of the research work of the Ph.D scholars.

7.2 Results & Discussion

Conclusion & Future Scope of the Work

8.1 Conclusion

The conclusion is one of the most important chapters of the dissertation and often it is one of the most badly written chapters. The student is expected to make a clear and concise statement of the original contributions made in the dissertation. The links between the key ideas spread across the chapters should be briefed in this chapter. Leave a positive impression with the examiner. One must remember not to claim those findings that have neither been proven nor corroborated in the dissertation.

8.2 Future Scope of the Work

This is not the end of the road. Narrate the way the research can be furthered.