GIET UNIVERSITY, GUNUPUR
DIST-RAYAGADA, (ODISHA)
PIN-765022

(Established Under Odisha. Act -23 of 2018 & Recognized by the U.G.C, Ministry of HRD, Govt. of India)

Ph.D. Programme Regulations-2019

(Amended up to August -2022)

GIET UNIVERSITY, GUNUPUR

Ph. D Regulations-2019 (Amended up to August -2022)

CONTENTS

Sl No	Content	Page No
1	Definitions and Nomenclature	2
2	Categories of Ph.D. candidates	2
3	Eligibility criteria for admission to the Ph.D. programme	3
4	Duration of the Programme	4
5	Admission Procedure	5
6	Allocation of Research Supervisor	6
7	Supervisors	6
8	Doctoral Research Committee (DRC) and its functions	7
9	Course Work	8
10	Registration	10
11	Cancellation of Registration	10
12	Submission of Synopsis	11
13	Submission of Thesis	12
14	Thesis Adjudication	12
15	Public Viva-Voce Examination	13
16	Award of Ph.D Degree	14
17	Publication of Thesis	14
18	Change of Regulations	15
19	Depository with UGC and University	14
20	Guidelines for preparation of Synopsis	16
21	Guidelines for preparation of Thesis	19
22	Different forms	35 to 69

NB: Any further changes as suggested may be updated from time to time with the approval ofthe competent authority.

Minimum standards and procedure for award of Ph.D. Degrees Regulation-2019

1. Definitions and Nomenclature

In the Regulations, unless the context otherwise requires,

(i) These Regulations may be called Gandhi Institute of Engineering and Technology University (GIETU) Ph.D. Degree Regulations-2019 along with (Amendment) Regulations -2020" for award of the Degree of Doctor of Philosophy (Ph. D). They shall apply to every candidate applying for admission, registration, conduct andconferment of degree of Ph.D of this University.

(ii) "Programme" means Doctoral Programme leading to the award of Ph.D. in Engineering andTechnology / Management / Science and Humanities both Full Time and Part Time modes.

(iii) "Scholar" means any candidate admitted by the University either under Full Time mode or PartTime mode for pursuing Doctoral Programme for the award of Ph.D. degree of the University.

(iv) Central Research Monitoring Committee (CRMC) means a committee constituted by theGIETU to monitor the Research activities of the University.

"Research Advisory Committee" (RAC) means a Committee constituted by GIETU to monitorthe Research Programme of the department.

"Doctoral Research Committee" (DRC) means a Committee constituted by GIETU for eachscholar to monitor the progress of his/her Research work.

(v) "Supervisor" means any faculty member of GIETU who has been recognized by GIETU tosupervise the research scholars as per UGC norms.

(vi) "Course" means a theory subject/ a practical subject of PG programmes / a directed study prescribed by the Doctoral Committee for the scholar to undergo as a part of the Ph.D. Programme.

2. CATEGORIES OF Ph.D. CANDIDATES

There shall be two categories of Ph.D. candidates

(i) Full Time candidates: All candidates who pursue full time research in GIETU shall belong to this category.

(ii) Part Time candidates: All candidates working in Industrial units, Colleges, Universities, Government departments, Research organizations or other Institutions, sponsored for pursuing Ph.D. Programmes in GIETU while continuing to serve in their respective Institutions/ organizations which are recognized as the Research Centers of GIETU shall belong to this category. They shall pursue research in their place of employment and /or in this GIETU.

3. Eligibility criteria for admission to the Ph.D. programme:

Subject to the conditions stipulated in these Regulations, the following persons are eligible to seek admission to the Ph.D. programme:

3.1. Master's Degree holders satisfying with at least 60% marks in aggregate in engineering streams and with at least 55% marks in aggregate in Science & Humanities or its equivalent grade 'B' in the UGC-7 point scale (or an equivalent grade in a point scale wherever grading system followed) or an equivalent degree from a foreign educational Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under law in its home country or any other statutory in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions

❖ Inserted by (Amendment) Regulation 2021

The eligibility criteria for admission in to the Ph.D. Programme (Full time/ Part time) in following branches under different Schools are given below.

Sl. No.	School	Branch	Eligibility for admission in to the Ph.D. Programme.
1	SOET	CSE	60% Marks in M.Tech (CSE/IT/ECE/E&I) or equivalent as per UGC norms.
		CHEMICAL	60% Marks in M.Tech (CHEMICAL / ENVIRONMENTAL SCIENCE Engineering) or equivalent as per UGC norms.
		CIVIL	60% Marks in M.Tech (CIVIL /ENVIRONMENTAL SCIENCE Engineering) or equivalent as per UGCnorms.
		ECE	60% Marks in M.Tech (ECE/E&I) or equivalent as per UGC norms.
		EEE/EE	60% Marks in M.Tech (EEE/ EE/ Energy Engineering Branch) or equivalent as per UGC norms.
		MECHANICAL	60% Marks in M.Tech (Mechanical / Thermal /Machine Design Production/Automobile/ Industrial Engineering Branch) or equivalent as per UGC norms.
		BIO-TECH	60% Marks in M.Tech (Bio-Tech / Industrial Bio-Technology Branch) or equivalent as per UGC norms.
2	SMS	MANAGEMENT	55% Marks in MBA / M.Com /PG Degree in Business Management/ PG. Degree in Hospitality Management/ PG. Degree in Hotel Management/ M.A. (IRPM/ IRLW / PMIR) or equivalent as per UGC norms.
3	SOS	CSA	55% Marks in MCA/M.Sc.(Computer Science/ IT) or equivalent as per UGC norms.
		PHYSICS	55% Marks in M.Sc.(Physics) or equivalent as per UGC norms.
		CHEMISTRY	55% Marks in M.Sc.(Chemistry) or equivalent as per UGC norms.

		MATHEMATICS	55% Marks in M.Sc.(Mathematics) or equivalent as per UGC norms.
		BOTANY	55% Marks in M.Sc.(Botany /Life Science-PlantScience) or equivalent as per UGC norms.
		ZOOLOGY	55% Marks in M.Sc.(Zoology/Life Science-Animal Science) or equivalent as per UGC norms.
		BIO-TECH	55% Marks in M.Sc.(Bio-Tech) or equivalent as per UGC norms.
4	SOHSS	ENGLISH	55% Marks in M.A.(English) or equivalent as per UGC norms.
		ECONOMICS	55% Marks in M.A.(Economics) or equivalent as per UGC norms.

3.2. A relaxation of 5% marks from 60% to 55% or 55% to 50%, (Whichever is applicable) or an equivalent relaxation of grade, may be allowed for those belonging to SC/ST/OBC (non-creamy layer)/differently –abled and other categories of candidates as per the decision of the Commission from time to time.

3.3. Candidates who have cleared M. Phil Course work with at least 55% marks in aggregate or its equivalent grade "B" in the UGC-7 point scale (or an equivalent grade in a point scale wherever grading system is followed) and successfully completing the M.Phil. Degree shall be eligible to proceed to do research work. However, they have to complete course work for the Ph.D. Programme mandatorily.

3.4. Reservation policy of the State Govt. will be followed for admission in to the Ph.D. Programme.

4. DURATION OF THE PROGRAMME

The duration of the programme and the time for submission of thesis are counted from the date of provisional admission.

4.1 Ph.D. programme shall be for a minimum duration of three (3) years, including course work and a maximum of six (6) years.

4.2 Part Time: Part time Ph.D. programme is allowed provided all the conditions mentioned in the extant Ph.D. regulations are met.

4.3 A maximum of an additional two years can be given through a process of Re-Registration duly recommended by the DRC, provided that the total period of completion for a Ph.D. Programme should not exceed Eight (8) Years from the date of admission in the Ph.D. Programme.

(i) For those candidates who want to re-register under the same supervisor on the same area of research, the earlier Doctoral Committee and the course works completed will hold good.

(ii) For those candidates who want to re-register with a different supervisor on a different area of research will be subjected to the regulations applicable for the fresh candidates.

(iii) If the area of research is the same, the new Doctoral Committee will decide whether the earlier course works completed can be considered for exemption or not.

4.4 The women candidates and Persons with disability (more than 40% disability) may be allowed arelaxation of two years for Ph.D. in the maximum duration. In addition, the women candidates may be provided Maternity Leave/Child Care Leave once in the entire duration of Ph.D. up to 240 days.

5. ADMISSION PROCEDURE

(i) The number of available seats in the various specializations under different disciplines will be determined well in advance depending on the number of available Research Supervisors and other academic and physical facilities available, keeping in mind the norms regarding the scholar- supervisor ratio (as indicated in Para 6.0 (iii), laboratory, library and such other facilities and will be notified in website and through advertisement.

(ii) The candidates desirous of pursuing Ph.D. degree shall submit the application in the prescribed form through proper channel wherever applicable, as per the Notifications of the University. The application form and the necessary details are available in GIETU website.

(iii) The applications received will be sent to the respective schools who will forward the same to theChairpersons of the Research Advisory Committee (RAC) of the departments. The RAC will consist of all the recognized supervisors in the department and a recognized supervisor from another department of the GIETU nominated by RAC. If the Head of the department is a recognized supervisor, he/she will be the Chairperson. If not, he/she will nominate one of the recognized supervisors in the department as the Chairperson of RAC. In Schools, the Dean of the School will be the Chairperson. The RAC shall screen the applications for conduct of the Entrance Test by Central Examination cell.

(iv) The Entrance test need not be conducted for those students who qualify UGC-NET (including JRF)/UGC-CSIR NET (including JRF)/SLET/GATE/teacher fellowship holder.

(v) The GIETU shall admit candidates by a two stage process through:

i. An Entrance Test shall be qualifying with qualifying marks as 50%. The syllabus of the Entrance Test shall consist of 70% subject specific and 30% of Probability-Statistics & English Communication. The Entrance Test shall be conducted at the Centre(s) notified in advance. This is scaled down to 70% of marks as per requirement of regulations.

ii. An interview/viva-voce to be organized by the RAC for 30% of marks, where the candidates are required to discuss their research interest/area through a presentation before the Research Advisory Committee. The interview/viva voce shall also consider the following aspects, viz. whether:

- The candidate possesses the competence for the proposed research.
- The research work can be suitably undertaken at the Institution / College / University.
- The proposed area of research can contribute to new/additional knowledge.

(vi) The allocation of Research Supervisor for a selected research scholar shall be decided by the RAC concerned depending on the number of scholars per Research Supervisor, the available specialization among the Supervisors and research interests of the scholars as indicated by them at the time of interview/viva voce.

(vii) The respective RAC will forward the list of selected candidates along with the applications of all the candidates to seek the approval of the Registrar / Vice-Chancellor for the provisional admission of the selected candidates.

(viii) The date of issue of the proceedings shall be considered as the date of admission into the Ph.D. programme.

(ix) The Candidates, whose admission has been approved by the Registrar/ Vice Chancellor shall be provisionally admitted to the Ph.D. Programme with intimation to the concerned HOD, supervisor, the candidate, and the sponsoring institution, if any.

(x) The date of provisional registration shall be as per recommendations of DRC of each Scholar.

(xi) GIETU shall maintain the list of all the Ph.D. registered students on its website on year-wise basis. The list shall include the name of the registered candidate, topic of his/her research, and name of his /her Supervisor/Co-Supervisor, date of enrollment and all such data as per requirement of regulatory bodies.

NOTE: Mere submission of an application and appearance in the Ph.D. entrance examination, the candidate has no right to claim for the admission into Ph.D. courses. The authorities have all rights to allocate seats basing on the availability of supervisors in the respective departments.

6. ALLOCATION OF RESEARCH SUPERVISOR:

Recognition of Supervisors:

(i) Any regular professor of the University with at least five research publications in refereed journal and any regular Associate/Assistant Professor of the University with a Ph.D. degree and at least two research publications in refereed journals may be recognized as Research Supervisor, Provided that in areas/disciplines where there is no or only a limited number of indexed journals, GIETU may relax the above condition for recognition of a faculty as Research Supervisor with reasons recorded in writing. The minimum impact factor (IF) requirements maybe somewhat relaxed by the Vice Chancellor for humanities, social sciences, and other areas where a rich research culture has not yet been established.

(ii) Only a full time regular teacher of the GIETU can act as a supervisor. The external supervisors are not allowed. However, Co-Supervisor can be allowed in inter-disciplinary areas from other departments of the same university or from other related institutions/Universities /Research laboratories with the approval of the Research Advisory Committee and NOC from the parent serving organization. In case of nationally important institutions, self-declaration shall be submitted.

(iii) A Research Supervisor/Co-supervisor who is a Professor, at any given point of time, cannot guide more than Eight (8) Ph.D. scholars. An Associate Professor as Research Supervisor can guide up to a maximum of six (6) Ph.D. scholars and an Assistant Professor as Research Supervisor can guide up to a maximum of four (4) Ph.D. scholars.

(iv) In case of relocation of a Ph.D. woman scholar due to marriage or otherwise, the research data shall be allowed to be transferred to GIETU to which the scholar intends to relocate provided allthe other conditions in these regulations are followed in letter and spirit and the research work does not pertain to the project secured by the parent institution/ supervisor from any funding agency. The scholar will however give due credit to the parent Supervisor and the institution for the part of research already done.

7. SUPERVISORS:

(i) All Ph.D. candidates are required to work under the guidance of a recognized Supervisor from GIETU.

(ii) The part time candidates may be required to have, in addition to a Research Supervisor from GIETU, a recognized Co- supervisor from the other institutions /organization/ Research laboratories / other departments of the

same University, who is responsible to provide all necessary resources and help to complete the research work in a time bound manner.

(iii) When a supervisor of a candidate happens to be away from GIETU on any leave for more than 6 months, he/she may continue to guide the candidate, but a supervisor belonging to the same department shall be officially nominated as a Co-supervisor by the DRC of the department and forwarded through proper channel to the Vice Chancellor for approval.

(iv) If the supervisor leaves GIETU, he/she may be permitted to continue as a Co-supervisor for his/her students depending upon the availability of the individual, subject to the approval of the Vice Chancellor. A new supervisor belonging to the same department, officially nominated by the RAC of the department will be appointed as the Supervisor after obtaining necessary approval from the Vice Chancellor.

8. Doctoral Research Committee (DRC) and its functions:

8.1. Composition of DRC-

There shall be a Doctoral Research Committee (DRC), or an equivalent body for similar purpose as defined in the Statutes/Ordinances, for each Ph.D. scholar. The DRC shall be constituted consisting of the following members-

1	HOD of the department concerned	:	Chairman, DRC (Where HOD himself is a supervisor, the next senior faculty member will be the Chairman, DRC)
2	Supervisor of the Scholar	:	Convener
3	Co-Supervisor of the Scholar	:	Member
4	Doctorate faculties of the department in the relevant areas	:	Member
5	One outside experts/ experts from inter-disciplinary areas from other departments of the University, known to be working in the domain specific areas of the scholars	:	Member

Responsibilities of the DRC:

The committee shall have the following responsibilities:

1. To conduct a synopsis seminar of the candidate and examine the suitability of the candidate forregistration.
2. To decide on the coursework of the candidate.
3. To finalize the topic of the research and to recommend for confirmation of the registration of thecandidate.
4. To review the quarterly progress report (online presentation) made by each scholar in connection with the progress of his / her research work.
5. To hold periodic meetings quarterly on virtual mode and physically once in every six months at the University from the date of registration to review the progress of the work of the scholar/candidate for evaluation and further guidance (The Physical presence of the scholar in every six months' progress review meeting is a must as scheduled by the respective department.)
6. To hold the pre-submission seminar of the Doctoral candidate and recommend for the submission of the Ph.D. Thesis.
7. To report cases of neglect of the research work and indiscipline that includes unethical practices such as plagiarism and misrepresentation of the data to the University administration for disciplinary action.
8. To fix the date of Viva-Voce examination in consultation with the Controller of Examinations.
9. To conduct the Viva-Voce examination and make appropriate recommendation to the CRMC.

8.2. Research Advisory Committee:-

There shall be a Research Advisory Committee in each department to monitor the researchactivities of the department.

Composition:

The Research Advisory Committee shall be constituted, consisting of the following Members:

1	HOD of the concerned department	:	Chairman
2	All faculties of the department having doctoral degree	:	Member
3	Outside experts /experts from other departments	:	Member

Functions:

1. To allot the DRC for each scholar.
2. To allot supervisor to each scholar based on the topic of his Research.
3. To recommend for the allotment of Co-Supervisor.

8.3. Central Research Monitoring Committee (CRMC)

There shall be a central Research Monitoring Committee (CRMC) to monitor the Research activities in the University. All academic matters relating to the Ph.D. Programme will be supervised by the CRMC.

Composition of CRMC:

The central Research Monitoring Committee shall be consisting of the following members:

1	Vice Chancellor	-	Chairman
2	Registrar	-	Convener
3	Dean (Academics)	-	Member
4	Dean (R&D)	-	Member
5	Dean (SMS)	-	Member
6	Dean (Agriculture)	-	Member
7	Head, P.G dept. (SOS)	-	Member
8	HOD/Chairman. DRC, (CSE)	-	Member
9	HOD/Chairman DRC,ECE	-	Member
10	HOD/Chairman, DRC, EEE	-	Member
11	HOD/Chairman, DRC,(Mechanical)	-	Member
12	HOD/Chairman, DRC,(Civil)	-	Member
13	HOD/Chairman, DRC,(Chemical)	-	Member
14	HOD/Chairman, DRC,(Bio-Tech)	-	Member
15	HOD/Chairman, DRC,(SOH)	-	Member

The quorum of the CRMC shall be seven members including Vice-Chancellor & Registrar.

Functions of CRMC:

a) To approve the proposal submitted by the HOD for allotment of Supervisor.
b) To approve the composition of DRC for each Doctoral Candidate.
c) To approve the registration of the candidate.
d) To review the progress of the Ph.D. programme based, on the progress report (quarterly & Half yearly) submitted by the DRC in respect of each Doctoral candidate.
e) To approve the submission of a Ph.D. dissertation and list of examiners for a Doctoralcandidate.
f) To interpret the report of the Examiners for considering the award of Ph.D. degree.
g) To deal with the complaints submitted by the Doctoral candidate(s) / Supervisor(s) / DRC member(s).
h) To conduct at least 2 (two) meetings in a academic year.

9. COURSE WORK:

The course work shall be treated as prerequisite for Ph.D. preparation. The Credit Requirements, number, duration, syllabus, minimum standards for completion, etc., are as follows:

(i) The research scholars should successfully complete a minimum of five courses (For a minimum of 14 credits) prescribed by the DRC and approved by the concerned Boards of Studies.

SEMESTER - I			
Sl. No	Course Code	Course Title	Credits
1	XXXXXX	Research Methodology	4
2	XXXXXX	Research Domain Specific Course-I	3
3	XXXXXX	Research & Publication Ethics	2
		Total Credits	**9**
SEMESTER - II			
1	XXXXXX	Research Domain Specific Course-II	3
2	XXXXXX	Seminar and Technical Presentation-II	2
		Total Credits	**5**

❖ Every candidate shall also be required to successfully complete Research and Publications Ethics (RPE) course (2 credits) as per UGC for awareness about publications Ethics and Publication misconducts during per-registration course work..

(ii) A minimum of four credits shall be assigned to one or more courses on Research Methodology (with a minimum of four credits) which could cover areas such as quantitative methods, computer applications, research ethics and review of published research in the relevant field, training, field work, etc.

❖Inserted by (Amendment) Regulation-2020

(iii) The other courses may be special courses decided by the Doctoral Committee relating to the area of research of the candidate.

(iv) For each of the courses, the maximum internal marks awarded is 30 marks. All the candidates have to appear for a Semester End Examination in each subject conducted by the Controller of examinations for 70 marks. The overall passing minimum is 55 marks.

(v) Ph.D. scholar has to obtain a minimum of 55% of marks or its equivalent grade in the UGC 7- point scale (or an equivalent grade/CGPA in a point scale wherever grading system is followed) in the course work in order to be eligible to continue in the programme and submit the thesis. A scholar who gets less than C grade in a course work, he/she has to redo that course.

Grading System

GRADE		**SCORE ON 100% POINTS**	**GRADE POINT**
O	Outstanding	91 and above	10
E	Excellent	81 to 90	9
A	Very good	71 to 80	8
B	Good	61 to 70	7
C	Pass	55 to 60	6
F(Fail) - Failure due to insufficientmarks in the course	Fail	<55	0
Ab. (Failure due to non-appearance in the examination)	Absent	-------	0

*Inserted by (Amendment) Regulation-2022

(vi) The Prescribed course work shall normally be completed within Two (2) years from the date of provisional enrollment in to the Ph.D. Programme (for both

full time and Part time scholar), otherwise the candidate's provisional enrollment / registration will be terminated. However, a further six (6) months may be extended if the DRC feels that the candidate can achieve the required standard in this additional time and recommends for such extension. This will be effective from the 2020-21 (Summer) batch admitted Ph.D. Scholars.

10. REGISTRATION

(i) ❖After successful completion of the course work, a candidate shall submit a synopsis of the proposed research work to the DRC concerned through his/her supervisor within one year from the date of declaration of the result of the Pre-Registration Course Work. The candidate needs to give a presentation of the synopsis before the DRC.

(ii) ❖The committee shall scrutinize the research proposal of the candidate and suggest for modifications, if any. The DRC shall also recommend the proposals for consideration of their registration.

(iii) ❖The Chairperson, DRC shall forward the applications of the candidates for Ph.D. Registration along with its recommendations to the Dean (Academics).

(iv) ❖The proposals for registration should contain the following documents:

a) Duly filled in and duly forwarded Application Forms.
b) Recommendation of the DRC with proposed date of effect.

(v) ❖The candidates from other Universities/Institutes must submit (TC & Migration) within one year from the date admission.

(vi) ❖Request for issue of **PROVISIONAL Ph.D. REGISTRATION ORDER** be made on successful completion of allocated Ph.D. course work and subsequent acceptance of presented Research Proposal and recommendations by DRC.

(vii) ❖The Chairman DRC shall evolve a mechanism using well developed software to detect plagiarism and other forms of academic dishonesty.

(viii) ❖An external expert is to be invited in the respective domain by the Head of the Department / Chairman, DRC for Registration seminar and Approval of Topic as DRC member of respective scholar.

❖ All Research scholars whose registration for research degree is in force, are required to report in-person to the Supervisor in each semester on the stipulated date till their submission of thesis, in the prescribed registration form after depositing registration fees and the same shall be forwarded to the COE through the Heads of the Department/Chairman, DRC.

❖**Inserted in 10.0 (I to viii) by (Amendment) Regulation-2020**

11. CANCELLATION OF REGISTRATION

(i) The registration of a research scholar whose progress is not satisfactory or who has not reportedin person to the supervisor for any one semester is liable to be cancelled.

(ii) The registration of a research scholar who has not submitted his/her thesis by the end of theprescribed /extended period as provided in the Regulations will be cancelled.

12. THESIS SUBMISSION

The Thesis shall report, in an organized and scholarly fashion, an account of the original research work of the candidate leading to the discovery of new facts or techniques or correlationof facts already known (analytical, experimental etc.) and demonstrating a quality as to make a definite contribution to the advancement of knowledge and the candidate's ability to undertake independent research and present the findings in an appropriate manner with actual accomplishments of the work, plainly stated and honestly appraised.

13. THE REQUIREMENT FOR SUBMISSION OF THESIS

13.1 Criterion for submission of Thesis

The criterion for submission of thesis is as follows:

i. The scholar should have passed the Pre-Ph.D. / course work examinations.

ii. The scholar should have completed quarterly and half yearly reviews with satisfactory results.

iii. He / She should have presented in one international conferences/ seminars with indexed in Scopus.

iv. The scholar should have published at least two research papers after the date of registration for Ph.D. in refereed journals mentioned in the **UGC CARE LIST** (like Scopus/SCI/ACM/IEEE/ASME/Web of Science etc,) related to his or her Ph.D. work and should be approved in respective DRC.

v. The scholar can submit his/her Ph.D. Thesis after completion of three years (including course work) from the date of enrollment on presentation of pre-submission seminar and recommendation of the DRC. In exceptional cases, the Vice-Chancellor on the recommendation of the DRC and Registrar may permit submission of Thesis six months earlier on production of quality publication in refereed/peer reviewed journals and patent grants.

13.2 PRE-SUBMISSION SEMINARS

a) A scholar who has fulfilled the above criterion (mentioned in 13.1) can apply for the Pre- submission seminar to Controller of Examinations.

b) Not less than three months before the submission of the thesis. Every candidate shall submit to the University, through the supervisor and Chairman, DRC, ten copies of the synopsis of the Thesis, together with the title of the thesis along with a soft copy of the synopsis and prescribed examination fees of Rs-60,000/- (Rupees Sixty thousand only). The candidate shall prepare the synopsis carefully in consultation with the supervisor. The synopsis should bring out in abridgedform, the aims for conducting research, work done, results and findings. The candidate shall make a presentation of the synopsis at a seminar in the Department before submission of the synopsis.

c) The synopsis of the Thesis shall not be less than ten pages or exceed fifteen pages, typed on A4 size paper with one and half space. The university shall prescribe a format for the synopsis from time to time. The candidate shall also submit the soft (only read format) and hard version of the synopsis.

d) The Controller of Examinations will forward the application to chairman DRC, to convene a Pre-Submission seminar in the department.

e) The Chairman, DRC will issue a circular regarding the conduct of the Pre-submission seminar and will organize the Pre-submission seminar (Open House). The scholar should present the draft thesis, during Pre-submission seminar.

f) The DRC shall forward the review recommendation of the Pre-submission seminar to the Controller of Examinations.

13.3 PLAGIARISM CHECK

After getting the clearance from the DRC on Pre-submission seminar, the scholar is permittedfor plagiarism check.

a) The scholar has to submit the soft copy of the thesis, for Plagiarism check to the Ph.D. section within three months.

b) The Prof. I/C of Central Library shall issue a Plagiarism report on the originality of thesubmitted work, stating that the similarity index is in accordance with UGC norms.

13.4 SUBMISSION OF THESIS

After obtaining successful plagiarism report on the originality of the Ph.D. thesis, from the Prof. I/C of the Library, the scholar is permitted for submission of the thesis, as per the following:

a) While submitting for evaluation, the thesis shall have an undertaking from the research scholar and a certificate from the Research Supervisor and Co-Supervisor (if any) attesting to the originality of the work, vouching that there is no plagiarism and that the work has not been submitted for the award of any other degree/diploma of the same institution, where the work was carried out, or to any other Institution.

b) The scholar must submit no due certificate in a prescribed format.

c) The scholar should deposit Rs 60,000/- towards the fees for Thesis evaluation in addition to normal course fees before submission of his/her Ph.D. Thesis.

d) The scholar should submit six hard copies of the Thesis, one soft copy of the Thesis and synopsis, within 30 days of plagiarism report to the Controller of Examination. The thesis contents submitted must be the same with the contents of the softcopy submitted for plagiarism check.

e) The supervisor should submit the panel of Examiners/Adjudicators of the thesis, duly signed by him/her, in a sealed cover to the Controller of Examinations.

f) The thesis should be submitted to the university for Evaluation not later than three months after the submission of the synopsis, through the supervisor and chairman, DRC/HOD along with his/ser application for the Ph.D. degree.

g) If the candidate fails to submit the thesis within three months from the date of submission of synopsis, maximum of two extensions of three months may be given with approval from the Registrar & Vice-Chancellor, after which the process gets cancelled, then he/she shall submit the synopsis again based on the recommendations of the Doctoral Research Committee. The supervisor, with the approval of the Doctoral Research Committee shall submit a fresh panel of examiners.

h) The Similarity Test of the thesis shall be done on a single file without contents, References andAppendices.

14. PANEL OF ADJUDICATORS

14.1. Panel of Examiners/Adjudicators of the Thesis

The panel of examiners/adjudicators has to be submitted by the research supervisor in a sealed cover to the Controller of Examinations. The research supervisor should submit a panel of Ten examiners (at the rank of Professors/ Associate Professors) who are well versed with area of the research, from the institute of Eminence and importance, like IIT/ IISc / NIT / IIIT / Central Universities / National Research Labs / State Govt. Universities along with the present designation, area of specialization, cell number and email id, complete postal address, in a sealed cover. Out on Ten adjudicators, a maximum of three (3) can be within the state of Odisha and rest Seven (7) from others states (outside the state of Odisha.) The thesis will be referred to two examiners appointed by the Vice-Chancellor on the recommendations of the Registrar.

14.2. Ph.D. Thesis Evaluation

a) Two independent examiners/ adjudicators shall be appointed by the Vice-Chancellor for the evaluation/adjudication of the thesis on recommendation of the Registrar.

b) The Controller of Examinations will communicate with the examiner, along with a copy of the synopsis of the thesis and seek his/her willingness to adjudicate it. After obtaining the examiner's consent, a soft/hard copy of the thesis will be sent with a request to submit his/her report in a prescribed format. The format consists of two parts.

Part-1: A detailed evaluation report.

Part-2: A Final Recommendation: As a final recommendation, the examiner has to state inclear/unequivocal terms, his/her opinion in one of the following way:

i. The thesis can be accepted for the award of Ph.D. degree in its present form (Commended / Highly Commended)

ii. The thesis is accepted, subject to revision / corrections suggested and be verified by the supervisor.

iii. The thesis is to be revised /resubmitted for re-evaluation by the same examiner.

iv. The thesis is rejected.

v. The examiner shall enclose a report of 200 to 300 words, indicating the standard attained in case(i), the nature of revision/ corrections in case (ii) & case(iii) and reason for rejection in case of (iv)

c) In the event of an examiners report not received even after three months from the date of submission, the thesis may be referred to a third examiner from the same panel for Adjudication after getting approval from Vice Chancellor on the recommendation of the Registrar.

d) The Controller of Examinations after receiving the two reports from adjudicators, will take necessary action as per the following guidelines:

i. If the reports of all the two examiners are favorable (i.e., accepting the thesis as it is), the candidate is permitted to take the Ph.D. Viva-Voce examination.

ii. If anyone / two of the examiners suggests a revision, the thesis shall be revised accordingly by the Scholar and resubmitted for approval to the same examiner(s)

iii. If two examiners reject the thesis, it will be rejected for the award of a Ph.D. degree and the candidate's registration shall stand cancelled.

iv. If one of the examiners rejects the thesis, the thesis shall be sent to another examiner from the existing panel of examiners approved by the Vice-Chancellor on the recommendation of the Registrar. If this examiner also rejects the thesis, the thesis is deemed to be rejected, and registration of the candidate shall stand cancelled.

e) Minor corrections suggested by the examiner (s) shall be intimated to the research supervisor of the candidate by the Controller of Examinations before the conduct of the Ph.D. Viva-Voce examination. These corrections must be carried out by the scholar with the approval ofsupervisor and two hard copies and two soft copies of the thesis to be submitted to the Controller of Examinations & Ph.D. Section.

15.0 Ph.D. Viva-Voce Examination

15.1. The Ph.D. Viva-Voce of the candidate is conducted only after all the two examiners recommend the award of Ph.D., degree. The Controller of Examinations will issue appointment orders to the External Examiner and Internal Examiners on the approval of the Vice-Chancellor, ensuring all correspondence strictly confidential. The Chairman, DRC/Head of the department should conduct the Ph.D. Viva-Voce examination in the department.

15.2. The Ph.D. Viva-Voce examination is open to all PG students, research scholars' and faculty of the University (Open Defense type). The Chairman, DRC /Head of the department should send a circular to all the departments to display on the notice boards the date and time of the Viva- Voce examination

15.3. The reports of the external adjudicators shall be made available to the supervisor before the Viva- Voce examination.

The Board of examiners of Ph.D. Viva-Voce comprises the following members:

(i) Chairmen, DRC – Chairperson
(ii) Convener of RAC – Convener
(iii) One of the Adjudicators, who has adjudicated the thesis, appointed by the VC, as a member
(iv) Supervisor – Member
(v) Co-supervisor – Member
(vi) Any Other- (As Nominated-Member by the Vice-Chancellor / Registrar)

15.4 The Viva-Voce is primarily designed to test the scholar's depth of knowledge on the subject matter of the thesis, including methodology adopted and the scholar's competence in defending his/her thesis to explain the observations made in the field of study.

15.5 The scholar has to address the clarifications sought by the external adjudicators through their reports during Ph.D. viva-voce.

15.6 The Chairperson, DRC after consulting the Board of examiners of Viva-Voce declares: (a) the scholar has successfully completed the Ph.D. Viva-Voce and may be awarded the Ph.D. Degree; OR (b) The scholar is asked to take the Viva-Voce examination a second time giving reasons thereof. In such case, the scholar has to pay again Rs- 50,000/- towards expenses for re-Viva- Voce Examination. The same examiners shall conduct the second Viva-Voce examination, not earlier than one month but not later than six months of the date of the first Viva-Voce examination. The Dean Academics shall participate in the second Viva-Voce examination, and record his/her observations and send it to the Vice-Chancellor through the Registrar.

16. DECLARATION OF THE Ph.D. RESULT & AWARD OF Ph.D. DEGREE

16.1. After completion of the Ph.D. Viva-Voce examination, the reports of the thesis examiners and the report of the Viva-Voce Board of examiners shall be immediately sent to the Controller of Examinations.

16.2 The scholar should submit two hardbound copies of the thesis and two soft copies of the thesis to the Controller of Examinations & Ph.D. Section.

16.3. Upon successful completion of Viva-Voce, the Vice-Chancellor may approve the notification of the award of the provisional Ph.D. degree to the Scholar. The award of the degree will be recommended by Academic Council and approved by the Board of Management (BOM).

17. A press note will be issued from the university declaring the award of the thesis.

18. Following the successful completion of the evaluation process and announcement of the award of Ph.D., the University shall submit a soft copy of the Ph.D. thesis to the UGC within a period of 30 days, for hoisting the same through the repository called "Shodhaganga" maintained in INFLIBNET accessible to all Institutions /Universities / Research students / Supervisors. Another soft copy is to be sent for hoisting the thesis in the AIU Website.

19. CHANGE OF REGULATIONS:

The Academic council may revise, amend or change the regulations from time to time with theapproval of the Vice-Chancellor.

Dean(Academics)

Dean (Academic)
G.I.E.T. University, Gunupur

Registrar

REGISTRAR
GIET UNIVERSITY, GUNUPUR

1. GENERAL:

GUIDELINES FOR PREPARATION OF Ph.D. SYNOPSIS

(Prescribed Format and Specification)

The synopsis is to be considered as a detailed summary of the work with important results highlighting the original contributions in the thesis to be submitted. It should give an outline of the thesis. The review of earlier work is to be minimized with just enough to highlight the contributions in the research work to be reported in the thesis. It is expected that at the time of submission of the synopsis no work is yet to be completed except writing the thesis and all other academic requirements such as course work, comprehensive examinations and the suggestions and directions given by members of the Doctoral Committee have been fulfilled.

2. NUMBER OF COPIES TO BE SUBMITTED:

Ten hard copies and one soft copy (pdf file) in a properly labeled Pen drive/ and CD are to be submitted to the University.

3. SIZE OF SYNOPSIS:

The size of synopsis should be 10-15 pages of 1 ½ spacing on A4 size good quality white paper preferably not lower than 80 gsm.

4. LAY OUT OF SYNOPSIS:

i. Cover Page & Title page
ii. Declaration
iii. Table of Contents
iv. Body of the Synopsis
   - Motivation and Problem statement
   - Brief survey of earlier work
   - Overview of the thesis
   - Major contributions (if required with results/ graphs/photographs)
   - Conclusions

v. List of References (pointed references only in the body)
vi. List of Publications (from the Ph.D work)

5. TYPING INSTRUCTIONS:

- The synopsis should have the following page margins

Top edge	:	25 to 30 mm
Bottom edge	:	25 to 30 mm
Left side	:	35 to 40 mm
Right side	:	20 to 25 mm

- Tables and figures should conform to the margin specifications. Large size figures should be photographically or otherwise reduced to the appropriate size before insertion.
- The general text shall be typed in Font Style "Times New Roman" and Font Size is 12.
- The page numbering for all items from 1 to 3 should be done using lower case Roman numerals and the pages thereafter should be numbered using Arabic numerals.
- General formatting can be similar to that of the thesis.
- However, figures and equations are to number using running numbers. References can be numbered as 1, 2, 3 etc., in the order in which they are referred to in the body of the synopsis. Only those, which are cited in the synopsis, only need be given in the list of references.
- Cover Page & Title Page: A specimen copy of the Cover page & Title page for synopsis is given in Annexure A.
- Declaration: A specimen copy of the Declaration is given in Annexure B.
- Table of Contents: The table of contents should list all material following it (divisions and subdivisions of body of the synopsis) and the formatting is similar to that of the thesis (see format for Ph. D thesis)

5. Binding Specifications:

Each of the 10 copies of the synopsis should be sewn and bound using flexible cover of thick white art paper. The cover should be printed in black letters and the text for printing should be identical to what has been prescribed for the title page.

6. Submission of Synopsis:

- Ten soft bound copies of the synopsis are to be submitted along with a soft copy of the synopsis (pdf file) on a (Pen drive/ CD) with proper labeling.
- The candidate has to submit the Thesis within six months from the date of submission of the synopsis.

ANNEXURE -A

A typical Specimen of Cover Page and Title Page

<Font Style Times New Roman>

VIBRATION AND THERMAL ANALYSIS OF 6/4 POLESWITCHEDRELUCTANCE MOTOR

<Font Size 18> <1.5 line spacing>

SYNOPSIS OF THE THESIS

<Font Size 14>

Submitted by

<Font Size 14> <Italic>

ABCD

Registration No:-

<Font Size 16>

Under the Supervision ofName of Supervisor Designation

GIET University, Gunupur (Odisha)AND

Name of the Co-SupervisorDesignation

Name of the Institution

in partial fulfillment of the requirements for the degree of

<Font Size 14> <Italic> <1.5 line spacing>

DOCTOR OF PHILOSOPHY

<Font Size 16>

DEPARTMENT OF ELECTRICAL ENGINEERINGGIET UNIVERSITY

GUNUPUR 765022

<Font Size 16>

<1.5 line spacing>

DECEMBER 2022

<Font Size 14>

GUIDELINES FOR THE PREPARATION OF THESIS

The scholars are expected to read carefully the Guidelines given in the sequel and meticulously follow them in the preparation of the Thesis. Non-compliance with any of these instructions may lead to the rejection of the Thesis submitted.

1 GENERAL

The manual is intended to provide broad guidelines to the research scholars in the preparation of the Thesis. In general, the Thesis shall report, in an organized and scholarly fashion, an account of original research work of the research scholar leading to the discovery of new facts or techniques or correlation of facts already known (analytical, experimental, hardware oriented, etc.). Thesis shall demonstrate a quality as to make a definite contribution to the advancement of knowledge and the research scholar's ability to undertake sustained research and present the findings in an appropriate manner with actual accomplishments of the work.

2. SIZE OF THESIS

The size of the Thesis shall be normally between 100 and 400 pages of typed matter reckoned from the first page of Chapter 1 to the last page of the thesis excluding reference section.

3. ARRANGEMENT OF THE CONTENTS OF THE THESIS

The sequence in which the Thesis material should be arranged and bound is as follows:

i. Cover Page and Title page (as shown in **Annexure- I & II**)
ii. Bonafide Certificate (as shown in **Annexure III**)
iii. Acknowledgement (one page only)
iv. Table of Contents (as shown in **Annexure IV**)
v. List of Tables
vi. List of Figures
vii. List of Symbols and Abbreviations (as shown in **Annexure V**)
viii. Abstract
ix. Chapters
x. Appendices
xi. References (Alphabetical order)
xii. List of Publications
xiii. Certificate (**Annexure-VI**)
xiv. Copyright Transfer Certificate (**Annexure-VII**)

The Tables and Figures should be included subsequently after referring them in the text ofthe Thesis.

The thesis from Chapters should be printed on both sides.

a. PAGE DIMENSIONS AND MARGIN

Standard A4 Size (297 mm x 210 mm) bond paper may be used for

preparing the copies. The dimensions of the final bound Thesis (6 copies) report should be 290 mm x 205 mm.

The final Thesis (at the time of submission) should have the following page margins:

Top edge :	30 mm
Bottom edge:	25 mm
Left side :	30 mm
Right side :	30 mm

The Thesis should be prepared on good quality white paper preferably not lower than 80GSM. Tables and Figures should conform to the margin specifications. Large size Figures should be photographically or otherwise reduced to the appropriate size before insertion.

b. MANUSCRIPT PREPARATION

In the preparation of the manuscript, care should be taken to ensure that all textual matter is typewritten to the extent possible in the same format as may be required for the final Thesis. Hence some of the information required for the final typing of the Thesis is also included in thissection.

The headings of all items from 2 to 12 listed in section 3 should be typed in capital letters without punctuation and centered 50 mm below the top of the page. The text should commence 4 spaces below this heading. The page numbering for all items from 1 to 8 shouldbe done using lower case Roman numerals and the pages thereafter should be numbered using Arabic numerals.

5.1 Cover Page & Title Page - A specimen copy of the Cover page and Title page for the Thesis is given in Annexure I & II.

5.2 Bonafide Certificate - The Certificate shall be typed in double line spacing using Font Style Times New Roman and Font Size 13 as per the format shown in Annexure -III.

The Certificate shall carry the Supervisor's signature and shall be followed by the **Supervisor's name, academic designation (not any other responsibilities of administrative nature)**, department and full address of the institution where the Supervisorhas guided the research scholar. The term 'SUPERVISOR' must be typed in capital letters between theSupervisor's name and academic designation. Signature of the Co-Supervisor with the details specified as aboveshould be included wherever it is applicable.

5.3 Abstract - Abstract should be an essay type of narration not exceeding four pages outlining the research problem, methodology used for tackling it and a summary of the findings. This shall be typed in one and a half line spacing using Font Style Times New Roman and Font Size 12 with key words.

5.4 **Acknowledgement** – It should be brief and should not exceed one page when typed in one and a half line spacing. The scholar's signature shall be made at the bottom right end above his/her name typed in capitals.

5.5 **Table of Contents** - The Table of contents should list all captions following it as well as any caption which precedes it. The title page, Certificate and Acknowledgment will not find a place among the items listed in the Table of Contents but the page numbers of which are in lower case Roman letters. One and a half line spacing should be adopted for typing the matter under this head. A specimen copy of the Table Contents for the Thesis is given in Annexure IV.

5.6 **List of Tables** - The list should use exactly the same captions as they appear above the Tables in the text. One and a half line spacing should be adopted for typing the matter underthis head.

5.7 **List of Figures** - The list should use exactly the same captions as they appear below the Figures in the text. One and a half line spacing should be adopted for typing the matter underthis head.

5.8 **List of Symbols and Abbreviations** - One and a half line spacing should be adopted for typing the matter under this head. Standard symbols, abbreviations, etc. should be used. **The list should be arranged alphabetically with respect to the contents on the right side as shownin Annexure V**.

5.9 **Chapters** - The chapters may be broadly divided into 3 parts (i) Introductory chapter,

(ii) Chapters developing the main theme of the Thesis and (iii) Results, Discussion and Conclusion. The main text shall be divided into several chapters and each chapter may be further divided into several divisions and sub-divisions.

- Each chapter should be given an appropriate title.
- Tables and Figures in a chapter should be placed in the immediate vicinity of the reference where they are cited.
- Footnotes should be used sparingly. They should be typed single space and placed directly underneath in the very same page which refers to the material they annotate.

5.10 **Appendices** - Appendices are provided to give supplementary information,

which if included in the main text may serve as a distraction and cloud the central theme under discussion.

- Appendices should be numbered using Arabic numerals, e.g. Appendix 1, Appendix 2,etc.
- Appendices, Tables and references appearing in appendices should be numbered andreferred to at appropriate places just as in the case of chapters.
- Appendices shall carry the title of the work reported and the same title shall beincluded in the Table of Contents page.

5.11 List of References - Any works of other researchers, if used either directly or indirectly, the origin of the material thus referred to at appropriate places in the Thesis should be indicated. The author's publications during the period of research should not be included in the references and can be separately mentioned as in 5.10. A paper, a monograph or a book may be designated by the name of the first author followed by the year of publication, placed inside brackets at the appropriate places in the Thesis. The citation may assume any one of thefollowing forms.

How to cite

- The structure of a citation is the author's surname and year of publication.
- Single author is cited as "Jones (2001)".
- Two authors are cited using "&" (Deane & Jones 1991) or Smith *et. al*. (1992)
- More than two authors are cited using "*et. al.*" (Smith *et al*. 1992) or Smith *et. al.*(1992).
- In case the information being discussed has been written in several different sources then cite them all in one set of brackets in chronological order of publication (Medley 1994; Smith 1994; Philip 2002).
- If an author published several papers in 2005, the year of the first

publication (in the alphabetic order of the references) is cited and referenced as 2005a, the second as 2005band so on.

- A citation is placed wherever appropriate in or after the sentence. If it is at the end of a sentence, it is placed before the full stop.
- Complete citations and Source shall be provided in alphabetical order in reference section.
- All citations shall be in the same font as the main text.
- All figures and charts etc., taken from other sources shall be cited beneath within brackets, author's name, source followed by, year in Times New Roman, Normal, font- size: 11 points, as "(Source: Jones, *et al*. 2001)". If it is sourced from Web pages the citation style shall be as "(Source: www.abc.com)" and the complete URL shall be given in the reference section.

Examples of Citation

(i) An improved algorithm has been adopted in the literature (Waldron 2008).
(ii) Conley & Galeson (1998) have dealt at length this principle.
(iii) The problem of mechanical manipulators has been studied by Alishahi et al (2009)

The listing should be typed 4 spaces below the heading "REFERENCES" in single spacing. The reference material should be listed in the alphabetical order of the first author. The name of the author/authors should be immediately followed by the other details and year.A typical illustrative list given below relates to the citation example quoted above.

REFERENCES

1 Journal Article : with Single Author

Waldron, S 2008, 'Generalized Welch bound equality sequences are tight frames', IEEE Transactions on Information Theory, vol. 49, no. 9, pp. 2307-2309.

2 Journal Article : with Two Authors

Conley, TG & Galeson, DW 1998, 'Nativity and wealth in mid-nineteenth century cities', Journal of Economic History, vol. 58, no. 2, pp. 468-493.

3 Journal Article : with more than two Authors

Alishahi, K, Marvasti, F, Aref, VA & Pad, P 2009, 'Bounds on the sum capacity of synchronousbinaryCDMA channels', Journal of Chemical Education, vol. 55, no. 8, pp. 3577-3593.

4 Books

Holt, DH 1997, Management Principles and Practices, Prentice-Hall, Sydney.

5 E-book

Aghion, P & Durlauf, S (eds.) 2005, Handbook of Economic Growth, Elsevier, Amsterdam. Available from: Elsevier books. [4 November 2004].

6 Conference Proceeding Paper with editors

Riley, D 1992, 'Industrial relations in Australian education', in Contemporary Australasian industrial relations: proceedings of the sixth AIRAANZ conference, ed. D. Blackmur, AIRAANZ, Sydney, pp. 124-140.

7 Conference Proceeding Paper without editors

Fan, W, Gordon, MD & Pathak, R 2000, 'Personalization of search engine services for effective retrieval and knowledge management', Proceedings of the twenty-first internationalconference oninformation systems, pp. 20-34.

8 Website

Australian Securities Exchange 2009, Market Information. Available from: <http://www. asx.com.au/professionals/market_information/index.htm>. [5 July 2009].

9 Patent

Cookson, AH 1985, Particle trap for compressed gas insulated transmission systems, US Patent 4554399.

10 Thesis: Unpublished

Hos, JP 2005, Mechanochemically synthesized nanomaterials for intermediate temperature solid oxide fuel cell membranes. Ph.D. thesis, University of Western Australia.

11 Newspaper: Print

Ionesco, J 2001, 'Federal election: new Chip in politics', The Advertiser 23 October, p. 10.

List of Publications - The list of publications (those already published/accepted for publication in Journals and papers presented in Conferences/Symposia) made by research scholar during the period of research shall be reported in the Table of Contents. Mention Impact Factor of the Journal (if applicable).

- **VITAE**: A short biography of the author shall be made at the end of the

Thesis and shall be prepared in double spacing to a single page.

5.12 Tables and Figures – "Table" means tabulated numerical data in the body of the Thesis as well as in the appendices. All other non-verbal material used in the body of the Thesis and appendices such as charts, graphs, maps, photographs and diagrams may be designated as Figures.

- AT able or Figure including caption should be accommodated within the prescribed marginlimits and appear on the page following the page where their first reference is made.
- Tables and Figures on half page or less in length may appear on the same page along with the text. However, they should be separated from the text both above and below by triple spacing.
- All Tables and Figures should be prepared on the same paper or material used for the preparation of the rest of the Thesis.
- Two or more small Tables or Figures may be grouped, if necessary in a single page.
- Wherever possible, the photograph(s) shall be reproduced on a full sheet ofphotographic paper or standard A4 size paper.
- More than one photograph can be included in a page.
- Samples of Fabric, Leather, etc., if absolutely necessary may be attached evenlyin a page and fixed/pasted suitably and should be treated as Figures.

c. TYPING INSTRUCTIONS

i. General

This section includes additional information for final typing of the Thesis. Theimpressions on the typed/printed copies should be black in colour.

A sub-heading at the bottom of a page must have at least two full lines below it or elseit shouldbe carried over to the next page.

The last word of any page should not be split using a hyphen. One and a half linespacingshould be used for typing the general text. The general text shall be typed in

Font Style Times New Roman and Font Size 12. Single spacing should be used for typing:

1. Long Tables
2. Long quotations
3. Foot notes
4. Multiline captions
5. References

All quotations exceeding one line should be typed in an indented space - theindentation being 15 mm from either side of the margin.

ii. Chapters

The format for typing Chapter headings, Division headings and Sub-division headings are explained by the following illustrative examples.

Chapter heading : CHAPTER – I

INTRODUCTION

Division heading :

1.1

OUTLINE OF THESISSub- division

heading :

1.1.1

Literatu

re Review

1.1.1.1 Synthetic aperture radars on satellites

The word CHAPTER without punctuation should be centered 50 mm down from the top of the page. Two spaces below, the title of the chapter should be typed center aligned capital letters. The text should commence 4 spaces below this title, the first letter of the text starting 20 mm inside from the left hand margin.

The division and sub-division captions along with their numberings should be left justified. The typed material directly below division or sub-division heading should commence 2 spaces below it and should be offset 20 mm from

the left hand margin. Within a division or sub- division paragraphs are permitted. Even paragraph should commence 3 spaces below the last line of the preceding paragraph, the first letter in the paragraph being offset from the left hand margin by 20 mm.

d. NUMBERING INSTRUCTIONS

i. Page Numbering

All page numbers (whether it be in Roman or Arabic numbers) should be typed without punctuation on the upper right hand corner 15 mm from the top with the last digit in line with the right hand margin. The preliminary pages of the Thesis (such as Title page, Acknowledgement, Table of Contents, etc.) should be numbered in lowercase Roman numerals. The title page will be numbered as (i) but this should not be typed. The page immediately following the title page shall be numbered as (ii) and it should appear at the top right hand corner as already specified. Pages of main text, starting with Chapter 1 should be consecutively numbered using Arabic numerals.

ii. Numbering of Chapters, Divisions and Sub-Divisions

The numbering of chapters, divisions and sub-divisions should be done using Arabic numerals only and further decimal notation should be used for numbering the divisions and sub-divisions within a chapter. For example, sub-division 4 under division 3 belonging to chapter 2 should be numbered as 2.3.4. The caption for the sub-division should immediately follow the number assigned to it.

Every chapter beginning with the first chapter should be serially numbered using Arabic numerals. Appendices, included if any, should also be numbered in an identical manner startingwith Appendix 1.

iii. Numbering of Tables and Figures

Tables and Figures appearing anywhere in the Thesis should bear appropriate numbers. The rule for assigning such numbers is illustrated by an example. Thus, if a Figure in Chapter 3, happens to be the fourth then assign 3.4 to that Figure.

Identical rules apply for Tables except that the word Figure is replaced by the word Table. If Figures (or Tables) appear in appendices, then Figure 3 in Appendix 2 will be designated as Figure A 2.3. If a table to be continued into

the next page this may be done, with unfinished Table, continued into the next page, with title Table 2.1 (continued) placed centrally.

iv. Numbering of Equations

Equations appearing in each Chapter or Appendix should be numbered serially, the numbering should commence afresh for each Chapter or Appendix. Thus for example, an equation appearing in Chapter 4, if it happens to be the eighth equation in that Chapter shouldbe numbered as (4.8) thus:

$$\left[\frac{\partial}{\partial x}\left[\frac{p^2}{h}\right]+\frac{\partial}{\partial y}\left[\frac{pq}{h}\right]=-gh\,\frac{\partial \eta}{\partial x}-k\,\frac{\sqrt{p^2+q^2}}{h^2}\,p+\frac{1}{\rho_w}\left[\frac{\partial}{\partial x}\left(h\,\tau_{xx}\right)+\frac{\partial}{\partial y}\left(h\,\tau_{xy}\right)\right]\right] \quad (4.8)$$

While referring to this equation in the body of the Thesis it should be referred to as Equation (4.8).

BINDING SPECIFICATIONS

- Thesis (6 copies) side pinning/stitching, covered with wrapper printed on 300 gsm whiteart card and outer side gloss laminated, adhesive binding. The cover should be printed in black letters and the text for printing should be identical to what has been prescribed for the title page.

e. ONLINE SUBMISSION OF THESIS

- After viva-voce examination the final version of the thesis need to be prepared by incorporating all corrections suggested by the examiners and the same shall be forwarded to the Ph.D. Section and Controller of Examinations.
- The final version of the thesis copy should contain a certificate given in Annexure VI and a scanned copy of the minutes of the oral examination board. These two items should be placed in between the title page and certificate.

ANNEXURE I

A typical Specimen of Cover Page and Title Page

<Font Style Times New Roman>

VIBRATION AND THERMALANALYSIS OF 6/4 POLESWITCHED RELUCTANCE MOTOR

<Font Size 18>
<1.5 line spacing>

A THESIS

<Font Size 14>

Submitted by

<Font Size 14> <Italic>

ABCD

Registration No:-

<Font Size 16>

Under the Supervision of
Name of Supervisor
Designation
GIET University, Gunupur (Odisha)
AND
Name of the Co-Supervisor
Designation
Name of the Institution

in partial fulfillment of the requirements for the degree of

<Font Size 14> <Italic>
<1.5 line spacing>

DOCTOR OF PHILOSOPHY

<Font Size 16>

DEPARTMENT OF ELECTRICAL ENGINEERING
GIET UNIVERSITY
GUNUPUR 765022

<Font Size 16>
<1.5 line spacing>

DECEMBER 2022

<Font Size 14>

ANNEXURE II

A typical Specimen of Cover Page and Title Page

<Font Style Times New Roman>

VIBRATION AND THERMALANALYSIS OF 6/4 POLESWITCHED RELUCTANCE MOTOR

<Font Size 18>
<1.5-line spacing>

A THESIS

<Font Size 14>

Submitted by

<Font Size 14>
<Italic>

ABCD

Registration No:-
<Font Size 16> Under the Supervision of
Name of SupervisorDesignation
GIET University, Gunupur (Odisha)AND
Name of the Co-SupervisorDesignation
Name of the Institution

in partial fulfillment of the requirements for the degree of

<Font Size 14> <Italic>
<1.5 line spacing>

DOCTOR OF PHILOSOPHY

<Font Size 16>

DEPARTMENT OF ELECTRICAL ENGINEERINGGIET UNIVERSITY

GUNUPUR 765022

<Font Size 16>
<1.5 line spacing>

DECEMBER 2022

<Font Size 14>

ANNEXURE III

A typical Specimen of Certificate

<Font Style Times New Roman>

GIET UNIVERSITY, GUNUPUR 765022

<Font Size 16>

<1.5 line spacing>

BONAFIDE CERTIFICATE

<Font Size 14>

<Font Size 13>

The research work embodied in the present Thesis entitled **"VIBRATION AND THERMAL ANALYSIS OF 6/4 POLE SWITCHED RELUCTANCE MOTOR"** has been carried out in the <<Name of the Supervisor's Department>>, <<Name of the School >>. The work reported herein is original and does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion or to any other scholar.

I understand the University's policy on plagiarism and declare that the thesis and publications are my own work, except where specifically acknowledged and has not been copied from other sources or been previously submitted for award or assessment.

<<Signature of the Scholar>>

<<Name>>

Counter signed by

<<Signature of the Co Supervisor>> <<Signature of the Supervisor>>

<<Name>> <<Name>>

CO- SUPERVISOR
(If applicable)

SUPERVISOR

<<Designation & Address >> <<Designation & Address >>

ANNEXURE - IV

A typical Specimen of Table of Contents

<Font Style Times New Roman Font Size 13>

TABLE OF CONTENTS

CHAPTER NO.	TITLE	PAGE NO.
	ABSTRACT	iii
	LIST OF TABLES	xvi
	LIST OF FIGURES	xviii
	LIST OF SYMBOLS AND ABBREVIATIONS	xxvii
1	**INTRODUCTION**	**1**
	1.1 GENERAL	1
	1.2 OBJECTIVES OF THE RESEARCH	3
	1.3 LITERATURE REVIEW	4
	1.3.1 Aircraft Landing Operations	6
	1.3.2 Flight Control System	19
	1.3.3 Intelligent Control Design Techniques	29
2	**DEVELOPMENT OF NON-LINEAR SIX DEGREES-OF-FREEDOM AIRCRAFT MODEL**	**45**
	2.1 GENERAL	45
	2.2 BUILDING AN AIRCRAFT	54
	2.2.1 Configuration Script	54
	2.2.1.1 Aerodynamic section	58
	2.2.1.2 Propeller section design	60
	2.2.1.3 Engine section comparison	63
	2.2.1.4 Inertia section	66

ANNEXURE - V

LIST OF SYMBOLS AND ABBREVIATIONS

ω	-	Absolute frequency
HOA	-	Acetic acid
Al	-	Aluminum
ASTM	-	American standard testing mesh
$CaCO_3$	-	Calcium carbonate
CIA	-	Chemical index of alteration
ρ	-	Density of the fluid
θ	-	Direction of wave propagation
EF	-	Enrichment factor
ωp	-	Frequency of the peak
Ω	-	Frequency of the waves
FP	-	First percentile
Γ	-	Gamma
g	-	Gram
HCl	-	Hydrochloric acid
Fe_2O_3	-	Iron oxide
MgO	-	Magnesium oxide
θm	-	Mean wave direction
mg	-	Milligram
HNO_3	-	Nitric acid
OC	-	Organic carbon
ppm	-	Parts per million
$K_2Cr_2O_7$	-	Potassium dichromate
φ	-	Potential function
SEM	-	Scanning electron microscope
Ag_2SO_4	-	Silver sulphate
τ	-	Time lag between samples
ζ	-	Vertical displacement

ANNEXURE VI

CERTIFICATE

1. This is to certify that no corrections/suggestions were pointed out bythe Examiner(s)

   in the Thesis titled "….....

   submitted by
   Mr./Ms.……

   (OR)

2. This is to certify that all corrections and suggestions pointed out by the Examiner(s)

   are incorporated in the Thesis titled ".....

   submitted by
   Mr./Ms.…….

CO SUPERVISOR **SUPERVISOR**

Place:

Date:

ANNEXURE VII

<Font Style Times New Roman, Font Size 13>

COPYRIGHT TRANSFER CERTIFICATE

Title of the Thesis :

Name of the Research Scholar :

Registration Number :

Department :

Copyright Transfer

The undersigned hereby assigns to the GIET University, Gunupur, Odisha, all rights under copyright that may exist in and for the above Thesis submitted for the award of the Ph.D.degree.

Place:

Signature of the
Research Scholar

Date: Name:

APPLICATION FORM FOR ADMISSION

Application No.
(For office use only) 1168

Entrance Exam Appeared (If any)

Paste Recent passport size Photograph

Personal Details

Mr./Ms.:

Father's Name:

Gender		Date of Birth			Nationality	Category (Please Tick)			
Male	Female	DD	MM	YY		GEN	OBC	SC	ST
					Minority Community				

Religion

Blood Gr.

AADHAAR CARD NO:

(Enclose a copy of the Aadhaar Card)

Contact number of the student

Contact number of the father/guardian

Email of the student:

Email of the father/guardian

Programme applying for

Name of the Programme	Choice 1	Choice 2
Such as BTECH, MTECH, MBA, MCA, PhD Etc	Fill choice of your course name	Fill choice of your course name

(You may offer alternate program in case you are not admitted for your main program, choose alternate program from list of programs under same eligibility).

Courses offered *(Put a "✓" mark on the applied course)*

B.Tech in
- ☐ Computer Sc. Engg
- ☐ Computer Sc. & Technology
- ☐ CSE in AI & ML
- ☐ CSE in Data Science
- ☐ CSE in IOT
- ☐ Agricultural Engg
- ☐ Mechanical Engg
- ☐ Electronics & Comm. Engg.
- ☐ Civil Engineering
- ☐ Chemical Engg
- ☐ Biotechnology
- ☐ Electrical Engg
- ☐ Elect & Electronics Engg
- ☐ Energy Engg

M.Tech courses in
- ☐ Computer Science & Engg
- ☐ Structural Engineering
- ☐ Construction Tech & Mgmt
- ☐ Heat Power and Thermal Engg
- ☐ Machine Design
- ☐ Power Electronics Engineering
- ☐ Electronics & Comm. Engg.
- ☐ Chemical Engineering
- ☐ Biotechnology
- ☐ Manufacturing Technology
- ☐ **Master in Comp Appⁿ (MCA)**
- ☐ **Master in Business Admⁿ (MBA)**
- ☐ **Bachelor of Comp Appⁿ (BCA)**
- ☐ **Bachelor of Business Admⁿ (BBA)**

- ☐ **B.Sc Agriculture**
- ☐ **B.Sc. Nursing**
- ☐ **M.Sc Courses in:**
  - ☐ Agriculture (Agronomy, Soil Sc.)
  - ☐ Physics/Chemistry/Mathematics
  - Life Sciences/Biotechnology
- ☐ **M.A. Courses in**
  - English/M.S.W./Sociology
  - Economics
- ☐ **Ph.D. PROGRAMS**
  In the above mentioned PG Courses.

Academic Accomplish-ments

Academic Accomplishments

#No.	Exams	Name of the Inst. passed from	Name of the Board /University	Subjects Studied	%age/ Grade/GPA	Year of Passing
#1	SSC (10th) *Equivalent*					
#2	12th/Diploma *Equivalent*					
#3	Graduation *Equivalent*					
#4	Post Grads					
#5	Others if any					

Correspondence Address (For all communication including letter of admission)

	Telephone Numbers (Include STD)
	Home
	Other
PINCODE ☐☐☐☐☐☐	Mobile

Permanent Address (If different from correspondence address)

	Telephone Numbers (Include STD)
	Home
	Other
PINCODE ☐☐☐☐☐☐	Mobile

Family Details

Fathers Name			
Occupation		Mobile	
Aadhaar No.	*Enclose Copy of the Aadhaar*	Mail Id	
Mothers Name			
Occupation		Mobile	
Aadhaar No.	*Enclose Copy of the Aadhaar*	Mail Id	

Accommodation

Will you be requiring Hostel Accommodation? ☐ **Yes** ☐ **No**

Do you have any chronic illness? ☐ ☐ **No**
If yes, please mention details

.....

Other conditions

Do you have any pending court proceedings? ☐ ☐ **No**
If yes, please provide details:

.....

TERMS &CONDITIONS FOR ADMISSION

1. **Non-refund of Fees** : ***All fees once paid are not refundable for any reason whatsoever except in the case of "FAIL" in the eligible examination.***

2.1 **Cancellation of Admission** : GIET reserves its right to cancel the admission of successful candidate under any of the following circumstances :

   a. If the fees is not deposited by the stipulated date.

   b. If the candidate does not join the particular programme by the stipulated date even though the Fee has been deposited.

   c. If the candidate fails to furnish the proof of the stipulated minimum qualifications.

2.2 Provision of Non Refund of Fees under Clause 1 will also apply in cases under Clauses 2.1 (b) and (c) or as per UGC norms.

3. Right of Alteration / Modification :

   a. Management reserves its right to alter or modify the structure of any of the programs to attain the objective of excellence.

   b. GIETU reserves its right to change the present Fee Structure.

   c. GIETU reserves its right to modify, alter and/or include any other Terms & Conditions that may be deemed fit in the interest of the University.

4. Jurisdiction: Any dispute pertaining to admission, or any other matter as a student or alumnus of GIETU, Gunupur shall be subjected to the jurisdiction of the Gunupur court only.

5. It is mandatory to put up 80% of the attendance in all the classes including sessionals to avoid detention from cycle test and semester examinations.

6. Smoking cigarette, consuming alcohol, narcotic drugs are strictly prohibited. If found indulging in such type of activities, the authorities have liberty to take appropriate action which may lead to rustication/expulsion from the hostels as well as the University.

7. It is mandatory for all outstation girl students to stay in University hostel for 100% safety and security.

MODALITIES OF FEES PAYMENT BY STUDENTS

1. Students are required to pay semester fees in the beginning of the semester when they are registering their name, else their name will not be registered in the attendance register until the completion of registration formalities.

2. In case a student enters the next semester without paying the fees in full, shall not be allowed to get admitted to the next semester class nor to the hostel until he clears the arrear fees and at least 50% of the present semester fees.

DECLARATION BY STUDENT/PARENT OR GUARDIAN

I hereby certify that the information given in the Application (All relevant Forms) is complete & accurate. I understand & agree that misrepresentation or omission of facts will justify the denial/cancellation of admission or expulsion. I do hereby consent to the Terms & Conditions for Admission being enclosed with the Application Form. I acknowledge that I have read, understood and agreed to the above terms and conditions.

Signature of the Student
Date:
Place:

Signature of the Parent/Guardian
Date:
Place:

IMPORTANT INSTRUCTIONS FOR FILLING UP OF APPLICATION FORM

1. Please make sure that you are using the correct application form.
2. Do not scribble, smudge, tear or wrinkle the application form. Do not put any stray marks anywhere on the application form.
3. Your photograph, signature and address, will also be scanned by a machine that recognizes only good quality images. Therefore, paste a recent, passport size, colour photograph of good quality and sign in the space provided with a black ball-point pen only. Do not stick an attested photograph.
4. Write the complete address giving your name and PINCODE correctly and legibly. Please note that this block will appear as such in all our correspondence with you. In case you happen to make a mistake, cover the whole box with a slip of white paper of the same size and write your address on it. Your address must not exceed the box.
5. Do not staple, pin, stitch or stick anything on to the application form. Paste only the photograph in the space provided.
6. Ensure the correctness of your mailing address, the PINCODE, valid e-mail ID, telephone number with correct STD CODE and mobile number. Please note that GIET UNIVERSITY will not be responsible if communications do not reach you due to incomplete or illegible address, invalid e-mail ID or wrong mobile number.
7. You must quote your application number for reference in all your future correspondence.
8. GIET UNIVERSITY will not be responsible for any postal delay or irregularity or loss in postal transit.
9. Ensure that your application is complete in all respects. An incomplete application or an application filled in a language other than English will be summarily rejected.
10. Options given in the application form cannot, in general, be altered at a later stage.
11. The cost of the application material is non-refundable.
12. You should retain a photocopy of the application form for your reference.

Check List

Before posting/submitting the application please ensure the following:

- Read the instructions before filling the Application Form.
- Affix a recent, colour photograph of good quality in the space provided.
- Do not get the photograph attested.
- Write your complete postal address, to which communication is to be sent, clearly and legibly.
- Enter the correct PINCODE.
- Indicate the correct STD code and Phone No. / Mobile No.
- Mention your correct E-Mail ID & Mobile number.
- Sign in the space provided.
- Parent /Guardian's signature in the declaration form.
- Do not use any pins or stapler pins in your application.
- Clearly indicate whether you require hostel accommodation or not.
- Retain a photocopy of your application.

Enclosures Check List (Incomplete forms will be rejected)

Listed below is each item which accompany this form. To ensure prompt and accurate processing of your application, check each item you are enclosing with the application.

☐ Photograph ☐ Photocopy of educational mark sheets ☐ Others if any please specify .....

Details of Payment

☐ Demand Draft No. _____ Date:...../...../..... Name of Bank _____

☐ Online Transaction No. / Receipt No. _____

FOLLOWING ORIGINAL DOCUMENTS ARE REQUIRED AT THE TIME OF ADMISSION

1. Matriculation/10th class pass certificates
2. Matriculation/10th class mark-sheet
3. +2 Science or equivalent mark-sheet *(For B.Tech/B.Sc Agri/B.Sc Fisheries/B.Sc)*
4. +2 Science/Arts/Commerce mark-sheet *(For B.B.A or B.C.A.)*
5. +2 Science/Art/Commerce or equivalent pass certificate
6. +3 Science / Arts / Commerce mark sheet. *(For LE TECH, MBA, M.Sc., M.A.)*
7. +3 Science / Arts / Commerce provisional certificate. *(For LE TECH,MBA,M.Sc., M.A.)*
8. B.Tech certificate cum mark-sheet. *(For M.Tech)*
9. Conduct/Character Certificate in Original
10. Nativity/Residence Certificate
11. Transfer certificate/College Leaving certificate.(Original)
12. Migration Certificate in Original
13. 10 (Ten) Passport size Color Photograph *(Digital Photographs are not allowed)*
14. Rank card , Admit Card (JEE MAIN) Or GIETEE If available (for B.Tech)
15. Xerox copies of all (each two sets) except sl.no 12
16. Xerox copy of Aadhaar Card (Including Parents).

Form No-GIETU/Ph.D-02

GIET UNIVERSITY, GUNUPUR

DIST-RAYAGADA, (ODISHA) PIN-765022

JOINING REPORT OF THE RESEARCH SCHOLAR

Date:_____

To

The HOD
Department of ……..
GIET- UNIVERSITY, GUNUPUR-765022, ODISHA

Sir,

I have been provisionally admitted to the Ph .D. programme
Ref No:_____
Dated_____
as per admission proceedings and my relevant details are as follows:

1.	Name of the department	
2.	Name of the candidate	
3.	Roll No.	
4.	Name of the supervisor / Co-Supervisor	
5.	Permanent address of the candidate	
6.	E-Mail	
7.	Mobile No.	
8.	Adhar Card No	
9.	Details of fee deposited	

I hereby join as ~~FT~~/PT research scholar in the Department of……
on……..

Supervisor / Co Supervisor

Sign. Of the Candidate
Forwarded to Registrar

Head of the Department

Form No-GIETU/Ph,D.-03

GIET UNIVERSITY, GUNUPUR

DIST-RAYAGADA, (ODISHA) PIN-765022

APPLICATION FOR PROVISIONAL REGISTRATION IN Ph.D. PROGRAMME

ANNEXURE-A

To be filled in by the candidate and submitted along with seven or eight copies of **a report on the road map for future work** – one for each DRC member, and Central research monitoring committee (CRMC).

1. Name of the Student _____ 2. Regd..No. _____
3. Name of the Department _____ 4. Name of the School: _____
5. Caste Status: GEN/SC/ST _____ 6. Category of studentship: _____
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)
9. Major equipment/ facilities necessary to carry out the project and means of obtaining them. (To be filled jointly by the student and the supervisor(s) on separate sheet)
10. Research work already completed by the student (if any) (Attach published or unpublished document) _____
11. (a) Request for early submission (if any) based on work already done _____
    (Relevant documents enclosed.) _____ months.
12. for sponsored students only (as per original application)
    Does the student intend to carryout his/her work at the place of employment? Yes /No.
13. Proposed place of work _____
14. Facilities available _____
15. Plan of residence oncampus: _____
16. Signature of student : _____ Date: _____
17. Recommendation of the Supervisor (s):
    1. Date of commencement of Research work:
    2. Comments: _____

Signature of Principal Supervisor

Name :

Designation:
Address
Email: ……..
Mob: ……..

Signature of Co-Supervisor

Name:

Designation:
Address
Email:……
Mob:…….

Recommendation of the Doctoral Research Committee:

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

18. Course Work Completed: (including research credits)

Sl. No.	Subject-Code	Course Title	Credits	Remarks
1				
2				
3				
4				
5				

19. Past research work: Total course Credits =

Documents examined: _____

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

Supervisor **CO-Supervisor** **DRC Member** **DRC Member**

Chairman,DRC/HOD

FOR OFFICE USE

Based on the recommendation of the DRC, the candidate's provisional registration for Ph.D. isrecommended to Academic Council.

Dean, Academic

Recommendation of the CRMC:

a) Recommended/Not Recommended :

b) Refused for the following reason :

_____ _____ _____

(Signature s of CRMC members)

Approved

Registrar **Vice-Chancellor**

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

ANNEXURE-B

Report of Doctoral Research Committee

Recommendation in favour of the candidate for registration for Ph.D. Programme

The application of Mr./Miss/Smt ..... is considered for the registration of Ph.D. degree.

We **recommend** the candidate for Registration in the Ph.D. programme of the GIETU, Gunupur.

1. Date of Pre-Registration Seminar of the candidate……

2. Ph.D. Coursework Completion Status:

Sl.No	Course Code	Course Title	Credits	Result
Total Credits				

3. We have checked the eligibility and verified under mentioned original certificates:
RecommendedTitle for Registration……
……
……...…….. Recommended name(s) of the Supervisor(s)

Role	Name of The Supervisor(s)	
Supervisor-1		
Supervisor-II		
Co Supervisor		

We have verified the vacancy position under the supervisor(s) as per UGC regulation basedon the declaration of the concerned faculty members.
Date: …… Signature of the Head of the Department with stamp(Convener)

Signature of the members of the Doctoral Research Committee:

1.
2. 6.
3. 7.
4. 8.
5. 9.

Annexure-C

Allocation of Research Supervisors for Ph.D. Programme

Department of ……

Name of the Candidate: ……..

Registration Number of Candidate:
……..

Recommended Title for registration
Note: (Title will be registered in English script only)

Name of the Supervisor(s)
(As recommended by the Departmental Research Committee)

1. Designation

with Department: …….

2. Designation

with Department: …….

3. Designation

with Department: …….

Signature of the Supervisor/ Co-Supervisor:

Signature of the candidate:

1)

2)

Signature of the Chairman,
DRC/ HOD

Note: Preferably type the information and take printout of this page before signing.

ANNEXURE-D

Self-declaration Form

Details about the pursuing Ph.D. Scholars

(For the faculty members who are willing to act as Ph.D. research Supervisor)

Name :
Designation : Department:
School :

Details about Pursuing Ph.D. Scholars: Number of Enrolled Scholars who have not registered (optional) [#1]: Number of Registered Scholars who have not submitted thesis [#2]: Number of Scholars who have submitted thesis but not awarded [#3]: **Details of the pursuing Ph.D. Scholars:**

Name of the Scholar	**Role (Supervisor/ CoSupervisor)**	**Date of Enrolment**	**Date of Registration**	**Name of University**	**Present Status (enrolled [#1]/ registered [#2]/ submitted [#3])**
					`

Signature of the Faculty with date and Stamp

ANNEXURE-E

Checklist of Documents for Registration of Ph.D. Students

Name of the candidate: Regd. No:

Department: School of

Sl. No	Documents	Submitted Yes / No	Remarks if any
1.	Ph.D. Admission Note		
2.	Aadhar Card		
3.	Pan Card		
4.	10^{th} or equivalent mark sheet /grade card & certificate		
5.	10+2/ Higher Secondary or equivalent mark sheet/ grade card & certificate		
6.	Bachelor's Degree mark sheets/ grade cards & certificates		
7.	Master's Degree mark sheets/ grade cards & certificates		
8.	NET/SLET/GATE qualifying certificate/Marks statement (If Applicable)		
9.	Transfer Certificate		
10.	Migration certificate		
11.	Caste certificate (if applicable)		
12.	Joining report		
13.	Syllabus Copy of Domain Specific Courses		
14.	Application for Registration in Ph.D. Programme.		
15.	Recommendation of Candidate & Forwarding letter of Head of the Department for registration of the candidate.		
16.	Allocation of Research Supervisor(s) duly signed by HOD, Supervisor(s) and candidate		
17.	Self-declaration by The Supervisor(s)		
18.	Abstract/Synopsis and tentative title of thesis		
19.	Ph.D. Coursework completion certificate cum grade card		
20.	Application For Recognition as a Research Co-Supervisor		
21.	Fees Dues Cleared Up to Date (Provide Transaction ID/Date**)**		
	a. Tuition Fees- 2019-20		
	b. Tuition Fees -2020-2021		
	c. Registration Fees-2000/-(Third Semester)		
22	NOC from the employer (if Applicable)		
23	Latest Pass port size Photo (5 nos.)		
24.	Details of Publications		
25.	Details of Previous Review		
26.	Latest Resume		
27.	Any others		

Note: Attach Self Declared (Xerox Copies) Documents checked by office of the HOD

Date ……. Signature

Form No-GIETU/Ph.D-04

GIET UNIVERSITY, GUNUPUR

DIST-RAYAGADA, (ODISHA) PIN-765022

RESEARCH AND DEVELOPMENT CELL

APPLICATION FOR RECOGNITION AS A RESEARCH CO-SUPERVISOR

Applied for School of	Department	Put [√] mark
Engineering and Technology	Biotechnology	
	Chemical Engineering	
	Civil Engineering	
	Computer Science and Engineering	
	Electronics and Communication Engineering	
	Electrical and Electronics Engineering	
	Mechanical Engineering	
Sciences	Biotechnology	
	Botany	
	Chemistry	
	Computer Science and Applications	
	Physics	
	Mathematics	
	Zoology	
Management Studies	MBA	
Humanities and Social Sciences	English	
	Economics	

Specialization: _____

1.	Name (In block letters)	:	
2.	Date of Birth	:	
3.	Gender	:	
4.	Nationality	:	
5.a.	Post held at the time of sending the application, date of appointment (whether permanent, on probation or temporary)	:	
b.	Name of Employer with Address	:	
6.	Do you belong to SC / ST/OBC/ Physically Handicapped (VH or OH). If yes, please attach certificate.	:	
7.	Address for Correspondence	:	
8.	Mobile Number	:	
9.	Email address	:	
10.	Permanent Address	:	
	Mobile Number	:	
	Email address	:	

7. Academic Qualification:					
Examination	Year of completion	Main Subject(s)	Division / Grade	Marks Aggregate & Percentage	University
Bachelor's Degree					
Master's Degree					
M. Phil.					
Ph. D.					
Title of Ph.D. Thesis:					
Date of Award of Degree					
Other Distinctions					
8. Whether the candidate has qualified UGC NET/JRF examination (if so, give details)					

9.(a) Teaching experience				
Name of the University/ College/Institution	Designation & scale of pay	Nature of Post: Temporary/ Permanent	Subjects Taught	
			Under graduate	Postgra Duate
(b) Other professional experience (indetail)				

10. **(a) Publications:** Attach on separate sheet(s)

(i) Select list of the research publications in last five years (provide photocopies, the first page of the research paper should be self- attested)

(ii) Complete list of research publications (including details of authorship, year of publications, title, name of the journal, volume number, page numbers and name of publisher)

(iii) List of other publications (books, chapters in edited books, review articles etc. with complete details)

(b) Research Supervision

(i) Supervision of awarded doctoral thesis----------

(ii) Supervision of doctoral dissertation, under progress ----------

(iii) Supervision of awarded M. Phil. dissertations ----------

(iv) Supervisionof M. Phil. Dissertation, under progress ----------

11. (a) Academic award and distinctions.....-

(b) Membership of learned bodies .....

Recognition by other Universities as Doctoral Research Co-Supervisor

Name of the University	Faculty/ Department	Date of Recognition (attach copy)	No. of Scholars Completed		No. of Scholars Pursuing	
			M. Phil.	Ph.D.	M. Phil.	Ph.D.

Any other relevant information:

_____

_____

Declaration:

Forwarded with the remarks that the facts stated in the above application are true to the best of my knowledge and belief and I may be considered for Recognition as Research Co-Supervisor at GIETUniversity, Gunupur 765022.

Signature of the Co-Supervisor

No Objection Certificate

Further Stated that we have been verified and found correct and this Institution/ Organization has no objection to the candidature of the applicant being considered for Recognition as Research Co- Supervisor at GIET University, Gunupur.

Date:

Signature of the Head of the Institution /Organization With seal

NB: The list of publications and Ph.D. notification /Certificate is to be enclosed alongwith the application form.

Form No-GIETU/Ph.D-05

GIET UNIVERSITY, GUNUPUR
DIST-RAYAGADA, (ODISHA) PIN-765022

On line Quarterly Progress Report

No_____

(To be filled in by the Chairman DRC)

1. Name of the Research Scholar:

2. Registration Number:

3. Title of the Thesis :

4. Total number of meetings held so far(With dates):

No	Date

5. Progress:

Excellent	
Good	
Satisfactory	
*Needs Improvement	
* Un Satisfactory	

* In case of last two observations, suggest remedial measures:

6. Difficulties encountered if , any:

7. Status of Publications/Patent:

8. Any other relevant information:

Research Supervisor

Chairman, DRC

Form No: GIETU/Ph.D-06

GIET UNIVERSITY, GUNUPUR – 765022

DIST-RAYAGADA, (ODISHA) PIN-765022

GIET UNIVERSITY, GUNUPUR

DIST-RAYAGADA, ODISHA) PIN-765022

SCHOOL OF

HALF YEARLY PROGRESS REPORT

DEPARTMENT OF _____

DOCTORAL RESEACH COMMITTEE EVALUATION REPORT

1. Name of the Scholar :-
2. E-Mail address/Cell No :-
3. Regd.No. :-
4. Area of Research :-
5. Title of the Ph.D. Dissertation:-
6. Progress of Work :-
7. Assignment of the Progress :-
8. Doctroral Committee :-

1.	(HOD/Chairman)	(Signature)
2.	(External Expert)	(Signature)
3.	(Supervisor)	(Signature)
4.	(Co-Supervisor)	(Signature)
5.	(Member)	(Signature)
6.	(Member)	(Signature)
7.	(Member)	(Signature)

Form No-GIETU/Ph.D-07

GIET UNIVERSITY, GUNUPUR

DIST-RAYAGADA, (ODISHA) PIN-765022

SCHOOL OF _____

DEPARTMENT OF _____

DOCTORAL RESEACH COMMITTEE EVALUATION REPORT

Date:

Name of the Scholar :
Reg No :
Area of Research :
Title of the Ph.D. Dissertation :

Name of the
DRC
Member/Expert :Affiliation :
Mail ID :
Phone No

(A) Points of observation:

Headings	Remarks			Signature for improvement, if any
	EXCELLENT	GOOD	ADEQUATE	
1. Review of literature				
2. Objectives				
3. Hypothesis/Research Questions, if taken				
4. Methodology & tools of analysis to be used				
5. Proposed source of data				
6. Chapterization, if shown				

(B) Comments and Suggestions:

(C) Recommendations (after suggested modifications):

Signature

Form No-GIETU/Ph.D.-08

GIET UNIVERSITY, GUNUPUR

DIST-RAYAGADA, (ODISHA) PIN-765022

Application for Change of Supervisor / Co-Supervisor

1. Name of the candidate:
   .Mail ID-:
   Contact No:-
2. Ph.D. Registration No.:
3. Branch:
4. Title of the Thesis:
5. Name of the Supervisor:
6. Name of the Co-supervisor:
7. Name of the proposed new Supervisor:Mail ID:-
   Contact No:-
8. Name of the proposed Co-supervisor:Mail ID:-
   Contact No:-

9 Reasons for change of Supervisor

10. Change in the scope of research, if any

Signature of the candidate with Date

Consent of the present supervisor

Signature of the present Supervisor

Consent of the proposed supervisor

Signature of the proposed Supervisor with his/her latestresume

Recommendation of the Chairman, DRC with minutes

Signature of the Chairman, DRC

Comments Allowed /Not Allowed

Dean (Academics) **Registrar**

Form No-GIETU/Ph.D-08.1

GIET UNIVERSITY, GUNUPUR

DIST-RAYAGADA, (ODISHA) PIN-765022

Application for Minor Change of Title of the Research Work

1	Name of the candidate	
2	Ph. D registration No	
3	Date of Enrollment	
4	Date of Registration	
5	Branch	
6	Present title of the research work	
7	Proposed title of the work	
8	Reasons for change of title	
9	Change in the area / scope of research (give details)	

Signature of the candidate with Date

Recommendation of Supervisor

Signature of the Supervisor

Recommendation of the Chairman, DRC with minutes

Signature of the Chairman, DRC

Comments Allowed/Not Allowed

Dean (Academics) Registrar

Form No-GIETU/Ph.D-09

GIET UNIVERSITY, GUNUPUR

DIST-RAYAGADA, (ODISHA) PIN-765022

Ph. D. SYNOPSIS SUBMISSION FORM

SL NO	Details	Description/Status
1	Name of the Ph. D Scholar	
2	Date of Enrollment with number	
	Date of Registration with number	
3	School of Studies	
	Discipline	
4	Name of the Research Supervisor	
	Name of the Research Co-Supervisor	
5	Tentative title at the time of submission of Abstract	
	Title at the time of Registration	
	Title at the time of synopsis	
	Title at the time of submission of thesis	
6	Details of course work (Copy to be enclosed)	
7	Details of half yearly Doctoral Research Committee Meetings held with Date	1. 2. 3. 4. 5. 6.

8	Whether copies of minutes of all the Doctoral Committee Meetings duly signed by the DRC Members has been submitted by the respective Research Supervisors to the COE ‘s Office before Synopsis submission?		
9	Whether the statement of marks of course work of the respective candidate has been issued by the Exam Section. A copy of the same be submitted to the COE’s Office before Synopsis submission, duly signed by the Supervisor & Chairman, DRC		
10	Whether copy of the publication of an article based on thesis either in Patent Publication / Scopus Listed or UGC Care List of Journal been forwarded to the COE’s Office from the Research Scholar at the time of Synopsis Submission? If so, full copy of the article with details duly signed by the scholars, supervisor, Co-supervisor & Chairman, DRC. To be submitted(UGC’s care list SL NO /web of science be mentioned.		
11	Whether attendance certificates for participation in at least one international conference has been submitted by the Research Scholar during his/her Ph. D study period at the time of Synopsis Submission?		
12	Details of thesis evaluation fees of Rs- 60,000/- deposited in the GIET University account (Transaction ID/ receipt No /Date and amount deposited be mentioned)		

Note: All the Columns in the Performa should be neatly filled-in and submitted along with Documentaryevidence.

Supervisor **Co-Supervisor** **DRC Members** **Chairman, DRC**

Form No-GIETU/Ph.D.-10

GIET UNIVERSITY, GUNUPUR

DIST-RAYAGADA, (ODISHA) PIN-765022

(Thesis submission form) (To be filled in by the candidate)

1. Name of the student and Regd. no.: _____
2. School_____ Department_____
3. Address for correspondence:

   Email: Tel: Mobile
4. Date of admission_____
5. Date of submission of Research Plan_____
6. Approved title of thesis (BLOCK LETTERS)_____
7. Any IPR involved in the Thesis

_____

(Confidential declaration to be submitted)

Signature of candidate

Date:_____

Recommendations:

<u>Certificate of having completed a course of study for Ph.D</u>.

I/We hereby certify that the candidate named above is a registered student of GIET University. He/she has already completed the prescribed course work and presented his/her pre-submission seminar in accordance with the regulation under supervision of the undersigned.

Name of supervisor_____ Signature_____ Date ____

Name of Co-supervisor_____ Forwarded By: Signature_____ Date____

Chairman, DRC_____ School of ____

Signature_____ Date____

Form No-GIETU/Ph.D-11

GIET UNIVERSITY, GUNUPUR
DIST-RAYAGADA, ODISHA-765022

DECLARATION OF RESEARCH SCHOLAR FOR PLAGIARISM FREECONTENT IN THE DOCTORAL THESIS

I, Sri/ Smt./Ms._____bearing Regd. No:

_____Branch_____School

_____undertake that thethesis entitled''_____

_____

_____under the guidance and

supervision of Dr._____(Supervisor) and Dr. _____

(Co-Supervisor) submitted by me for Ph.D. Examination does not use any sources or material withoutacknowledgement and with any plagiarized content.

The manuscript has been subjected to plagiarism check by **TURNITIN** software. I declare thatthe work and language included in this thesis is free from any kind of plagiarism.

If any act of Plagiarism is proved in future, the degree awarded consequent to evaluation wouldbe liable to be withdrawn.

Date:

(Signature of the Research Scholar)

Address :_____

:_____

: _____

:_____ Mobile No: _____

Supervisor **Co-Supervisor**

Comments of the Prof. In-charge of Central Library

Prof. In-charge of Central Library,
GIET University, Gunupur

Form No-GIETU/Ph.D.-11.1

GIET UNIVERSITY, GUNUPUR

DIST-RAYAGADA, (ODISHA) PIN-765022

Certificate of Originality

The research work embodied in this thesis entitled"

_____

_____" has been carried out by me at the Department of

_____, School of _____GIET University. The manuscript hasbeen subjected to plagiarism check by_____software. I declare that thework and language included in this thesis is free from any kind of plagiarism.

Full signature of the Candidate

Date_____

Signature of the Supervisor

Date:

Form No-GIETU/Ph.D-11.2

GIET UNIVERSITY, GUNUPUR
DIST- RAYAGADA, (ODISHA) PIN-765022

C E R T I F I C A T E

Certified that the contents of the soft copy 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:

Form No-GIETU/Ph.D-11.3

GIET UNIVERSITY, GUNUPUR
DIST- RAYAGADA,

(ODISHA) PIN-765022C

E R T I F I C A T E

I do hereby give my consent to upload my Ph.D.Thesis titled

"……
……
…… in the site of the Shodhganga (INFLIBNET) Name & Address of the Supervisor & Co-Supervisor

1. -Supervisor
2. -Co-Supervisor

Date……. **Full signature of the Scholar**

Address:

Form No-GIETU/Ph.D-12

GIET UNIVERSITY, GUNUPUR

DIST-RAYAGADA, (ODISHA) PIN-765022

(Format for Certificate of the Supervisor (s))

This is to certify that the Thesis entitled _____

_____submitted to theDepartment Schoolof_____

GIETUniversity in partial fulfillment for the award of the degree of Doctor of Philosophy in _____is a record of research work carried out by Mr./Ms. _____under my supervision and guidance.

All help received by him/her from various sources have been duly acknowledged.No part of this thesis has been submitted elsewhere for award of any other degree.

Signature of Supervisor
Supervisor:
Designation:
Department :
School

Signature of Co-

Designation:
Affiliation

FORM---No GIETU/Ph.D-13

GIET UNIVERSITY, GUNUPUR

DIST-RAYAGADA, (ODISHA) PIN-765022

Recommendations of Composition of Board of Examiners for Adjudication of Ph.D. Thesis

Date:_____

1. Name of the Candidate (Full):_____ Regd. No._____
2. Department :_____
3. Effective Date of Registration:_____
4. Subject of Research/ :_____
5. Title of Thesis :_____
6. Degree for which the thesis :Ph.D. in _____

   is to be submitted :_____
7. Name(s) of Supervisors(s) : _____

   :_____
8. Panel of names for composition of the Board of Examiners:

A. For Adjudication of Thesis:

Out of 10 adjudicators, a maximum of Three (3) can be within the State of Odisha and restseven (7) from other states (Outside the state of Odisha).

(a) External Examiners (Detailed address given in Separate page.)

(i) Name :_____

Designation:_____ Specialization:

_____

Affiliation Address:_____

(ii) Name:

_

Designation:_____ Specialization:_____

Affiliation Address:_____

(iii) Name :

_

Designation:_____ Specialization:

_____

Affiliation Address:_____

(iv) Name :_____

Designation:_____ Specialization:_____

Affiliation Address:_____

(v) Name :_____

Designation:_____ Specialization:_____

Affiliation Address:_____

(vi) Name :_____

Designation:_____ Specialization:_____

Affiliation Address:_____

(vii) Name :_____

(viii) Designation:_____Specialization:_____ Affiliation A

(ix) Name :_____ Designation:_

(x) Name :_____ Designation:_

(xi) Name :_____ Designation:_

.....

.

Detailed information on all proposed examiners shall contain **(i)** Name **(ii)** Designation **(iii)** Postal address **(iv)** Telephone –Office **(v)** Mobile Number **(vi)** Fax **(vii)** E-mail(**viii)** Website of Organization.

(b) For Conducting the Viva-Voce:

1. One of the External Examiner, who adjudicated the thesis,

Declaration

I do hereby declare that the information provided by me in this form is genuine and

shall be keptconfidential**.**

Signature of the Supervisor

Approved in order of preference as marked on the margin

Registrar **Vice-Chancellor**

Form No-GIETU/Ph.D-14

GIET UNIVERSITY, GUNUPUR

DIST-RAYAGADA, (ODISHA) PIN-765022

Ph.D. THESIS EXAMINER'S REPORT

1. Name of the candidate :
2. Regd. No :
3. School :
4. Department :
5. Title of the thesis :

6. Recommendation of the Examiner:
   The thesis has been examined by me and I recommend that: *(please delete all except any one relevant)*
   (a) The thesis is found suitable for oral defense evaluation without further examination or amendment.
   (b) The thesis is found suitable for oral defense evaluation, subject to inserting the corrections and/or additions/modifications suggested by me in the thesis. This should subsequently be found to be satisfactory by ODEC without further reference to me.
   (c) The thesis is not suitable for oral defense evaluation, but the candidate be asked to re-submit the thesis in a revised form for re-examination. Areas requiring major modifications are detailed in my attached report.
   (d) The thesis is rejected.

7. **If the thesis is recommended for acceptance whether**:

   (a) It is fit for publication by the candidate in its original form or in any modified form.
   (b) The thesis is of such outstanding merit that the university would be justified if publishing itat its own cost.

Dated: Signature of Examiner:……

Name:……

Designation:……

(Seal)

University/Institution:…….
Address
E-mail Id:……..
Mob. No: ……..

Note: ***The report may be continued on blank sheet with signature of the examiner. Each page of thereport should be signed by the examiner.***

Form No-GIETU/Ph.D.-15

GIET UNIVERSITY, GUNUPUR

DIST-RAYAGADA, (ODISHA) PIN-765022

REPORT OF EXAMINERS OF ORAL DEFENCE EVALUATION COMMITTEE

The examiners of Oral Defense Evaluation Committee (ODEC) certify that the thesis entitled

……
……..……
……..……
……..**Submitted by** ……**to the GIET University in partial fulfillment of requirement of the Ph.D. degree in the discipline of** …….. **Under the school of** ……..**has been examined on**……**and recommend that:**

a. That the degree be awarded as the presented Thesis has met all the standards for the award of Ph.D.degree.

b. That the candidate be further examined on an another date not later than**……**

(Note: Please delete the clause not applicable)

c. In our opinion, the candidate has not performed to our satisfaction and does not deserve the degreeof Ph.D. (in case the Board does not recommend the award of the degree)

Signature of

Supervisor	**Co-supervisor**	**External examiner**
Name……	**Name……**	**Name……**

Date:

Forwarded to Controller of Examinations

Memo No : **…….** **Date ……**

Signature of the Chairman, DRC/HOD

Form No-GIETU/Ph.D-16

GIET UNIVERSITY, GUNUPUR

DIST-RAYAGADA, (ODISHA) PIN-765022

Application for Renewal of Registration

1. Name of the Doctoral candidate:
2. Ph.D. Registration No:
3. Title of the thesis:
4. Date of registration:
5. Scheduled Period of completion of the work:
6. Reasons for non-completion in due time:
7. (a) expected time of completion of work

   (b) Expected time-frame for submission of thesis and period of extension sought

Signature of the
Doctoral candidate

Recommendation of the Supervisor

Signature of the
Supervisor

Recommendation of the DRC **Signature of the**
Chairman, DRC