SRI RAMACHANDRA

INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Category - I Deemed to be University) Porur, Chennai

REGULATIONS FOR

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

(Revised AUGUST 2020)

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

In exercise of the powers conferred by Rule 12.1 (iv) B (a) of Memorandum of Association & Rules and clause 21 of Bye-laws of Sri Ramachandra Institute of Higher Education and Research (Deemed to be University), Porur, Chennai – 600 116, the Academic Council of the Deemed University hereby makes the following Regulations, in conformity with University Grants Commission (Minimum Standards and Procedure for Award of M.Phil./Ph.D. Degree) Regulations, 2016 and UGC guidelines communicated from time to time:-

1. SHORT TITLE AND COMMENCEMENT

These Regulations shall be called "THE REGULATIONS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY (Ph.D.) OF SRI RAMACHANDRA INSTITUTE OF HIGHER EDUCATION AND RESEARCH (DEEMED TO BE UNIVERSITY).

These revised Regulations shall come into force with effect from the academic year 2020 - 21 and are subject to such modifications as may be approved by the Academic Council from time to time.

2. ELIGIBILITY

Candidates applying for admission to Ph.D. program should have qualified 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) in PG course.

Further relaxation of 5% marks i.e. from 55% to 50% or an equivalent relaxation of grade, may be allowed for those belonging to SC/ST/OBC (non-creamy layer)/Differently abled.

Candidates can register for admission to Ph.D. program under one of the following categories:-
     a. Full time (Stipendiary/Fellowship holders)
     b. Integrated (MD/MS-Ph.D.- ICMR-TSS Fellowships)
     c. Part Time: Internal
     d. Part Time: Internal Independent
     e. Part Time: External

2.1 Full Time Candidates (common provision)

Only such of those candidates who are stipendiary, including recipients of the Founder-Chancellor Fellowship/ Integrated MD/MS-Ph.D. program (ICMR-TSS Fellowships)/or Fellowships in project positions from funding agencies, industries, governmental and non-governmental agencies would be considered for admission to Ph.D. program as full time research scholars.

In other words, candidates without any stipend/scholarship/fellowship/project positions cannot apply for admission to Ph.D. Degree program under the Full-time research scholar's category.

2.2 Full Time candidates in Faculty of Medicine

Every candidate who presents himself/herself for registration for the Degree of Doctor of Philosophy (Ph.D.) in Medicine, Surgery and other specializations must possess any one of the following educational qualifications, awarded by this Deemed University or of any other University or any other qualification recognized by this Deemed University as equivalent thereto:-

- Degree of Doctor of Medicine (D.M.);
- Degree of Master of Chirurgie (M.Ch.);
- Degree of Doctor of Medicine (M.D.);
- Degree of Master of Surgery (M.S.);
- Postgraduate Diploma in the Faculty of Medicine and
- Diplomate of National Board of Examinations of India

2.3 Full Time Candidates (Non-Medical Disciplines) in the Faculty of Medicine, Dentistry, Pharmacy, Nursing, Physiotherapy, Allied Health Sciences, Biomedical Sciences & Technology, Management Sciences, Public Health, Clinical Research, Sports & Exercise Science and Engineering & Technology.

A candidate who presents himself/herself for registration for the Degree of Doctor of Philosophy (Ph.D.) must possess any one of the following educational qualifications, awarded by this Deemed University or of any other recognised University or any other qualification recognised by this Deemed University as equivalent thereto:

- Master of Science in the Faculty of Medicine (M.Sc. - Non-medical 3 years course);
- Master's Degree in the Faculty of Dentistry / Pharmacy / Nursing / Physiotherapy / Allied Health Sciences / Biomedical Sciences & Technology / Management Sciences / Public Heath / Clinical Research / Sports & Exercise Science / Engineering & Technology.

2.3.1 Full Time Candidates in Engineering and Technology

A candidate who presents himself/herself for registration for the Degree of Doctor of Philosophy (Ph.D.) must possess any one of the following educational qualifications, awarded by this Deemed University or of any other recognised University or any other equivalent qualifications recognised by this Deemed University:

- Masters degrees (M.Sc. / MCA / M.S.) in Physical and Biological Sciences, Computers, Computer Applications, Engineering, Technology, Engineering Management or Technology Management

- Masters degrees (M.Tech. / M.E.) in Technology, Engineering, Computer Science, Information Technology, Engineering Management or Technology Management

2.4 Part Time Research Candidates (Internal)

2.4.1 A candidate who fulfils the regulations as per the qualifications specified in the Regulations (2.2 & 2.3) and possesses at least one year continuous experience as teaching faculty/ researcher in a Department/Constituent college / Research Centre of this Deemed University on the date of provisional registration, may be permitted to register himself/herself as a part time scholar (internal) for Ph.D. Degree.

2.4.2 Notwithstanding anything contained in these regulations, those who are working in this Deemed University as clinical instructor involved in clinical training may apply as part time internal candidate on approval of appropriate authorities of the Deemed University

2.4.3 Attendance requirement: Part time Internal candidate shall be required to work under the Research Supervisor directly at least for 60 days for instruction/discussion etc. during the prescribed period of research work. Research Supervisor at this Deemed University shall submit the certificate of attendance (with dates) to the Controller of Examinations along with six monthly progress reports within the stipulated time frame.

2.5 Part Time Candidates (Independent Research)

2.5.1 Head of Department, Professor, Additional Professor or Associate Professor who is working in any department of this University with not less than fifteen years of teaching experience of which at least five years shall be at the postgraduate level and having a minimum of three research publications in peer reviewed indexed (Scopus/ Web of Science/ PubMed) /UGC care Journals as first or corresponding author, is eligible to register for the Ph.D. Degree without a supervisor as "Part time Independent Research Candidate".

2.5.2 Such candidates shall seek the guidance/assistance of not less than three experts in the concerned field, who shall be members of faculties not below the rank of Associate Professors and possess the qualifications and eligibility prescribed by the Deemed University for being a supervisor.

2.5.3 The said three experts shall be members of the 'Research Advisory Committee' for the respective 'Part time Independent Research Candidate' and conduct the Research Methodology Examination for him/her at the end of the first year and send the report to the Controller of Examinations as provided in these regulations. Out of the three members of the Research Advisory Committee, one shall be the Convenor of the Committee as may be indicated by the candidate. At the end of the prescribed period of research, the Research Advisory Committee shall submit a panel of examiners for evaluation of Thesis and for conducting the public viva-voce examination *for* the independent research candidate concerned.

2.5.4 He/she will be abide by all regulations as applicable for part time candidates.

2.6 Part Time Research Candidates (External)

Notwithstanding anything contained in these regulations, candidates may be permitted to register for the Ph.D. program on a part-time basis as external candidates if they satisfy the following:-

Any one of the qualifications prescribed under regulations (2.2 & 2.3) from this Deemed University or from any other university recognised as equivalent thereto and
- employed as a teacher or scientist in National/State level institutions/Laboratories/ Research and Development (R&D) Centres/ Industries/ Universities in India and abroad, satisfying the stipulations under Regulation 8;
- with experience as prescribed under regulations 2.4.1; and
- are permitted by their respective organizations to pursue research leading to the Ph.D. Degree of this Deemed University on a part-time basis while continuing in employment.

2.6.1 Such external candidates shall necessarily have the Research Supervisor from this Deemed University, and they shall also have a Research Co-Supervisor from the institution where they are employed, provided that such experts are recognized as Research Supervisors for Ph.D. research by this Deemed University. On no account there shall be relaxation of this condition.

2.6.2 Attendance requirement: External candidates are expected to do research in their place of employment and in addition, should undergo such course work, examinations and research work as may be prescribed for a minimum of six months during the research period directly under the Research Supervisor at this University. The Research Co-Supervisor of the candidate at the place of employment and the Research Supervisor at this Deemed University shall submit the certificate of attendance (with dates) to the Controller of Examinations along with six monthly progress reports within the stipulated time frame.

2.7.   International Candidates:

International Students including (foreign nationals & NRIs) are eligible to apply for Ph.D. program (Full time or Part time) provided they possess equivalent eligibility requirements as mentioned in Clause 2.1, 2.2, 2.3 & 2.6

3.   DURATION OF RESEARCH WORK

3.1   Full Time Candidates:

Candidates registered for the Degree of Doctor of Philosophy (Ph.D.) as full time research scholars shall undergo research work for a minimum period of THREE years from the date of provisional registration.

However, for candidates with MD/ MS/ DNB/ MDS/ DM/ M.Ch. qualifications, the period of research would be a minimum of TWO years.

He/she shall attend the department full time for research on all working days, except for periods when he/she is allowed to visit other institutions/laboratories for activities connected with research for short period as may be permitted by the Research Supervisor based on recommendations of RAC.

3.1.1   Full Time Candidates in Engineering and Technology :

Candidates registered for the Degree of Doctor of Philosophy (Ph.D.) as full time research scholars shall undergo research work for a minimum period of THREE years from the date of provisional registration.

However, for candidates with Masters degrees (M.Tech / M.E) in Technology, Engineering, Computer Science, Information Technology, Engineering Management or Technology Management, the period of research would be minimum of **TWO YEARS**.

3.2   Part Time Candidates:

All candidates registered for the Degree of Doctor of Philosophy (Ph.D.) as part time research scholars shall undergo research work for one more year than that prescribed for full-time candidates, i.e., for a minimum period of FOUR years from the date of provisional registration.

Provided that in the case of Part time candidates under disciplines of Medicine and Dentistry with MD/ MS/ DNB/ MDS /DM/ M.Ch qualifications, the minimum period of research shall be THREE years.

3.2.1. Part Time Candidates in Engineering and Technology:

All candidates registered for the Degree of Doctor of Philosophy (Ph.D.) as part time research scholars shall undergo research work for an extra year compared to those prescribed for full-time candidates. In the case of Part time candidates under disciplines of Engineering and Technology with MEng. / MTech qualifications the minimum period of research shall be THREE years and for those with M.Sc. / MCA / M.S shall be **FOUR YEARS.**

3.3.   Maximum Duration:

3.3.1. The maximum period of research for both full time and part time candidates under all disciplines shall not exceed **SIX** years from the date of provisional registration.
3.3.2. Women candidates and persons with disability (more than 40%) will be permitted a relaxation of 2 years in the maximum duration.

4. REGISTRATION SESSIONS

4.1   There shall be two sessions in each year for provisional registration of candidates for the Degree of Doctor of Philosophy.(Ph. D) 1st April & 1st October.

4.2   The tentative schedule of Ph.D. Entrance Examination and Provisional Registration for Ph.D. Program for Full Time & Part Time is as follows:-

		For April Session	For October Session
i.	Release of Advertisement	December / January	July / August
ii.	Entrance Examination	January / February	August / September
iii.	Publication of Results/counselling	January / February	August / September
iv.	counselling	March	September
v.	Last date for applying for Provisional Registration for Ph.D. program	March	September
vi.	Date of Provisional Registration	1st April	1st October

5. PROCEDURE FOR ADMISSION TO Ph.D. PROGRAM

5.1.1 Candidates wishing to apply for admission to Ph.D. program under Full Time (seeking Founder-Chancellor Shri N.P.V. Ramasamy Udayar Fellowships) and Part Time (internal and external) categories will have to qualify through entrance examination.

5.1.2 Candidates who have qualified the (i) UGC/ CSIR/ ICMR/ DBT/ DST NET-JRF/ AICTE-GATE/ AYUSH/INSPIRE Fellowship or having qualified other UGC recognized national eligibility test with a valid fellowship at the time of entrance exam or (ii) work in funded research projects as JRF/SRF in the Deemed University are **exempted** from appearing for Entrance Examination and interview and they will be called directly for counseling and admission.

5.2   Performance of the candidate will be calculated on written test (70% weightage) and interview (30% weightage). The qualifying marks for provisional admission to Ph.D. program is 50% in the entrance examination i.e. aggregate of marks obtained in written test and interview taken together). However, a relaxation of 5% of marks (from 50% to 45%) shall be allowed for the candidates belonging to SC/ST/OBC (Non-Creamy layers)/ Differently-abled category in the entrance examination.

5.2.1. Entrance Examination for Engineering and Technology Candidates:

The admission process will involve the following steps:

- Interested candidate will submit a CV along with brief outline of the topic of interest

- If a potential supervisor and the needed facilities are available to carry out the research, the Provost, Engineering and Technology will ask the candidate to take the entrance examinations. If the faculty or the facilities are not available, the candidate will be advised to seek other avenues for research.

- If it is determined that provisions exist to carry out research in SRET, the candidate may proceed to take the examinations.

- A candidate selected on the basis of the results of the entrance examination and the academic qualifications will be directed to register as an internal fulltime, internal part-time or external part-time PhD student.

- The entrance examination will be in the form of a written and an oral examination.

- The written examination may involve writing an essay or a research paper detailing the student's area of interest. It may be a   review of a research topic or a proposal dealing with a research problem. The student may take up to a week to complete the written examination. If justified for the nature of problem involved, the Engineering and Technology Faculty may provide additional time to complete the written examination. Oral presentation of the essay /paper will be to a team of examiners consisting of the potential research supervisor, a second member of the Faculty of Engineering and Technology and an industry or an academic expert appointed by the Vice Chancellor / Dean of Research / Provost of Engineering and Technology. The written portion of the examination will carry 70% of the marks while 30% of the marks will be assigned to the oral examination.   Multiple choice examinations will not be part of the written examinations in Engineering and Technology.

5.3   Syllabus and Pattern of Entrance Examination:
   (a) Syllabus for Entrance Examination is available in the website www.sriramachandra.edu.in
   (b) The duration of the examination will be 2 (two) hours.
   (c) The Entrance Examination will be conducted in ENGLISH only. The question booklet will consist of 120 multiple choice questions (single best response).
   (d) The written test will have two sections, Section A & B.
   - Section-A Research Methodology: Common to all disciplines will have 60 questions (answer all questions)
   - Section-B Discipline Specific: Candidates will attempt questions from one of the following:-
   Medicine/Dentistry/Pharmacy/Nursing/Physiotherapy/Biomedical Sciences/Management/ Allied Health Sciences/Public Health.

The Section-B will have 75 questions and the candidate may attempt any 60 questions. The first 60 questions attempted will be considered for evaluation.

5.4   The Vice-Chancellor/Dean (Research) will constitute the Committee for conducting Interviews for Provisional Admission for Ph.D. program. The Dean (Research) will be the Chair of the Admission Committee with representatives from concerned disciplines.

5.5   During the interview each candidate will be examined about motivation to apply for Ph.D. at this Deemed University, his educational background, Master's thesis or previous research experience, and career goals in the future.

5.6   The marks obtained in entrance examination are valid only for two consecutive admission sessions from date of qualifying in the Entrance examination. Candidates may if required, request in writing to defer provisional registration to the next immediate session.

5.7   Those candidates who fulfil all criteria for provisional registration as per regulations (including those candidates who hold approved scholarships /fellowships) will be called for counseling.

5.8   counselling will be held at the Deemed University campus and those eligible will be notified to attend the counseling on the specified date and time.

5.9   During counseling, Founder-Chancellor Fellowships will be offered to those full time eligible candidates. Guidance to identify Research Supervisors will also be provided to the candidates.

5.10   After counseling all eligible candidates will be issued 'application for Provisional Registration' for Ph.D. program.

5.11. International Candidates (Foreign Nationals / NRI):

5.11.1. Any candidate desiring to enrol for Ph.D. program in a Full time or Part time basis should contact the Office of the Asst. Director – International Relations through email (admissions.international@sriramachandra.edu.in) / letter and will submit a brief CV and an outline of topic of interest.   An application should be submitted through online application system (https://www.sriramachandra.edu.in/university/nri-admission-fees.php?pos=6). This application, CV and an outline of topic of interest will be forwarded to the concerned Principal / Dean for identification of the potential supervisor and to determine if facilities are available for the intended area of research.

5.11.2.   Full time Candidates:
Candidate wishing to apply for Ph.D. program under full time category (Founder Chancellor Shri. N.P.V.Ramasamy Udayar Research Fellow) will have to qualify through entrance examination.

5.11.3.   Candidates who have qualified the (i) UGC / CSIR / ICMR / DBT / DST NET-JRF / AICTE-GATE/ AYUSH / INSPIRE Fellowship or having qualified other UGC recognized national eligibility test with a valid fellowship at the time of entrance examination or (ii) work in funded research projects as JRF / SRF in the Deemed University are exempted from appearing for entrance examination and interview and they will be called directly for counseling and admission.

5.11.4.   Part time Candidates:
Candidates who wish to register for Ph.D. under part time category will complete a written entrance examination and an interview.

Once a potential research supervisor has been identified, the candidate will be asked to submit a detailed proposal / review of research topic within two weeks. This will serve as the written examination and will be graded for 70% of the total marks. The research proposal will be evaluated and an oral examination will be scheduled either in person or using an appropriate technology tool. The Dean (Research) will constitute the Admission Committee which will include the Dean (Research), Principal / Dean of the college / faculty and proposed supervisor. The oral examination will have a weightage of 30% of the total marks.

5.11.5.   The candidate has to obtain 50% aggregate in the combined written and oral examination.

5.11.6.   Those candidates who fulfil all criteria for provisional registration as per regulations (including those candidates who hold approved scholarships / fellowships) will be called for counseling. counselling will be held at the Deemed University campus and those eligible will be notified to attend the counseling on the specified date and time.   During counseling, Founder-Chancellor Fellowships will be offered to those full time eligible candidates. Guidance to identify Research Supervisors will also be provided to the candidates. After counseling, all eligible candidates will be issued 'application for Provisional Registration' for Ph.D. program.

5.11.7.   Once the application is approved and registration fees are received, a letter of provisional registration will be issued.

5.11.8.   Foreign Nationals have to obtain a 'Research Visa' as per the provisions of the MHRD / UGC / FRRO for enrolling in a Ph.D. program.   The letter of provisional registration can be used for application of Research Visa.   The Office of the International Relations will provide assistance for obtaining Research Visa.   All scholars need to submit 'C' form and other forms through e-FRRO online portal, Govt. of India.

5.11.9.   The deadlines for submission of applications for International candidates will be announced on the website.

6.   APPLICATION FOR PROVISIONAL REGISTRATION (COMMON TO ALL CANDIDATES)

6.1   A candidate applying for provisional registration shall submit an application complete in all respects along with the prescribed fee, within the stipulated time furnishing the following information:-

6.1.1   Qualifications with photocopies of degree certificates and details of previous study and research if any, and full particulars of publications (with reprints) to his/her credit in accredited journals;

6.1.2   "Broad area of proposed research":
(Exact title of proposed thesis need not be given at this stage)

6.1.3.   Acceptance letters of Research Supervisor/Co-Supervisor if identified by the research scholar should be enclosed, before acceptance the Research Supervisor/ Co-Supervisor should satisfy themselves that;

(i) The candidate possesses the necessary aptitude and competence for the proposed Ph.D. research, with critical and analytical ability and adequate background in the broad field of research,
(ii) The proposed field of research falls within the area of expertise of Research Supervisor and Research Co-Supervisor

(iii) Adequate facilities/ clinical materials are available in this Deemed University and also in the place of research in respect of part time external candidates) for research area proposed by the candidate.

(iv) The proposed area of research can contribute to new/additional knowledge.

6.1.4   Applications of candidates **(Part Time External)** who intend to carry out research in the institution in which they are working shall enclose acceptance of the proposed Research Supervisor from this University and Research Co-Supervisor, Head of the Department and NOC from Head of the Institution where the candidate is employed.

6.2.   Every candidate provisionally registered for the Degree of Doctor of Philosophy (Ph.D.) shall be required to carry out research work under the supervision of a Research Supervisor (and Research Co-Supervisor, wherever applicable) and the Research Advisory Committee and undergo such courses of instruction as may be advised by them.

6.3   Every candidate recommended by the Ph.D. Admission Committee for provisional registration, after satisfying the requirements prescribed under these Regulations shall, after approval by the Vice-Chancellor, be provisionally registered for the Degree of Doctor of Philosophy (Ph.D.). The list of such candidates, with full details, shall be placed before the next meeting of the Board of Management for ratification and also be placed before the Academic Council for information.

7.   **QUALIFICATIONS FOR RESEARCH SUPERVISOR/ RESEARCH CO-SUPERVISOR**

7.1   A full time faculty/scientist desiring to be recognised as a Research Supervisor, shall apply in the prescribed application form (VIDE ANNEXURE-I(a) for medical and ANNEXURE-I(b) for non Medical application format). This shall be placed before the Dean (Research) for making suitable recommendations to the Vice-Chancellor for approval or otherwise as a Ph.D. Research Supervisor. On such approval, the Research Supervisor will be intimated that he/she has been recognized as a Research Supervisor for Ph.D. research.

7.2   To be recognized as a Research Supervisor/ Co-Supervisor/ Member of RAC for Ph.D. the faculty/scientist shall have qualification, experience and publications as described below:-

Qualification	Teaching/research experience after highest degree	Number of Publications in peer reviewed indexed (Scopus/ Web of Science/ PubMed) journals/ UGC CARE Journals as first or corresponding author
Ph.D.	2 years	4
DM/M.Ch./ DNB in super speciality	2 years	4
MD/MS/DNB/MDS	4 years	4

7.2.1   Research Supervisor in Engineering and Technology - Qualifications :

Qualifications	Min. of Teaching / Research Experience After Ph.D./DEng/DBA/D.Sc.	Min. Number of Publications (Scopus, Web of Science/ Pubmed / UGC – CARE) Journals
Ph.D. / DEng / DBA / D.Sc.	2 years as an Assistant Professor / Research Scientist or higher rank	4

7.3   Emeritus Scientists/ Emeritus Professors/ Visiting Professors/ Fellows of the Departments/ Constituent Colleges of this Deemed University or teachers who are reemployed after their superannuation and satisfying the conditions prescribed for recognition as Research Supervisors, may be permitted to Supervise. Ph.D. scholar (full-time and part-time).

7.4   A Supervisor shall not undertake to offer guidance for Ph.D. work for more than SIX candidates (including part-time scholars) at a time. However for reckoning the number of candidates under a supervisor, the number of candidates for whom he/she is acting as a co-supervisor shall not be taken into account. The number of candidates for whom a supervisor can act as a co-supervisor shall not exceed FOUR after ascertaining the number of scholars under their supervision.

7.5   For the purpose of reckoning the number of candidates (both full-time and part-time) under a Research Supervisor (or Co-Supervisor) those candidates who have submitted their synopsis of the theses to the Controller of Examinations, shall not be taken into account.

7.6   List of recognised researchers of this Deemed University under each faculty, their area of research interest and number of research scholars registered under them will be available at the university website. This will be updated from time to time.

7.7   A Research Supervisor shall not enrol fresh candidates for the Ph.D. Degree program unless he/she has at least one year of service before retirement / superannuation (i.e., 58 years). A Research Supervisor who has more than one year of service before retirement / superannuation may enrol candidates and continue as Research Supervisor even after retirement / superannuation in respect of such candidates.

7.7.1.   With respect to Engineering & Technology, upon the recommendation of the Dean of Research and as authorized by the VC, a Supervisor may continue to guide a student towards the completion of the degree requirements even if the Supervisor is no longer associated with this university. A co-Supervisor of this university shall be appointed to support the work.

7.8   The maximum age limit for a Research Supervisor to supervise a Ph.D. candidate is 65 years of age. It may be extended beyond 65 years in exceptional cases of expertise, provided he/she is associated with the Deemed University in a teaching/research position, with the approval by the Vice-Chancellor.

7.9   Emeritus Scientists/ Emeritus Professors/ Visiting Professors/ Fellows of the University Departments/ Constituent Colleges of this University or teachers recognized as research supervisors shall not be allowed to register fresh candidates if they have completed 75 years of age on the date of provisional registration of the candidates(s).

7.10   A research supervisor shall not undertake to offer guidance for Ph.D. work to any of his/her first degree relatives.

8. RECOGNISED INSTITUTIONS FOR Ph.D. PROGRAM

Every candidate who has registered for the Degree of Doctor of Philosophy (Ph.D.) shall pursue research under the supervision of a Research Supervisor in any one of the following Departments/ Institutions, wherever applicable recognized by the Deemed University, namely:-

8.1   Any Department of this Deemed University.

8.2   Postgraduate Departments of recognized Universities or Colleges situated within the country having necessary facilities for carrying out research in the branch of study concerned provided the Department has been offering the postgraduate course in the branch of study concerned for a minimum period of THREE years. (e.g. M.Sc. Nursing in Surgical Nursing recognized by INC/M.Pharmacy – Pharmaceutics recognized by AICTE/PCI).

8.3.   All India Research Institutions, Regional Research   Institutions, other Non-teaching Research Institution and industries having necessary facilities for carrying research in the branch of study concerned with the Deemed University.

The concerned Institution shall issue a No Objection Certificate stating that

i)   the candidates is permitted to pursue research leading to Ph.D. degree from this Deemed University on a part time basis while continuing in employment.
ii)   will provide infrastructure as needed for carrying out proposed Ph.D. research
iii)   will assign 2 persons who can potentially serve as a Research Co-supervisors. These persons should meet the requirements as per Clause 7 (Qualification for Research Supervisor / Research Co-supervisor). Any exception relating to Research Co-supervisor will have to be approved by the Vice-Chancellor

9. RESEARCH ADVISORY COMMITTEE

9.1.   There shall be a three member Research Advisory Committee consisting of Research Supervisor, Co-Supervisor (wherever applicable) and RAC member(s) for each research scholar constituted by the Vice-Chancellor based on the recommendations of Dean (Research) drawn from the panel of four-five members submitted by the Research Supervisor. All proposals that include/involve human/animal subjects or clinical applications shall include a clinician (from medical/dental faculty) as a member. In exceptional cases, a fourth member may be inducted based on the requirement, recommended by Dean (Research) and approval by the Vice-Chancellor.

9.2   Each member of the Research Advisory Committee shall be a recognized or be eligible to be recognized as a Research Supervisor for scholars for Ph.D. program, as per the requirements under the Regulations 7.

9.3   In the case of Part Time (External) Research Scholar, there shall be a Research Supervisor from this Deemed University as Convenor and a Co-Supervisor from his/her institution and one Research Advisory Committee member.

9.4   Any change in the membership of the Research Advisory Committee shall be effected only on approval by the Vice-Chancellor.

9.5   The Research Advisory Committee shall be functional till the end of public viva-voce examination for monitoring and advising scholars for whose thesis examiners have recommended modifications, corrections, etc., to be incorporated in the thesis before the public viva-voce examination to defend thesis.

9.6   **Functions of Research Advisory Committee:** The Research Advisory Committee shall monitor the research work of the scholar. The RAC shall meet at least bi-annually (period from April to September & period from October to March). The minutes of the RAC meeting should be appended along with the six-month progress report.

9.6.1.   The meetings of the RAC will be held at the Deemed University campus. Under unavoidable circumstances if a member of the RAC (Co-Supervisor or RAC member) is unable to attend a scheduled meeting in person, then he/she can participate via teleconference. The minutes of the RAC will be circulated and signatures obtained from all members of the RAC.

9.6.1(a) With respect to Engineering & Technology, the meetings of the RAC will be held on the campus of this Deemed University. However, where logistics warrant, technology tools shall be employed to facilitate the participation of RAC members and the External PhD students from a distance.

9.6.2   At each RAC meeting, the members should
- Review work book, attendance and progress based on records submitted by scholar and presentation made by scholar.
- Approve the six month report of the preceding 6 months to be submitted as per schedule,
- Discuss matters relating to the scholar's research study including time lines, publications or presentations, conferences, finalizing protocols etc.,
- Identify proposed dates of RAC meeting and agenda/ plan of action for next 6-12 months.

9.6.3   The RAC should within the first **6 months** from date of provisional registration (in addition to items included in 9.6.2)
- Specify protocols/mechanism for monitoring of progress (work book, meetings, etc.)
- Determine the required course work for the scholar.
- Approve and forward to Controller of Examination through Academic Officer the Syllabus for Research Methodology Examination in the prescribed format **(ANNEXURE-II)**
- Review the research proposal of the scholar
- Guide the scholar for submission of proposal to Institutional Ethics Committee .
- Finalize the six-month report and date for next meeting well ahead of the Research methodology examination.

9.6.4   The RAC should in the first **12 months** from date of provisional registration (in addition to items included in 9.6.2)
- Approve/ finalize the research proposal   and working title of the proposed thesis.
- Review the application and annexures for submission to Institutional Ethics Committee.
- Review progress of systematic review for submission at the time of RME examination
- Forward to Controller of Examination the question paper for Research Methodology Exam as per Annexure-II.

9.6.5   The RAC should, by **24 months** (for full time scholars) and **30 months** (for part time scholars) approve the presentation for **Ph.D. Program Review-I** (as prescribed under Regulations 10.4) to be made by the Scholar and after the review certify that recommendations made by the committee have been addressed.

9.6.6   The RAC should before the submission of Synopsis approve the presentation for **Ph.D. Program Review-II** (as prescribed under Regulations 10.4) to be made by the Scholar and after the review, certify that recommendations made by the committee have been addressed.

10. PROGRESS OF RESEARCH

10.1   **Course work:** All scholars should complete the course work as detailed below before appearing for Research Methodology Examination**. (Syllabus Annexure II (a))**

S.No	Course Code	Course Title	Credits	Instructional method	Authorized Responsibility
1.	U0218CT101	Research Methodology, Biostatistics & Computer Applications	3	Course conducted at DU	University
2.	U0220CT102	Research and Publication Ethics	2	Conducted Course	University
3.	U0218CT103	Advanced course/Analytical/Instrumentation training in area of research	3	Self- study based on syllabi approved by RAC; Theory/practical Workshop/Training or combination	University
4.	U0218CL104	Review of Literature and Research Proposal	2	Self- study Proposal Submission	RAC
5.	U0218CL105	Viva Voce – related to research proposal	1	Viva	RAC
6.	U0218GE106 (GE/GL)	Elective course (to be chosen by scholar related to broad area of research)	2	online courses as permitted by RAC with completion certificate	RAC
		Total	**13**		

10.1.1. Coursework and Assessment in Engineering and Technology: (Syllabus Annexure II(b))

Course Code	Course Title	Credit Hours (C)	Authorized Responsibility
ENG 600	Research Methodology	4	University
ENG 605	Review of Literature (Related to the Research Topic)	2	RAC
ENG 615	Thesis Related Topic: A Study of a Topic Related to the Research Problem	4	RAC
ENG 620	Research and Publication Ethics	2	University
ENG 650	Viva-Voce	1	RAC
	Total	**13**	

10.2　　　Work book: Every Ph.D. scholar shall maintain a work book of research activities undertaken on the study. The RAC will determine the mechanism for submission and review for scholars both part time and full time. This work book will be reviewed at every RAC meeting.

10.3　　　**Six-monthly reports**: Every scholar will submit 6 month report to the RAC in the prescribed format (**VIDE ANNEXURE-III**) along with required enclosures. This will be forwarded by Research Supervisor to the Academic Officer as per the schedule given below.

Period of six-month reports	Last date for submission
From 1st April to 30th September	31st October
From 1st October to 31st March	30th April

10.3.1　　　A copy of the six-month reports shall be made available to the Ph.D. scholar as well as HoD/ Dean/Principal of the Faculty in which the scholar is registered.

10.3.2　　　If the progress of the research scholar is found unsatisfactory by the Research Advisory Committee, it shall record the reasons for the same, and suggest corrective measures. If the scholar fails to implement these corrective measures within a period of three months, the Research Advisory Committee may recommend with justification the cancellation of the registration by the Vice-Chancellor. This should be submitted to the Vice-Chancellor through the Academic Officer and copy provided to Controller of Examinations.

10.3.3　　　Failure to submit two consecutive six monthly progress reports will entail cancellation of registration of the scholar by the Vice-Chancellor on a report made by the Research Supervisor to the Academic Officer in this regard.

10.4　　　Review meetings Scholars will also complete reviews as detailed below.

Review	Time frame	Nature of Review	**Outcome**
Research Proposal Review	At the end of 3rd month from the date of provisional registration	**Presentation** before the Ph.D. Admission Committee for review of Ph.D. Research Proposal.	Advisory
Ph.D. Program Review-I Doctoral Colloquium	24 months(Full time) or 24 months /30 months (Part time)	The colloquium will be conducted by each faculty and will include Presentation before committee appointed by Dean (Research). The Committee will include subject experts, senior professors, University officers and RAC.	Advisory
Ph.D. Program Review -II	Prior to submission of synopsis	**Presentation** before University level committee. The committee will be Chaired by Vice-Chancellor will include Dean (Research), COE, Senior Professors, University Officers, subject experts and RAC	Approval to submit synopsis

10.4.1. Review meetings with respect to Engineering & Technology:

The Scholars will complete the following review process:

Research Proposal Review – At the end of 3 months from the Provisional Registration
PhD Review – 24 months after registration or three months prior to submission of the synopsis
Synopsis Submission – Three months after Ph.D. Review

11. RESEARCH METHODOLOGY EXAMINATION

11.1   At the end of the first year after provisional registration and on completion of such course work of instruction, there shall be a Part-I Research Methodology Examination conducted in the Deemed University premises. The Provisional Registration for Ph.D. Program will be confirmed on passing this examination.

11.2   Scheme of Examination (syllabus as given in Annexure-II)

S.No	Course Code	Course Title	Credits	University Examination Marks		
				Theory	Practical	Grand Total
1.	U0218CT101	Research Methodology, Biostatistics & Computer Applications	3	100	0	100
2.	U0220CT102	Research and Publication Ethics	2	50	0	50
3.	U0218CT103	Advanced course /Analytical/Instrumentation training in area of research	3	100	0	100
4.	U0218CL104	Review of Literature and Research Proposal	2	0	100	100
5.	U0218CL105	Viva Voce*	1	0	50	50
6.	U0220GE106 (GE/GL)	Elective course** (to be chosen by scholar related to broad area of research)	2	0	0	Completed
		Total	**13**	**250**	**150**	**400**

*Viva-voce will be conducted relating to submission (Review of Literature and Research Proposal) made by scholar.
Passing Minimum:

➢ If scholar gets less than 40% in any paper (RA or Fail) **in their first attempt**, student has to repeat only that paper even if the aggregate is ≥ 225 (55%) and shall do so until he / she obtains the passing minimum of 40% and ≥55% in aggregate.
➢ If student gets less than 225 in aggregate, he has to **repeat all** the papers.
➢ In cases of RA in one or more papers, passing session needs to be mentioned in the new marks statement.

➢ The Pass/ Fail (RA) declared for a course in the first attempt shall be taken and in case of RA for a course that course shall be repeated until he obtains ≥ 40% for the said course and ≥55% in aggregate.

11.2.1. Scheme of Examination for the first year – Engineering & Technology:

S.No	Course Code	Course Title	Credits	Total
1.	ENG 600	Research Methodology	4	100
2.	ENG 605	Review of Literature	2	100
3.	ENG 615	Thesis Related Topic: A Study of a Topic Related to the Research Problem	4	100
4.	ENG 620	Research and Publication Ethics	2	50
5.	ENG 650	Viva Voce	1	50
		Total	**13**	**400**

Passing Minimum:

➢ If scholar gets less than 40% in any paper (RA or Fail) **in their first attempt**, student has to repeat only that paper even if the aggregate is ≥ 225 (55%) and shall do so until he / she obtains the passing minimum of 40% and ≥55% in aggregate.
➢ If student gets less than 225 in aggregate, he has to **repeat all** the papers.
➢ In cases of RA in one or more papers, passing session needs to be mentioned in the new marks statement.
➢ The Pass/ Fail (RA) declared for a course in the first attempt shall be taken and in case of RA for a course that course shall be repeated until he obtains ≥ 40% for the said course and ≥55% in aggregate.

11.3 The Research Supervisor shall be the Convenor of the Research Methodology Examination. Every scholar shall be examined by the Research Advisory Committee by written and viva voce examination to assess his/her skills. Grades/Marks in the course work, including research methodology courses shall be finalised after a combined assessment by the Research Advisory Committee. The detailed report submitted by the Research Supervisor/Convenor duly attested by the other members shall contain the details of procedure followed for the written evaluation, experimental models, Viva-Voce etc., and the percentage of marks secured by the scholar as per the standard format.

11.4 The report shall also specify the fitness of the scholar to proceed with the research work for the Degree of Doctor of Philosophy (Ph.D.) and shall be submitted by the Research Supervisor/ Convenor to the Controller of Examinations within 15 days from the date of the Research Methodology Examination.

11.5 The Ph.D. scholar shall obtain a minimum of 55% of marks in aggregate 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 Ph.D. program.

11.6 If any research scholar fails to qualify in the Research Methodology Examination, he/she should undergo the course for a further period of six months. At the end of the said period, he/she shall be examined again by the same Research Advisory Committee and if found fit, he/she shall be

permitted to proceed with the research work. The minimum period of research prescribed for submission of thesis shall be extended by 6 more months in such cases.

11.7 A research scholar who does not qualify even at the second attempt, shall not be permitted to continue his/her research work and his/her provisional registration shall be cancelled by the Vice-Chancellor.

11.8 If a scholar fails to take the Research Methodology Examination at the end of the first year after provisional registration, without any prior approval/permission his/her provisional registration shall be cancelled by the Vice-Chancellor without any further reference to the scholar.

11.9 In extraordinary circumstances, a request may be made with appropriate justification for extension of time to appear for Research Methodology Examination, to be considered by the Vice-Chancellor. Such a request must be forwarded by the RAC and submitted in advance of the dates of the Research methodology examinations. The maximum period of extension granted will be 6 months. Failure to appear for RME beyond this period will result in cancellation of his/her provisional registration by the Vice-Chancellor without any further reference to the scholar.

12. CONFIRMATION OF PROVISIONAL REGISTRATION

12.1 The provisional registration of a scholar for the Degree of Doctor of Philosophy (Ph.D.) shall be confirmed only on
> (i) Receipt of the report of passing the Research Methodology Examination conducted by the Research Advisory Committee/Controller of Examinations and after approval of the Vice-Chancellor.
> (ii) Submission of letter of approval by the specified ethics committee to COE.

12.2 After confirmation of the provisional registration, the scholar shall pursue research work for the period prescribed in the Regulations under the guidance of the Research Supervisor (Co-Supervisor, if any) and the Research Advisory Committee.

13. CHANGE OF FIELD OF RESEARCH

If a change of field of research becomes necessary, the research scholar should make a requisition seeking permission for change duly recommended by the Research Supervisor and RAC within one year from the date of provisional registration. Permission for change of field of research may be granted by the Vice-Chancellor considering the merit of each such request. No further change in the field of research shall be permitted thereafter.

14. CHANGE OF RESEARCH SUPERVISORS AND TRANSFER OF SCHOLARS

14.1 Transfer of Ph.D. scholars from one Research Supervisor to another Research Supervisor can be effected, if mutual willingness is given by both the original and proposed Research Supervisor, for valid reasons with the approval of Vice-Chancellor.

14.2 In the case of change of Research Supervisors or transfer of scholars is proposed by the scholars with specific reasons and without the consent of any one of the parties concerned, the matter shall be referred to the Board of Research Studies, for making suitable recommendations to the Vice-Chancellor, whose decision will be final.

14.3 The Research Supervisors who wish to avail leave/lien/deputation beyond a period of six

months shall nominate a Co-Supervisor in the subject concerned for the scholar(s) registered with them and the fact intimated to the Controller of Examinations through Academic Officer in advance, for getting the approval of the Vice-Chancellor.

14.4   If the Research Supervisor has not made any such nomination, it will be open to the Vice-Chancellor to appoint the Research Supervisor from among the members of Research Advisory Committee

14.5   **Change of Supervisor with respect to Engineering & Technology:**   In the event of a supervisor not being able to supervise or no longer associated with this university, the VC may appoint another qualified faculty of the university as a Supervisor and enable the candidate to fulfil the degree requirements

15. CHANGE OF INSTITUTION OF RESEARCH BY SCHOLARS

If any scholar during the period of research leaves the institution in which he/she has originally registered for the Ph.D. degree and desiring to continue his/her research in another institution in which he/she has now joined, can do so only with the prior approval of the Vice-Chancellor who may grant approval, provided such institution is approved for conduct of Ph.D. Research, satisfying the conditions prescribed in these Regulations and an eligible Co-Supervisor is available in that institution. In other cases, the Vice-Chancellor may seek the recommendations of the Board of Research Studies before taking a decision in the matter.

16. CONVERSION OF FULL-TIME REGISTRATION INTO PART-TIME AND VICE-VERSA

Notwithstanding anything prescribed in these Regulations, the Deemed University may permit conversion from Full-time research to Part-time research and vice-versa in respect of scholars registered, for valid reasons and subject to satisfying the Regulations in force after approval of the Vice Chancellor.

Provided that in the case of conversion from full-time research to part-time research, the whole period put in by the scholar, will be taken into account for purposes of reckoning the minimum period of research to be put in by the scholar and in the case of conversion from part-time research to full-time, 2/3 of the research period put in as part-time will be taken into account for purposes of reckoning the minimum period of research to be put by the scholar, to become eligible to submit the Ph.D. thesis.

17. CANCELLATION OF Ph.D. REGISTRATION

17.1   In case of recommendation for cancellation of the registration by the Research Supervisor based on reasons listed under regulations 10 and 11 the scholar shall be intimated about the grounds on which the registration is being cancelled. In case of any representation from the scholar, it shall be referred   to the Board of Research Studies, which may either suggest cancellation depending on the merit of the case. The decision of the Board of the Research Studies shall be final.

17.2   Where a scholar has not submitted the thesis within the period prescribed or has also failed to do so within the extended period of the Ph.D., the registration of such scholar shall stand lapsed automatically and the scholar shall be discharged from the Ph.D. degree program.

18. TITLE OF THE THESIS

18.1.   The approved working title of the thesis shall be intimated to the scholar after the presentation of the Ph.D. research proposal to the Ph.D. Admission Committee. This shall be

forwarded to the Controller of Examinations.

18.2   The **exact title** of the Thesis shall be intimated to the Controller of Examinations at the time of submission of the synopsis. No change of Title of the Thesis shall be considered after the submission of synopsis.

19.   SUBMISSION OF SYNOPSIS

19.1   This step will be considered as a process prior to the finalisation of doctoral thesis.

19.2   The synopsis shall be submitted by each scholar at least three months, prior to the expiry of the period of research prescribed and before the submission of the thesis.

19.3   Prior to submission of synopsis the scholar is required to present the entire completed research work to the Ph.D. Program Review-II (as prescribed under Regulations 10.4) committee, for review and approval of synopsis.

19.4   Once approved by the Ph.D. Program Review-II committee, the scholar can submit the synopsis, along with application and prescribed fee. The Research Supervisor and Co-Supervisor (wherever applicable) will certify that the corrections/ modifications, if any, suggested by the committee have been incorporated by the scholar in the synopsis.

19.5   The completed Synopsis application, (Five hard copies and one soft copy) of the synopsis along with copy of receipt of payment of synopsis submission fee should be submitted to Controller of Examinations through the Research Supervisor.

19.6   The title page, cover format, type and size of fonts to be used for synopsis, should strictly conform to the format prescribed (**ANNEXURE**- IV)

19.7   It is mandatory that each scholar need to have 2 publications/acceptance letters of arising out of their Ph.D. research as first author in indexed peer reviewed (SCOPUS, WoS, PubMed) or in UGC approved journals at the time of submission of the synopsis. A (patent published or awarded) will be considered equivalent to a publication.

20.   SUBMISSION OF THESIS

20.1   The application for submission of thesis will be issued after "No Due certificate" is obtained from the Department, Finance section and Academic Office. The scholar will pay the Annual Research fee until the submission of his/her thesis.

Every scholar shall along with his/her application for the Degree of Doctor of Philosophy (Ph.D.), submit Four hard copies of the Thesis and soft copy with each thesis along with the prescribed fee to the Controller of Examinations through the Research Supervisor/Research Advisory Committee. The title page of the thesis, cover format, etc., should strictly conform to the format of presentation as prescribed **(ANNEXURE-V)** and the thesis (all copies) should carry a declaration by the scholar and certificate duly signed and issued by the Research Supervisor and Co-Supervisor, if any.   Each scholar shall submit two additional copies with all corrections incorporated prior to the Public Viva-voce examination. This corrected copy will be placed in the department / central library.

20.2   The research scholars shall submit his/her Ph.D. thesis for verification of Plagiarism. The verification for Plagiarism will be carried out as per the Policy for Promotion of Academic Integrity and

Prevention of Plagiarism of this Deemed University.   The scholar shall include the Plagiarism Verification Certificate as per format **(ANNEXURE-VII)** in the thesis.

20.3   Supplementary papers if any to the Thesis like copies of reprints of publication as contribution to the knowledge on the subject must be appended to the thesis by the research scholar.

20.4   If the thesis is accepted/ approved, the Controller of Examinations shall place a copy of the thesis in the library. The scholar should also submit one hard copy and one electronic copy after the public viva-voce examination incorporating all the corrections suggested by the examiners which will be preserved in the digital archive of the Deemed University. After award of the Ph.D. degree the summary of each thesis, along with details of the scholars would be uploaded in Shodhganga repository.

20.5.   Submission of Thesis before the minimum period prescribed
Notwithstanding anything contained in these regulations regarding the minimum period of research to be put in by scholar before becoming eligible to submit their theses for the degree, a scholar may be permitted to submit their theses earlier by a period not exceeding six months provided such request for earlier submission from candidates is accompanied by
(i)   the recommendations of the supervisor for relaxation is based on the satisfactory completion of the research work for the thesis topic with evidence that the candidates has been working consistently even prior to his/her provisional registration for the Ph.D. Degree on the topic of his/her research; and

(ii)   Evidence of having completed the required work for the thesis by way of reprints of at least two publications in the topic of Ph.D. research in indexed journals with impact factor.

The request for submission of thesis before the minimum period prescribed will be approved by the Board of Management and intimated to UGC for information.

21. EXTENSION OF TIME TO SUBMIT Ph.D. THESIS

21.1.   The Thesis shall ordinarily be submitted not later than 6 years from the date of provisional registration and subject to provisions under Regulations 3.3.

21.2.   Where a research scholar is unable to submit the thesis within the maximum period prescribed, he /she may be eligible to apply for Re-registration (Clause 31).

21.3.   In exceptional circumstances the Vice-Chancellor on the recommendation of the Research Supervisor and Research Advisory Committee, may grant and extension of up to one year after the period of re-registration is over, on payment of such penal fee as may be prescribed by the Deemed University.

21.4.   If the scholar fails to submit thesis, even after extension of time so granted, his/her registration will automatically lapse and his/her name will be taken off the rolls of registered scholars for the Ph.D. program

22. EXAMINERS

22.1   While forwarding the synopsis to the Controller of Examinations, the Research Advisory Committee will furnish a panel of nine external examiners (three from the Southern States, three from the rest of India and three from abroad) for evaluation of the Thesis and for the conduct of

public viva-voce examination as per the format to be obtained from the Controller of Examinations. All external examiners must meet the same eligibility criteria (as per Regulations 7) required for being recognized as 'Research Supervisor for Ph.D.' in this Deemed University.

22.1.1   Examiners for evaluation of Ph.D. thesis with respect to Engineering & Technology:
For Engineering and Technology Programs, there will be three examiners. The research supervisor shall be convenor and the internal examiner and there shall be two external examiners, one Indian and one International.

22.2   The Research Advisory Committee shall along with the panel enclose a certificate stating that all the examiners suggested are experts in the discipline concerned and qualified to evaluate the thesis and that they are not first degree relatives of the scholar.

22.3   The Vice-Chancellor shall, from out of the panel of nine examiners, select and appoint three examiners (one from the Southern States, preferably one from the rest of India and one from abroad). The examiners so appointed will be furnished with a copy of the synopsis for their perusal and they will be requested to convey their acceptance within four weeks to evaluate the thesis to be submitted by the research scholar subsequently.

22.3.1   For Engineering and Technology Programs, the Vice Chancellor shall appoint two external examiners from a panel of six examiners (three from India and three from overseas).

22.4   In case the first panel of nine names of Ph.D. examiners are unable to accept the examinership, the Controller of Examinations shall call for an additional panel of examiners from the Research Advisory Committee. If the additional panel is also unable to accept the examinership, the Vice-Chancellor shall appoint examiner(s) as required in consultation with experts in the relevant discipline.

23. VALUATION OF THESIS AND PUBLIC VIVA VOCE EXAMINATION TO DEFEND THESIS

23.1   The thesis shall be referred for valuation to three examiners as specified in these Regulations.

23.2   The Examiners who evaluate the thesis shall report to the Controller of Examinations on the merit of the Thesis for Ph.D. Degree as "Highly Commended", "Commended" or "Not Commended" in the format prescribed, along with a detailed report. If all three Examiners commend the thesis, such reports of the examiners will be sent to the Research Supervisor who will act as Convenor and he/she will prepare a consolidated report which shall include the main points made in the individual reports together with a reference to critical comments and suggestions, if any, made by the examiners. The scholar will then be permitted to defend his/her thesis in a public Viva Voce examination.

23.3   If one of the external examiners (India or abroad) reports the evaluation of the thesis as "Not Commended", the Vice-Chancellor, having regard to the nature of the comments of the examiner who has "Not commended" the thesis, may at his discretion, refer the thesis to a fourth examiner for evaluation and the fourth examiner so appointed shall be same category i.e. from Southern India,/rest of India / from abroad. The fourth examiner, so appointed, will not be provided with the report of the other examiners. If the fourth examiner reports the evaluation of the thesis as "Commended" the scholar will be asked to defend his/her thesis in a public Viva prescribed in these regulations. If the fourth examiner also does not "Commend" the thesis the scholar has to resubmit the thesis, after revision.

23.4   A scholar whose thesis has not been commended as specified above will be permitted to resubmit it a second time after carrying out additional work suggested and revising the thesis within a period of one year from the date of communication of the Controller of Examinations in this regard.

23.5   If none of the examiners who evaluated the thesis is available at the time of Public Viva-Voce, another examiner from the panel may be appointed by the Vice-Chancellor and such examiner will be provided with a copy of the thesis and reports of all the three examiners, well in advance before the date of Public Viva-Voce examination to defend thesis.

23.6   At least six external teachers and/or scientists in the specialty concerned or allied specialty shall be invited to be present at the public Viva-Voce in addition to the faculty members of the department in which the scholar conducted research and such of the members of the faculties, research scholars and students of the Deemed University as may be present. The Research Supervisor (Convenor) shall convey to the Controller of Examinations the result of such public Viva-Voce, duly endorsed by the external examiner together with a list of names and designations of the participants, with their signatures.

23.7   The scholar successful in defending his/her thesis in the Public Viva-Voce Examination to defend thesis shall be declared to have qualified for the Ph.D. Degree with effect from the date of the Public Viva-Voce on approval by the Vice-Chancellor and the result will be placed before the Board of Management at its next meeting, for ratification.

23.8   A scholar who is not successful public Viva –voce examination to defend thesis will be permitted to appear for the examination one more time within a period of three months.

23.9   No scholar shall be permitted to submit the thesis or defend his/her thesis for Ph.D. Degree for more than two occasions.

24. LEAVE / BREAK OF STUDY

24.1   Full time Scholars can avail maximum of 15 days of leave in a calendar year.

24.2   Full time Women scholars can avail maternity leave/ child care leave only once in the entire duration Ph.D. for up to 240 days.

25. FEE STRUCTURE FOR Ph.D. CANDIDATES

Application fee, registration fee, fee for recognition of degrees of other Universities, annual research fee for extension of time and fee for submission of synopsis and thesis shall be payable by the scholar as prescribed by the University from time to time. **(ANNEXURE – VI)**

26. PUBLICATION OF THE THESIS

An approved thesis may be published in full as a book or in parts only with the permission of the Deemed University with due acknowledgment. (Vide Declaration form in the prescribed format) However, a scholar can during the course of his/her research, publish papers in peer-reviewed/indexed research journals as advised by his/her Research Supervisor, in accordance with Regulations 19.8.

27. DECISION BY VICE-CHANCELLOR

In all other matters not specifically covered under these regulations, the Vice-Chancellor may take a decision having regard to the circumstances of the case, if deems necessary, he may refer the matter to the Board of Research Studies, for suitable recommendations for taking a decision.

28. TRANSITORY PROVISION

These revised Ph.D. regulations shall come into effect from October 2019 session. However in the case of scholar registered for Ph.D. program prior to the said session, the previous regulations shall be applicable.

29. INTEGRATED Ph.D.

29.1   Emerging areas of medical and surgical specialities are in need of research qualified manpower in view of strong operational knowledge requirement to bring about innovations in these areas which are directly applicable to Community Health and Patient Care. Hence, notwithstanding the above Ph.D. regulations, in order to encourage postgraduates in Medicine and Surgery (MD/ MS/ DM/M.Ch.) to take up the research specializations, an Integrated Ph.D. Full time program is evolved with minimum period of FIVE YEARS duration and maximum period of SIX YEARS.

29.2   Scholars during the time of admission to MD/MS courses should exercise their option to undergo the Integrated Ph.D. program and file the necessary application for registration within TWO months of their admission to the postgraduate courses, through Dean Research.

29.3   There shall be a selection process through interview by the Ph.D. Admission Committee along with invited national level experts, which may include those from funding agencies like ICMR

29.4   The first three years curriculum would be the same as that of MD/MS/DM/M.Ch. Curriculum currently approved/ modified from time to time by MCI. In this sandwich Ph.D. program, the scholar will take the Part–I Research Methodology examination at the end of the second year of the postgraduate course. They will indicate the broad field of research during the second year of the postgraduate course and the Dissertation for the MD/MS/ DM/M.Ch. postgraduate examination may form a part of their Ph.D. thesis to be submitted later.

29.4.1   except for the above all the provisions of the Ph.D. regulations will be applicable for integrated Ph.D. program.

29.5   The Research Supervisor and/or Co-Supervisor shall submit a certificate of attendance of scholar (with specific dates) to the Controller of Examinations along with half yearly progress report as per the timelines prescribed.

29.6   The above Integrated program may also be made applicable to other scholars undergoing the Master's courses in Non-clinical disciplines (Faculty of Medicine), Pharmacy, Nursing, Biomedical Sciences & Technology and other allied health sciences courses, subject to framing suitable Research Supervisory guidance for such integrated program for these disciplines and also subject to availability of recognised Research Supervisors in the respective disciplines at the Deemed University.

29.7   **Integrated Ph.D. for Engineering & Technology:** Candidates who hold a B.Tech. / B.E. degrees with an average of 75% marks or above from this or other recognized universities may be considered for an integrated PhD in Engineering and Technology. The minimum required time for a full

time student to complete the Ph.D. degree shall be four years. Integrated PhD candidates shall take six extra courses at the post graduate level compared to the regular PhD candidates to develop breadth and depth of knowledge in the field of study.

30. SPLIT Ph.D. PROGRAM:

The split Ph.D. program is designed to provide a chance to the scholar to conduct a portion of their Ph.D. work in a recognized foreign university/ Institution or a recognised Indian University with which Sri Ramachandra Institute of Higher Education and Research (Deemed University) has signed an academic and research MoU.

The basic objective of this scheme is to develop good research exposure to research scholars and future collaborative research projects and to bring the international/National Universities and research institutes and industries closer with the host Deemed University through Ph.D. Program. While eligibility, admission procedures, duration, functions of Research Advisory Committee, Research Methodology, thesis submission and valuation of thesis will be the same as per the general Ph.D. regulations, the following would be the norms and Research Supervisory guidance for conducting split Ph.D. Program.

The partnering institution in split Ph.D. Program should have signed an academic MoU with the Deemed University.

The maximum period of research that can be conducted with the partnering institution shall not exceed ONE YEAR. In case the scholar has spent longer than one year outside this University, being the place of registration, only one year shall be reckoned with for purposes of record.

The expert under whom the scholar proposes to work for the split Ph.D. program shall be suggested by the Research Supervisor/ or as a Co-Supervisor and he/she would also be a member of the Research Advisory Committee.

The progress report of work done by the scholar in the external institution shall be submitted to the Controller of Examinations through the Research Supervisor by the external expert/ Co-Supervisor once in six months during the entire period of work under the split Ph.D. program

All financial commitments required for carrying out the research work at the partnering institution shall be borne by the scholar concerned or as per the terms of the MoU.

The degree on successful completion would be awarded by Sri Ramachandra Institute of Higher Education and Research (Deemed to be University) only with a mention of the name of partnering institution under the split Ph.D. program.

30.1.   Split Ph.D. Program for Engineering & Technology :

To promote and undertake international collaboration in research, Engineering and Technology shall utilize the provisions of the Split PhD. As part of the Split PhD, a candidate shall spend a minimum of two years at this university and complete the review process and the PhD requirements. The candidate may spend up to 18 months at a partner university (aside from the requirements of this university) and carry out part of the research in the form of experiments, studies or formulation of solutions to the research problem. The collaborative work may result in one or more publications. The duration to be spent at the partner university should be justified by the needs for the particular candidate and requirements of partner university, this should be recommended by the Research Advisory Committee with the approval of the Dean (Research).

In awarding the degree, this university shall recognize the work done at the partner university by indicating that part of the work for PhD was done at the partner university. In addition, the partner university may issue a certificate or an appropriate degree recognizing the candidates work.

31. RE-REGISTRATION

The scholars who could not submit their Ph.D. thesis within the prescribed maximum duration (including permissible extensions) can apply for re-registration. The scholar should apply for re-registration providing appropriate reasons for non-completion of thesis within the prescribed period. The Vice-chancellor may grant approval of the request for re-registration considering the merit of such request.

A candidate can re-register under the same Supervisor / RAC / institution or under a fresh Supervisor / RAC / Institution with NOC. The re-registered candidate will be provided a maximum period of 2 years to submit the thesis. For re-registered candidates who change the area of research, the required period would be similar to that of freshly registered candidates. These candidates will not require NOC.

The candidates will pay a prescribed fee for Re-registration. The re-registered scholars will be governed by regulations and fees in force. These candidates are not eligible for any further extensions and their registration will be cancelled after the end of the prescribed duration of re-registration.

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SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai

ANNEXURES FOR Ph.D. REGULATIONS (2019)

Annexure No.	ANNEXURES
I (a)	Application for recognition as a Research Supervisor/ Co-Supervisor for those with MD/MS/DNB/ MDS/ DM/M.Ch./ qualification
I (b)	Application for recognition as a Research Supervisor/ Co-Supervisor for those with Ph.D. qualification
II (a)	Research Methodology Examination : Syllabus and Guidelines
II (b)	Research Methodology Examination : Syllabus and Guidelines [Engineering & Technology]
III	Format for Six monthly Progress Report
IV	Format for submission of Synopsis
V	Format for submission of Thesis
VI	Fee Structure
VII	Plagiarism Verification Certificate

ANNEXURE – I (a)

SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai

Application for recognition as a Research Supervisor/ Co-Supervisor for Ph.D. Program
(for those who have qualified for MD/ MS/ DNB/ MDS /DM / M.Ch.)

1.	Name (In capital letters)									

2.	Date of Birth	D	D	M	M	Y	Y	Y	Y	Age :

3.	Designation	
4.	Institutional address	
5.	Mobile	
6.	E-mail ID	
7.	Qualification :	

	Degree	Specialization	College and University	Month & Year of Awarded

8.	Number of years of Teaching Experience after PG Degree			
9.	Number of years of Research Experience after PG Degree			

10.	Academic / Research Positions held after PG Degree:			
	Name of the Institution	From	To	Total months/ years

11.	Thrust area of research interest (List at least 4)			
a.				
b.				
c.				
d.				
12.	Attach Brief CV			
13.	Publications	No. of publications	No. of books authored	No. of book chapters

14. Attach list four recent publications indexed in Scopus/ Web of Science / PubMed or in UGC approved list for which you are either first or corresponding author in the format given below. Also enclose the first page of the each publication

S.No	Publication Title	Authors, (Highlight first and corresponding authors)	Name of Journal/ Volume/ Page No. and Year	Indexed in Scopus/ Web of Science / PubMed/ UGC CARE journals
1.				
2.				
3.				
4.				

Signature of applicant:
Designation:
Department / Faculty:
College / University:

                        Forwarded by

                        Signature of the Head of Institution
                        (where the applicant is presently working
                        with designation and seal)

SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai

Application for recognition as a Research Supervisor / Co-Supervisor for Ph.D. Program
(for those who have Ph.D. qualification)

1.	Name (In capital letters)									
2.	Date of Birth	D	D	M	M	Y	Y	Y	Y	Age :
3.	Designation									
4.	Institutional address									
5.	Mobile									
6.	E-mail ID									
7.	Qualification :									

Degree	Specialization	College and University	Month & Year of Awarded

8.	Number of years of Teaching Experience after Ph.D.			
9.	Number of years of Research Experience after Ph.D. Degree			
10.	Academic / Research Positions held after award of Ph.D.:			

Name of the Institution	From	To	Total months/ years

11.	Thrust area of research Interest (List at least 4)			
a.				
b.				
c.				
d.				
12	Attach Brief CV			

13.	Publications	No. of publications	No. of books authored	No. of book chapters

14. Attach list four recent publications indexed in Scopus/ Web of Science / PubMed or in UGC approved list for which you are either first or corresponding author in the format given below. Also enclose the first page of the each publication

S.No	Publication Title	Authors, (Highlight first and corresponding authors)	Name of Journal/ Volume/ Page No. and Year	Indexed in Scopus/ Web of Science / PubMed/ UGC CARE journals
1.				
2.				
3.				
4.				

Signature of applicant:
Designation:
Department / Faculty:
College / University:

Forwarded by
Signature of the Head of Institution
(where the applicant is presently working
with designation and seal)

SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai

RESEARCH METHODOLOGY EXAMINATION: SYLLABUS AND GUIDELINES

Scheme of Examination

S.No	Course code	Course Title	Credits	University Examination Marks		Total
				Theory	Practical	
1.	U0218CT101	Research Methodology, Biostatistics & Computer Applications	3	100	0	100
2.	U0220CT102	Research and Publication Ethics	2	50	0	50
3.	U0218CT103	Advanced course/Analytical/Instrumentation training in area of research (exact title to be submitted by RAC)	3	100	0	100
4.	U0218CL104	Review of Literature and Research Proposal	2	0	100	100
5.	U0218CL105	Viva Voce – related to research proposal	1	0	50	50
6.	U0218GE106 (GE/GL)	Elective course** (to be chosen by scholar related to broad area of research) Exact title to be submitted by RAC)	2	0	0	Completed
		Total	**13**	**250**	**150**	**400**

*Viva-voce will be conducted relating to submission (Review of Literature and Research Proposal) made by scholar.

Passing Minimum:
➢ If scholar gets less than 40% in any paper (RA or Fail) **in their first attempt**, student has to repeat only that paper even if the aggregate is ≥ 225 (55%) and shall do so until he / she obtains the passing minimum of 40% and ≥55% in aggregate.
➢ If student gets less than 225 in aggregate, he has to **repeat all** the papers.
➢ In cases of RA in one or more papers, passing session needs to be mentioned in the new marks statement.
➢ The Pass/ Fail (RA) declared for a course in the first attempt shall be taken and in case of RA for a course that course shall be repeated until he obtains ≥ 40% for the said course and ≥55% in aggregate.

SYLLABUS - Ph.D. PROGRAM

Course No.	Course Title	Credits for program	University Exam. Marks		Grand total
		Credits	Theory	Practical	
U0218CT101	RESEARCH METHODOLOGY, BIOSTATISTICS AND COMPUTER APPLICATIONS	3	100	-	100

Learning Objectives	Learning outcomes
Learning the principles and concepts in conducting research, writing and publishing Learn basic biostatistics methods, sampling and their applications. Learn about computer applications for research Guidelines in conducting experiments on human subjects or animals.	The student should have acquired the skills to • plan a research project, • review literature; • identify a research problem; • communicate a publication; • develop study design suitable for the research undertaken • hypothesis testing, • statistical analysis • use computers for research. • Practice the principles of Good clinical practice • apply ethical principles in the conduct of research

Unit I	Introduction to Research and Review of Literature Concept of applied and basic research, need for theoretical frame work, hypothesis development for research, process of selection of research question including prioritization and feasibility, research process, process of writing a research proposal, scientific writing for thesis and research publications. Review of literature, what is review of literature, need for review of literature, primary and secondary sources for review, treatise, monographs, patents, current literature methods, abstraction of research papers, major secondary sources, bibliographic databases, web as source of information, information retrieval, information processing, critical evaluation, organization of materials collected and writing of review, methods of writing references and bibliography.
Unit II	Scales of Measurement & Measures of Disease Frequency Scales of measurement, basic concepts in response scales, types of scales, categorical scales, nominal scales, ordinal scales and interval scales, visual analogue scales, composite scales, Guttmann scale, combination scores, Likert scale, principles and approaches in questionnaire development. Measures of disease frequency and association, prevalence, incidence, crude, specific and adjusted (standardized) rates, relative risk, odds ratio, standardized mortality ratios, attributable risk and interpretation of measures of association.

Unit III	**Epidemiological Methods and Social Science Methods**
	Descriptive epidemiological studies, correlation studies, case reports and case series, design and conduct of cross sectional studies, hypothesis formulation from descriptive studies.
	Case control studies: Design and conduct of case control studies, analysis and interpretation of results, bias in case control studies.
	Cohort studies: Types of cohort studies, design and conduct of cohort studies, analysis and interpretation of results, bias in cohort studies.
	Interventional studies: Types of interventional studies, design and conduct of randomized controlled trials, analysis and interpretation of results
	Evaluating role of bias and confounding: Types of bias, control of bias, evaluation of role of bias, nature of confounding, methods of controlling confounding.
	Statistical association and cause effect relationship: Evaluation of the presence of valid statistical association, judgment of a cause-effect relationship.
	Social science methods: Different social science methods, questionnaire designing and validation.
Unit IV	**Drug discovery and evaluation**:
	Historical approaches in drug discovery, pharmacological approaches of modern medicine, new approaches in drug discovery, pharmacological evaluation of acute, sub acute, chronic toxicity studies, pharmacological evaluation methods, and OECD guidelines.
Unit V	**Descriptive statistics and Probability**
	Presentation and summarization of data, types of variables, data presentation, tables, charts and diagrams. Measures of central tendency and location, mean, median, mode, position average, and percentile. Measures of dispersion, Range, inter-quartile range, mean deviation, standard deviation and coefficient of variation.
	Probability, Probability scale, measurement of probability, laws of probability for independent events, conditional probability, Bayes theorem. Probability distribution, binomial distribution, Poisson distribution, normal distribution, t distribution.
Unit VI	**Correlation & Regression, Inferential statistics and Non-parametric methods**
	Utility of scatter plot, Correlation, linear regression, multiple regression and logistic regression.
	Sampling, Population, sample, sampling variations and bias, probability sampling methods, concepts in calculation of sample size.

	Evaluating role of chance, inferential statistics, hypothesis testing, test of statistical significance, p value, confidence intervals

Confidence interval for mean, statistical test of significance for difference between two means and more than two means (ANOVA).

Confidence interval for proportion, statistical test of significance for difference between two proportions and more than two proportions (chi-squared test).

Non parametric methods: Sign test, Wilcoxon signed-rank test, median test, Mann-

Whitney test, Kruskal-Wallis test, Friedman test, Spearman rank correlation coefficient. Advantages, disadvantages and application of non-parametric tests. |
| **Unit VII** | **Research Ethics Involving Human Participants**

Ethics and biomedical research: General principles on ethical considerations involving human subjects, ethical review procedures, Institutional ethics committee, its organization and functions, general ethical issues. Specific principles for clinical evaluation of drugs / devices / diagnosis / vaccines / herbal remedies, specific principles in epidemiological studies, specific principles in human genetic research, specific principles for research in transplantation including foetal tissue implantation. |
| **Unit VIII** | **Research Ethics Involving Laboratory Animals**

Ethical guidelines for experimental animals: Sources of experimental animals, Lab. animal husbandry and management, anaesthesia and euthanasia, laboratory animal ethics, animal ethics committee, its organization and functions, ethical guidelines for use of animals for scientific research, CPCSEA guidelines, in-vitro system to replace animals, legal provisions for experimentation of animals. |
| **Unit IX** | **Responsible Conduct of Research**

Values of research, Research misconduct & handling misconduct, Responsible authorship & publication, Peer review, Reviewing and reporting research, Mentoring, Conflict of interest, Collaborative research, Registration with Clinical Trials – Registry India, International Committee for Medical Journal Editors guidelines |
| **Unit X** | **COMPUTER APPLICATION**

Introduction to computers; Introduction to internet
Scientific research ; Stages of scientific research ; Rules for proper research ; Academic publishing ; Scientific literature - Scientific journal articles- Types - Research paper, Case series/reports, Review paper, Position paper ; Publishing process – Peer review; Scientometrics - Impact factor (IF) - Journal Citation Reports, SCImago Journal Ranking, H-index and its application |
| **Unit XI** | Citations and Referencing; Cross reference, Crossmark; Citation content; Unique identifiers - ISBN, DOI, PMID; Citation styles – Harvard and Vancouver styles; Software for referencing – Endnote, Zotero, Mendeley |

Unit XII	Scientific misconduct; Responsibility of Authors/ Co-authors, Educational institutions; Plagiarism, self-plagiarism, rogeting; Source criticism – Epistemology, Library and information science (LIS); Plagiarism detection - Computer-assisted plagiarism detection - Citation-based plagiarism detection, Stylometry, anti-plagiarism software , avoiding plagiarism.

Reference books:
1. Epidemiology in medicine, Charles H. Hennekens and Jules E.Burling.(1987)
2. Oxford Text Book of Public Health (5 th edition), volume Oxford University press.(2011)
3. Essentials of Medical Statistics by Belty R. Kirkwood.(2011)
4. An Introduction to biostatistics by P.S.S. Sundar Rau.(2006)
5. National Ethical Guidelines for Biomedical & Health Research involving human participants ICMR, New Delhi 2017
6. Guidelines for care and use of animals in scientific research. Indian National Science Academy, New Delhi .
7. Research Methodology, methods and techniques by C.R. Kothari.(2009)
8. Basic epidemiology, 2nd edition, R Bonita, R Beaglehole and T Kjellstrom (2007)
9. Statistical methods in medical research, 4th edition, P Armitage, G Berry and JNS Matthews. (2001)
10. Biostatistics: A foundation for analysis in health sciences, 9th edition, Wayne W Daniel (2008)
11. Computer fundamentals Pradip K. Singha and Priti Singha (BPB Publication)
12. The Internet: A users guide K. L. James (PHI publication)
13. Internet Research skill (SAGE publication) Niall O Dochartaigh
14. Microsoft office system (PHI publication)
15. How to keep your Research Project on Track- Keith Town send - 2018

Online Resources:
http://nptel.ac.in/
http://cpcsea.nic.in
https://icmr.nic.in/ethical_guidelines.pdf

Courses on Swayam Platform: Based on Recommendation by RAC and proof of registering

Course Title	Mentor	Institute	Link	
Biological Bases of Behavior (Web)	**Braj Bhushan**	**IIT Kanpur**	**http://nptel.ac.in/syllabus/ syllabus.php?subjectId=1 09104029**	
Ethics (Video)	Dr. Vineet Sahu	IIT Kanpur	http://nptel.ac.in/syllabus/syll abus.php?subjectId=109104 032	
Health Research Fundamentals		NIE	**https://onlinecourses.npte l.ac.in/noc1**6_hs03	http://nptel.ac.in /courses/10910 6095/
Introduction To Research		IITM	**https://onlinecourses.npte l.ac.in/noc16_ge01**	http://nptel.ac.in /courses/12110 6007/
Introduction to Professional scientific Writing	**Dr Ganesh**	IITK		

Introduction to Research (Video) >	**Dr. Prathap Haridoss; Dr. G. Phanikumar; Dr. Arun K.Tangiral**	IIT Madras	http://nptel.ac.in/syllabus/syllabus.php?subjectId=121106007	
Research Writing	Prof. Aradhna Malik	IITKGP		
CITI online		SRMC & RI		

Course No.	Course Title	Credits for program	University Exam. Marks		Grand total
		Credits	Theory	Practical	
U0220CT102	**RESEARCH AND PUBLICATION ETHICS ***	2	50	-	50

(Research and Publication Ethics UGC) https://www.ugc.ac.in/pdfnews/9836633_Research-and-Publication-Ethics.pdf

Learning description
This course has total 6 units focusing on basics of philosophy of science and ethics, research integrity, publication ethics. Hands-on-sessions are designed to identify research misconduct and predatory publications. Indexing and citation databases, open access publications, research metrics (citations, h-index, Impact Factor, etc) and Plagiarism tools will be introduced in this course.

Theory	
Unit I	**Philosophy and Ethics (3 hrs)** 1. Introduction to philosophy: definition, nature and scope, concept, branches 2. Ethics : definition, moral philosophy, nature of moral judgements and reactions
Unit II	**Scientific conduct (5 hrs)** 1. Ethics with respect to science and research 2. Intellectual honesty and research integrity 3. Scientific misconducts : Falsification, Fabrication and Plagiarism (FFP) 4. Redundant publications : duplicate and overlapping publications, salami slicing 5. Selective reporting and misrepresentation of data
Unit III	**Publication Ethics (7 hrs)** 1. Publication ethics : definition, introduction and importance 2. Best practices / standards setting initiatives and guidelines : COPE, WAME, etc. 3. Conflicts of interest 4. Publication misconduct : definition, concept, problems that lead to unethical behaviour and vice versa, types 5. Violation of publication ethics, authorship and contributor ship 6. Identification of publication misconduct, complaints and appeals 7. Predatory publishers and journals

Practice	
Unit IV	**Open access publishing** **(4 hrs)** 1. Open access publications and initiatives 2. SHERPA / RoMEO online resource to check publisher copyright & self-archiving policies 3. Software tool to identify predatory publication developed by SPPU 4. Journal finder / journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc.

Unit V	**Publication Misconduct** **(4 hrs)**
	
	A. Group Discussions
	       1. Subject specific ethical issues, FFP, authorship
	       2. Conflicts of interest
	       3. Complaints and appeals: examples and fraud from India and abroad
	
	B. Research Metrics
	       1. Impact Factor of journal as per Journal Citation Report, SNIP, SJR, IRP, Cite Score
	       2. Metrics : h-index, g-index, i10 index, altmetrics

References

Bird, A.(2006). Philosophy of Science. Routledge.
MacIntyre, Alasdair (1967) A Short History of Ethics. London
P.Chaddah, (2018) Ethics in Competitive Research : Do not get scooped; do not get plagiarized, ISBN:978-9387480865
National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009). On Being a Scientist : A Guide to Responsible Conduct in Research : Third Edition. National Academies Press.
Resnik, D.B. (2011). What is ethics in research & why is it important. National Institute of Environmental Health Sciences, 1-10. Retrieved from https://www.niehs.nih.gov/research/resource/bioet hics/whatis/index.cfm Beall, J.(2012). Predatory publishers are corrupting open access. Nature, 489(7415), 179-179.
https://doi.org/10.1038/489179a
Indian National Science Academy (INSA), Ethics in Science Education, Research and Governance (2019), ISBN : 978-81-939482-1-7. http://www.insaindia.res.in/pdf/Ethics_Book.pdf

*Research Ethics https://swayam.gov.in/nd2_ugc19_ge04/preview By Shri. Manoj Kumar K | Central University of Himachal Pradesh and 10   others

Course No.	Course Title	Credits for program	University Exam. Marks		Grand total
		Credits	Theory	Practical	
U0218CT103	**ADVANCED COURSE/ ANALYTICAL/ INSTRUMENTATION TRAINING IN AREA OF RESEARCH (Title of Course to be specified by RAC)**	3	100	-	100

Learning Objectives	Learning outcomes
To be defined by RAC	To be defined by RAC
Syllabus in Units and References to be defined by the RAC	

Course Number	Course Title	Credits for program	University Exam. Marks		Grand total
		Credits	Theory	Practical	
U0218CL104	**REVIEW OF LITERATURE AND RESEARCH PROPOSAL**	2	-	100	100

Learning Objectives	Learning outcomes
Literature review and analysis for the given research topic	Student should: • Do a Systematic review on the current status, National status and International status from Literature • Identify lacunae in research and • State two or three specific areas of research required to solve a problem

Student may submit a research proposal in a common format approval by Deemed University Ph.D. board.

Ph.D. Candidates could collect literature on the given broad area of research and do a systematic Review and meta-analyses of data. The review maybe analysed to obtain key indicators in that area.

1. Develop a viable project of personal research and the strategy to complete this;

2. Evaluate and discuss information sources available/experimental approaches/results obtained etc. as appropriate;

3. Complete the review and submit a written project Pre- Proposal which shows evidence of an understanding of research methods, access and application of information sources, and an ability to write an account of a scientific topic for a specified audience.

4. Demonstrate the exercising of individuals' reflective thinking; planning an experiment or optimizing variables (identify them from literature)

They could also identify lacunae – two or more topics such that the feasibility of finalising a research topic is possible. It should include appropriate research methodologies, tools needed and the applicability of the research in our communities; relational analysis of this area of research and its impact in that area.

References:

http://www.ccace.ed.ac.uk/research/software-resources/systematic-reviews-and-meta-analyses

Course No.	Course Title	Credits for program	University Exam. Marks		Grand total
		Credits	Theory	Practical	
U0218CL105	**VIVA-VOCE**	1	-	50	50

Learning Objectives	Learning Outcomes
Assess research ability and aptitude of the student	Supervisor and RAC members should strongly recommend and assess the feasibility of the proposed research

Student should make a 30 minutes presentation on the chosen research area, relevance, objectives, scientific study methods and its impact on research contributions. The student should also have obtained the Institutional ethical committee clearances. After this presentation a formal research proposal – with recommendations by RAC, maybe submitted to the Ph.D. Section as the Ph.D. Proposal by the student for confirmation of registration.

Course No.	Course Title	Credits for program	University Exam. Marks		Grand total
		Credits (C)	Theory	Practical	
U0218GE106 (GE/GL03)	**ELECTIVES (Title to be specified by the RAC)** (To be Chosen by scholars)**	2	-	-	-

Objectives	Learning outcomes
Topics relevant to their area of research	Student can choose to qualify is an area not already studied Encourages cross – fertilization of research fields

Student can register and complete one or more SWAYAM courses or Deemed University Pool of PG electives offered under CBCS, to gain the credits- These courses should be approved as relevant to the research by RAC and Academic Office. Electives:

1. Scholars can enroll for courses pertaining to their broad area of research interest from various different MOOCS platforms / electives offered at SRIHER.

2. The scholar shall complete one elective course (one carrying 30/60 hours of study) equivalent to 2 credits (i.e. 30 hours for theoretical courses or 60 hours for lab related courses)- online.

3. This selected course must be recommended by the RAC in advance and stipulated in the submitted coursework document.

4. The elective online Course completion certificate endorsed by the supervisor must be submitted at the time of submitting an application form for RME examination.

5. **The elective certificate should display- Title of the elective courses, the total contact hours, and % marks or grades obtained by the scholar.** The same title and status of completed or not completed shall be provided in their personalized Mark Statements.

** Syllabi for Electives offered by SRIHER (DU) are in the website and on portal.

ANNEXURE – II (b) [Engineering & Technology]

Ph.D. Course Work – Summary

S.No	Course Code	Course Title	Credits	Total
1.	ENG 600	Research Methodology	4	100
2.	ENG 605	Review of Literature	2	100
3.	ENG 615	Thesis Related Topic: A Study of a Topic Related to the Research Problem	4	100
4.	ENG 620	Research and Publication Ethics	2	50
5.	ENG 650	Viva Voce	1	50
		Total	**13**	**400**

Passing Minimum:

➢ If scholar gets less than 40% in any paper (RA or Fail) **in their first attempt**, student has to repeat only that paper even if the aggregate is ≥ 225 (55%) and shall do so until he / she obtains the passing minimum of 40% and ≥55% in aggregate.

➢ If student gets less than 225 in aggregate, he has to **repeat all** the papers.

➢ In cases of RA in one or more papers, passing session needs to be mentioned in the new marks statement.

➢ The Pass/ Fail (RA) declared for a course in the first attempt shall be taken and in case of RA for a course that course shall be repeated until he obtains ≥ 40% for the said course and ≥55% in aggregate.

ANNEXURE – II (b) [Engineering & Technology]

S.No	Course Code	Course Title	Credits	Grand total
1.	ENG 600	Research Methodology	4	100

Course Objective	Course Outcome
- To Introduce concepts of Research Methodology - To help Identify research problems, review the literature, design a research methodology, gather and analyze data - To prepare to write reports, journal articles, and thesis	- Skills to review literature, identify a problem and develop the research methodology for a study - Skills for the analysis of data - A paper on the area of research to be published in a conference

Course Description

This course provides an overview of the research methods for scientific and engineering research. Topics include: introduction to research methods and the need for those, identification of the area of research, review of literature on a given area, problem identification, scope of the problem, rationale to undertake the study, selection of research methods and tools, research design, statistical tools and principles for research, setting up experiments, scientific methods of data collection, analysis of data and arriving at conclusions, writing reports, research papers and thesis.

Unit- 1	Research Methodology - Fundamentals • Definitions of Research • Objectives of Research • Motivation for Research • General Characteristics of Research • - Types of Research
Unit -2	The Research Problem • Identification of an area of research • Identification of problems needing solutions • Selection of a research problem • Sources of the Problem • Defining a Problem • Statement of a Problem • Limitations and Delimitations • Evaluation of a Problem •
Unit -3	Review of Literature • Need of Review of Literature • Objectives of Review of Literature • Sources of Literature • Review of Literature – the Process • Review of Literature Pertaining to a given study • - Project on the Review of Literature

Unit -4	Statistical Tools and Their Applications in Research
	- Concepts in Probability and Statistics - Raw data and data analysis - Descriptive Statistics - Population and Sampling - Sampling Distributions - Regression and Correlation - Design of Experiments - Hypothesis testing - Analysis of Variance
Unit -5	Approaches to Research
	- Lab based study - Literature based study - Survey Research - Case Studies - Longitudinal studies
Unit -6	Data Collection Methods
	- Archival search - Lab experimental results and Observations - Survey responses - Focus group and other studies
Unit – 7	Analysis of data
	- Use of statistical tools - Analysis of data with statistical tools - Conclusions of the study
Unit – 8	Research Output – Reports, Journal Articles, Thesis
	- Writing research reports - Writing articles for journal publications - Writing a PhD thesis
Unit -9	Tools for Research and Analysis
	- SAS Tools - SPSS Tools - Python
Unit - 10	Preparation of a Project Report / Paper
	- Selection of a Topic - Development of Methodology - Collection and Analysis of Data - Preparation of a report

Assessment:
A publishable paper for a conference proceeding - 100%

Textbooks and References:

https://www.scribbr.com/methodology/types-of-research/
https://www.scribbr.com/category/research-paper/

https://www.scribbr.com/category/dissertation/
https://www.scribbr.com/category/research-process/

R.Pannerselvam, Research Methodology, 2nd Kindle Edition (2019)
Kothari, C. R. (1980). Research Methodology: Research and techniques, New Delhi: New Age International Publishers.
Singh, Y. K. (2006). Fundamental of Research Methodology and Statistics. New Delhi. New International (P) Limited, Publishers.
Cohen, L. Lawrence, M., & Morrison, K. (2005). Research Methods in Education (5th edition). Oxford: Oxford University Press.

S.No	Course Code	Course Title	Credits	Grand total
2.	ENG 605	Review of Literature	2	100

Course Objective
- To research the literature pertaining to the area of PhD thesis and write a review

Course Outcomes
- Identification of potential problem(s) for the study, the research methodologies employed in the past in conducting the studies and conclusions and recommendations that would be helpful for the candidate's PhD.
- A report on the review literature. Preference is for a paper communicated to a peer reviewed Scopus Indexed journal

Course description:
A self study course to apply the concepts learned in the Research Methodology course and to identify the gaps that present potential areas for future studies. Areas to consider include the problems studied in the past, methodologies employed, tools, techniques and labs used, the challenges faced in carrying out the studies, and the differences in the studies and their conclusions and the lessons that will be useful for future research.

Approach to the Course:
- Define a topic for review: Collect, Evaluate and Select the Area of Literature to Study
- Connect common themes in the literature
- Structure the review:
  o Chronological
  o Thematic
  o Methodological
  o Theoretical
  o Experimental
- Documentation
- Writing the Review:
  o Introduction
  o Content according to the structure planned
  o Conclusions
  o Recommendations
  o References

Assessment:

A Report on the Literature Reviewed - 100%

References:

https://www.scribbr.com/dissertation/literature-review/

https://www.scribbr.com/dissertation/theoretical-framework/

https://www.scribbr.com/research-process/research-proposal/

https://www.scribbr.com/dissertation/methodology/

https://www.scribbr.com/category/dissertation/

S.No	Course No.	Course Title	Credits	Total
3.	ENG 615	Thesis Related Topic: A Study of a Topic Related to the Research Problem	4	100

Course Description:

A guided self study course that is intended to provide the student with an opportunity to gain a better understanding of a topic related to the research or problem being considered. It may also involve the study of an analytical tool, an experimental method or gaining a basic understanding of a related field. The course outcome may involve the knowledge of a tool such as the Statistical Analysis involving SAS, SPSS or the application of Matlab. It may also result in an understanding of the need for computer application tools in healthcare and other areas.

Expected Outcome:

A report or a paper of publishable quality. Preference is for a paper communicated to a peer reviewed conference or a Scopus indexed journal.

Assessment:

Publishable report on the topic studied - 100%

References:

https://www.scribbr.com/category/research-paper/

https://www.scribbr.com/dissertation/methodology/

S.No	Course No.	Course Title	Credits	Total
4	ENG 620	Research and Publication Ethics	2	50

Course Description:

The course is intended to provide the student with an opportunity to make an in-depth study of an area related to the research or problem being considered. The course outcome may involve a better understanding of the research problem being studied, relevant tools and techniques or the possibilities in laying out the structure the PhD research.

Ethics in Research:

- Research process and the challenges
- Personal and professional integrity of a researcher
- Personal and professional commitment of a researcher
- Value of research and the output
- Ethics in utilizing public information
- Ethics in crediting the works of others
- Ethics in reporting the facts and the findings

Ethics in Publications:
- Importance and the value of publishing the research output
- Best practices in sharing research findings
- Best practices in publishing research findings
- Submitting the research findings for peer review
- Ethical practice in publishing one's own work
- Contributions of teams of researchers and due recognition of the works of everyone
- Ethics in professional recognition of researchers

Expected Outcome:
- Ethical practice in research and publications
- Contributing to best practices in research and publications

Assessment:
A Powerpoint Presentation on the Best Practices in Research and Publications - 50%

References:
https://www.elsevier.com/__data/assets/pdf_file/0008/653885/Ethics-in-research-and-publication-brochure.pdf
https://onlinecourses.swayam2.ac.in/ugc19_ge04/preview
http://ignca.gov.in/short-term-certification-course/research-and-publication-ethics/

S.No	Course No.	Course Title	Credits	Total
5.	**ENG 650**	**Viva –Voce**	1	50
This course is the final assessment process of the Ph.D. thesis. In preparing for the viva-voce, the Ph.D. candidate should be prepared to present an overview of the thesis, the problem studied, the rationale for the research, the methodology employed, study findings and conclusions and the recommendations for future studies. Emphasizing the contributions of the research, the viva-voce will focus answering question from the examiners and the public and defending the thesis.				
Assessment : 50%				

ANNEXURE – III

SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai

REPORT No .: ☐

Ph.D. PROGRAM - SIX MONTH PROGRESS REPORT

Schedule:

Period of six-month reports	Last date for submission
From 1st April to 30th September	31st October
From 1st October to 31st March	30th April

Period of the report From   1st April 20……   to 30th September 20…… ☐

From   1st October 20……to 31st March 20…… ☐

1.   Particulars about the scholar:

(a) Name of Scholar	
(b) Ph.D. Registration No.	
(c) Designation	
(d) Institution where working	
(e) Mobile	
(f) Email	
(g) Date of provisional registration	D D M M Y Y Y Y
(h) Category of registration	FT ☐ FT INTEGRATED ☐ PT INTERNAL ☐ PT EXTERNAL ☐
(i) Broad area of research	………………………………………………………………
(j) Working title of the proposed thesis	………………………………………………………………

(k)	Name of Dept./Institution where research is conducted	……………………………………………………………………
(l)	Has the provisional registration been confirmed If yes, give University approval	Yes ☐ No ☐
(m)	RAC meeting in the reporting period (enclose minutes)	Yes ☐ No ☐
(n)	Annual Research fee paid for the year	Academic Year : Amount Rs.: Receipt No .: Dated : Enclose receipt Yes ☐ No ☐

2. WORK DONE

(a) Does the progress of the project deviate from the approved plan for completion of the thesis? (funding, place of work, supervisor(s), working title of the thesis, methods used, schedule, etc.)

Yes ☐   No ☐

If yes please provide details as annexures

(b) Provide details of publications/ Training undergone, presentation made, project submission / approval, conference attended, attached first page of publication indicating impact factor if any:

(c) Give a brief account of the progress made and what has been achieved in the reporting period (500 words): (search of the literature, data collection, experiments, writing, dissemination of expertise, etc.)

(d) Planned activities for the next six months :

Date :   Signature of Ph.D. scholar

3. To be completed by Research Supervisor

(a) Remarks of the Research Supervisor:
(b) Overall Satisfaction with the Quality of Work: ☐   ☐   ☐ Below Expectations   Meets Expectations   Exceeds Expectations
(c) Overall Pace of Work: ☐   ☐   ☐   ☐   ☐ Too Slow   Right Pace   Hurried   Too Hurried
(d) Attendance :   i. indicate dates of leave taken (for full time scholars) ii. indicate dates of attendance at Deemed University (for part time scholars)
(e) Any other Comments / Recommendations:

I / we hereby certify that a candidate has put in necessary attendance and shown progress in his/her research and he/she may be permitted to continue research.

Name and Designation	Signature with Date & Dept. Seal
Research Supervisor:	

| **Research Co-Supervisor/ RAC Member**: | |
| **RAC Member:** | |

FOR OFFICE USE ONLY:

Date of receipt of Report	
Signature of Dealing Assistant	

SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai

GUIDELINES FOR SUBMISSION OF SYNOPSIS OF Ph.D.

1. The synopsis should be submitted not less than 3 months before submission of Thesis.

2. Every scholar must complete Ph.D. Program Review-II (Regulation No. 10.4) prior to submission of synopsis. The synopsis can be submitted after "approval to submit" is obtained from COE's office after the completion of Ph.D. Program Review-II.

3. The scholar should have at least two publications or acceptance as first author in indexed (Scopus, WoS, PubMed) journals or UGC - CARE journals at the time of submission of the synopsis.

4. Synopsis application form will be issued once the Ph.D. scholar has obtained "No Due Certificate" from Accounts and Academic Office.

5. The prescribed fee in the form of Demand Draft drawn in favour of 'Sri Ramachandra Institute of Higher Education & Research (DU)' payable at Chennai.

6. The following should be enclosed at the time of submission of synopsis.
   a) Completed synopsis application form with a copy of synopsis submission fee receipt.
   b) Original Post graduate Degree Certificate. (This will be returned after the declaration of result of Ph.D.)
   c) Photocopy of communication issued by Controller of Examinations confirming the provisional registration
   d) One hard copy of synopsis should be submitted and after approval by University level committee, the scholar required to submit 5 hardcopies and one soft copy.
   e) The synopsis should append the copy of the first page of publication/ communication from journal confirming "under review" status or acceptance. Please indicate publications as first or corresponding author in UGC approved Journals / indexed (Scopus/ Web of Science / PubMed) Journals
   f) Panel of Experts/Examiners from supervisor in a prescribed format in sealed cover

7. The format for synopsis :
   a) The synopsis should be soft bound
   b) Outer cover in white photo paper with black tape
   c) The cover page should be as per the format (enclosed).
   d) Certificate from RAC as per the format (enclosed).
   e) The content page should include page numbers.
   f) Maximum number of pages 30 (excluding title page, certificate, index, bibliography and appendix)
   g) The synopsis should be typed in A4 size 110 GSM paper
      • Double side printing
      • Font Times New Roman, size 12

- Margin 1 inch from Top & Bottom
- Margin 1.5 inch for Left & Right
- Lines Spacing: 1.5
- Page numbering starts from introduction chapter (at bottom right side)

Format for Ph.D. SYNOPSIS

Contents for a hard copy of synopsis to be submitted

Sl. No.	Contents	Guideline	No. of Pages
1	Title	A title should highlight an important aspect of the research study; important diagnostic technique; path breaking hypothesis etc. If the title carries the name of a species then Latin names (italicized) with the author citation is required e.g., *Amaranthus retroflexus* L.)- as per model given	As per format
2	Certificate	Certificate from RAC members	As per format
3	Table of Content	With page numbers	
4	Introduction, Statement of the Problem, Scope of Work, Study design and Methodology	- Nature and significance of the problem/ study- from Universal outlook to India and then Chennai - Highlights of Review of Literature - to identify the lacunae in research or justification for the problem- - Why the researcher selected this problem - Objectives- primary and secondary - Hypotheses- alternate / null (if any) - Includes a strategy for research study / Study design - Sampling and sample size; Data analysis	5 - 7
5	Results	Salient results with data	10 - 15
6	Discussion	Most important findings pertaining to the results of the study	5 - 7
7	Summary/ Conclusions	Major highlights of the present work – in list	1
8	References	Harvard or Vancouver style - APA	2
9	Appendix	- List of Publications/Submission in indexed journals by the scholar - The first page of publication or communication from the journal - List of conference presentations/ posters by the scholar	

<u>TEMPLATE FOR COVER PAGES FOR SYNOPSIS OF Ph.D. THESIS: INSTRUCTIONS</u>

1. **Please see the attached as PDF 'model template' before filling in the template for your synopsis.**
2. **Please follow the guidelines listed below for each page with reference to formatting of font & size for each sections.**
3. **If you have any doubt please contact our office for clarifications.**

Page 1 (Outer cover page)

Title of Thesis	17 Bold, Times New Roman, All Caps
Name of Candidate	16 Bold, Times New Roman , Title Case
Department & Faculty	13 Bold, Times New Roman , Title Case
Month & Year	14 Bold, Times New Roman

Page 2 (Inside cover page)

Title of Thesis	17 Bold, Times New Roman, All Caps
Name of Candidate &	
Ph.D. Reg. No.	16 Bold, Times New Roman , Title Case
Department & Faculty	13 Bold, Times New Roman , Title Case
Month (in Full) & Year	14 Bold, Times New Roman

Page 3 (Declaration Page)

Title of Thesis	12 Bold, Times New Roman, Sentence case
Name of Candidate &	
Ph.D. Reg. No.	12 Bold, Times New Roman
Name of all RAC members	11 Bold, Times New Roman
Designation and Address	10 , Unbold, Times New Roman

Note :
1. Your Ph.D. Registration number comes only in page 2
2. Delete either Research Co-Supervisor / RAC member whichever is applicable.

SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai

------TITLE------

Synopsis of the thesis to be submitted for the Degree of

Doctor of Philosophy (Ph.D.)

by

---- name ------

Department of ……….

Faculty of ----------------

SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai

-------------- TITLE --------------------

Synopsis of the thesis to be submitted for the Degree of

Doctor of Philosophy (Ph.D.)

by

----name------

---------Ph.D. Regn. No.------------------

Department of --

Faculty of ---------------------------

-------Month & year --------

SRI RAMACHANDRA
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(Category - I Deemed to be University) Porur, Chennai

DECLARATION BY THE RESEARCH ADVISORY COMMITTEE

We hereby certify that, the research described in the synopsis of the Ph.D. thesis titled **'---------
----------'** is based on the bonafide work carried out by **------------------. (Ph.D. Registration
No: ----------------------------------)** under our guidance and supervision. This work has not
previously formed the basis for the award of any degree, diploma, associateship, fellowship or
similar titles in this Deemed University or any other University or other similar Institution of
higher learning.

Name and Designation	Signature with Date & Dept. Seal
Research Supervisor:	
Research Co-Supervisor/ RAC Member: .	
RAC Member	

ANNEXURE – V

SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai

GUIDELINES FOR SUBMISSION OF Ph.D. THESIS

The prescribed fee in the form of Demand Draft in favour of 'Sri Ramachandra Institute of Higher Education and Research (DU)' payable at Chennai.

Four Copies of the Thesis should be submitted along with the Ph.D. thesis Application form and the prescribed fee. After the thesis is evaluated and prior to the public viva-voce, Two copies of the thesis with corrections incorporated (if any) should be submitted.

1. The format for Thesis :
   a. The Thesis should be in hard bound volume, white cover (without rexine cover and brass edges)

   b. The cover page and spine should be as per the format (enclosed).
   c. Declaration certificate from scholar as per format (enclosed).
   d. Certificate from Supervisor and Co-Supervisor (if any) as per format (enclosed).
   e. Plagiarism Check Certificate should be included as per format
   f. The Table of content page should include page numbers.
   g. Maximum number of pages 250 (excluding title page, certificates, Table of content, bibliography and appendix) and the weight of the thesis should **not be more than 2 kgs.**
   h. The thesis should be typed in A4 size 110 GSM paper:-
      • Thesis shall be printed double sided from Introduction
      • Font Times New Roman, size 12
      • Margin 1 inch for Top, Bottom
      • Margin 1.5 inch on either side (right & left)
      • Lines Spacing: 1.5
      • Page numbering starts from Introduction chapter to Conclusion
      • Header: chapter name for each page (font size-8) right aligned
      • Footer: title of the thesis for each page (font size-8) left aligned

Format for Ph.D. THESIS

Contents for a hard copy of Thesis to be submitted

Sl. No.	Contents	Guideline	No. of Pages
1.	Title	Approved Title	As per format
2.	Certificate	Declaration Certificate from scholar	As per format
3.	Certificate	Certificate from Supervisor and Co-Supervisor	As per format
4.	Certificate	Plagiarism Verification Certificate	As per format
5.	Index Page	With page numbers	
6.	Ethics clearance	Communication from Institutional Ethics Committee	
7.	Thesis Manuscript	- Introduction - Review of Literature - Methodology - Results - Discussions - Summary - Conclusions	Maximum 250 and less than 2 kgs.
8.	Bibliography	Harvard or Vancouver style - APA	
9.	Appendix	Those relating to study	
10.	Certifications, Publications & Presentations and awards	- Any certifications obtained as part of research studies - List of Publications in peer-reviewed indexed journals by the scholar (append full copy of all publication) - List of conference presentations/ posters by the scholar - List of awards	
11.	Plagiarism Report	From Publications Guidelines and Monitoring Committee (PGMC)	

COVER PAGE

SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai

------------------TITLE--------------------

Thesis submitted for the Degree of

Doctor of Philosophy (Ph.D.)

by

-------name----------

Department of --------------------------------------
Faculty of --

Month & year --------------------

INSIDE FIRST PAGE

SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai

-----------------TITLE----------------------

Thesis submitted for the Degree of

Doctor of Philosophy (Ph.D.)

by

------name------

Ph.D.----------------

Department of ---------------------------------------

Faculty of --

Month & year --------------------

SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai

-----------------TITLE--------------------

Thesis submitted for the Degree of

Doctor of Philosophy (Ph.D.)

by

-----name------

Research Advisory Committee

Research Supervisor:
Research Co-Supervisor/ RAC Member
RAC Member:

Ph.D. Thesis

name

thesis title

--month---------
year ---

DECLARATION

I declare that this thesis entitled '---' submitted by me for the degree of Doctor of Philosophy (Ph.D.) is the bonafide record of research conducted under the supervision of ---------------------------- and co-supervision of   -----------------------, and has not formed the basis for the award of any degree, diploma, associate ship, fellowship or similar titles in this Deemed University , any other University or other similar Institution of higher learning.

Date: Signature of the candidate

Place   -----------------------

SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai

CERTIFICATE

I certify that the thesis entitled '--'
submitted for the Degree of Doctor of Philosophy by --------------------- (PhD
RR------------------------) is the bonafide record of research work carried out
under my supervision and that to the best of my knowledge no part of this
research work has formed the basis for the award of any degree, diploma,
associateship, fellowship or other similar titles in this Deemed University, any
other University or any other similar Institution of higher learning.

Date: Signature of the Supervisor

Place: With Seal

CERTIFICATE

I certify that the thesis entitled '--' submitted for the Degree of Doctor of Philosophy by ------------------------------------ (----------------------) is the bonafide record of research work and that to the best of my knowledge no part of this research work has formed the basis for the award of any degree, diploma, associateship, fellowship or other similar titles in this Deemed University, any other University or any other similar Institution of higher learning.

Date: Signature of the Co-Supervisor

Place: With Seal

Ph.D. Thesis

of

name of scholar ----------------

SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai

ANNEXURE – VI

SRI RAMACHANDRA
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Category - I Deemed to be University) Porur, Chennai

FEE STRUCTURE FOR Ph.D. PROGRAM
(with effect from October, 2018)

Sl. No.	Particulars	Fee (in Rs.) Indian candidates	Fee (in Rs) Foreign Nationals/ NRI	Equivalent in USD ($)
1.	Application form for admission	5,000/-	10,000/-	150
2.	Admission and Provisional Registration	25,000/-	50,000/-	775
3.	Annual Research Fee for Full Time	25,000/-	50,000/-	775
4.	Annual Research Fee for Part Time (internal & external) Candidates will pay annual research fee from the date of provisional registration to till the date of submission of their thesis.	50,000/-	1,00,000/-	1550
5.	Research Methodology (Part–I) Examination – Rs.20,000/-	21,000/-	21,000/-	-
	Application form for Part–I Research Methodology Examination -500/-			
	Statement of Marks -500/-			
6.	Submission of Synopsis	25,000/-	25,000/-	-
7.	Submission of Thesis including Public Viva- Voce Examination	1,00,000/-	1,00,000/-	-
8.	For approval of Change of Supervisor or Co-Supervisor, RAC members	5,000/-	5,000/-	-
9.	Change of Institution	15,000/-	15,000/-	-

ANNEXURE – VII

![SRI RAMACHANDRA INSTITUTE OF HIGHER EDUCATION AND RESEARCH (Category - I Deemed to be University) Porur, Chennai]

PLAGIARISM VERIFICATION CERTIFICATE

[As per UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher
Educational Institutions) Regulations, 2018]

It is certified that Mr. / Mrs………………………………..…………. Regn.
No………………………………………… has carried out his / her Ph.D. research titled
………………………………………………………………………………………………………
………………………………………………………………………………………………………
…………………………………………………………………….and the said doctoral thesis has been
checked by "Urkund" Software. I have reviewed the report of the plagiarism software and the
similarity index is ………………………………….. i.e. satisfies the accepted norms of the University.
The plagiarism verification report is enclosed.

Signature and Seal of the Supervisor   Signature and Seal of the Principal/Dean

Date: Date: