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RESEARCH MANUAL



Research and Development Cell
SANGAM UNIVERSITY, BHILWARA

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SANGAM UNIVERSITY, BHILWARA

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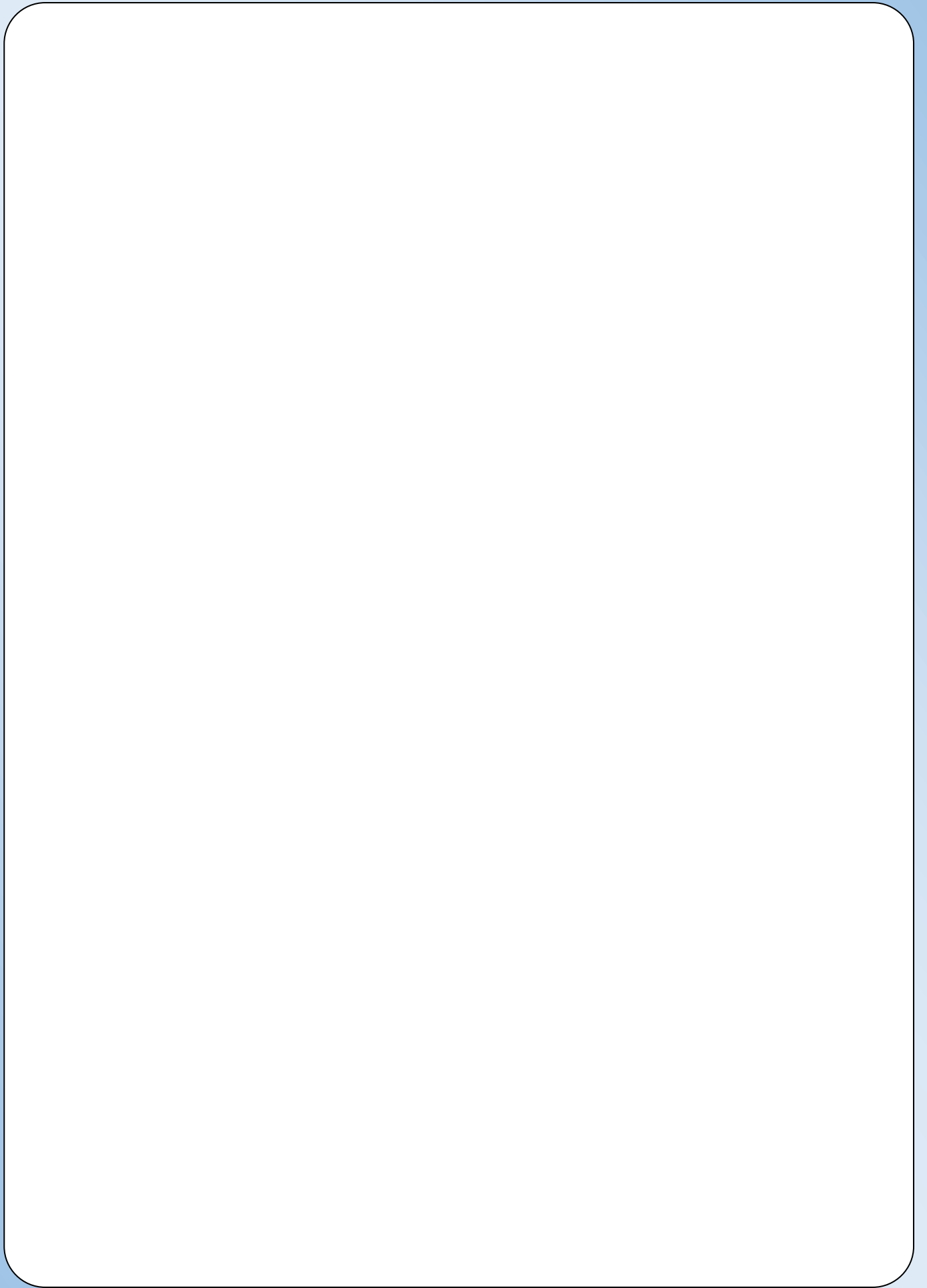
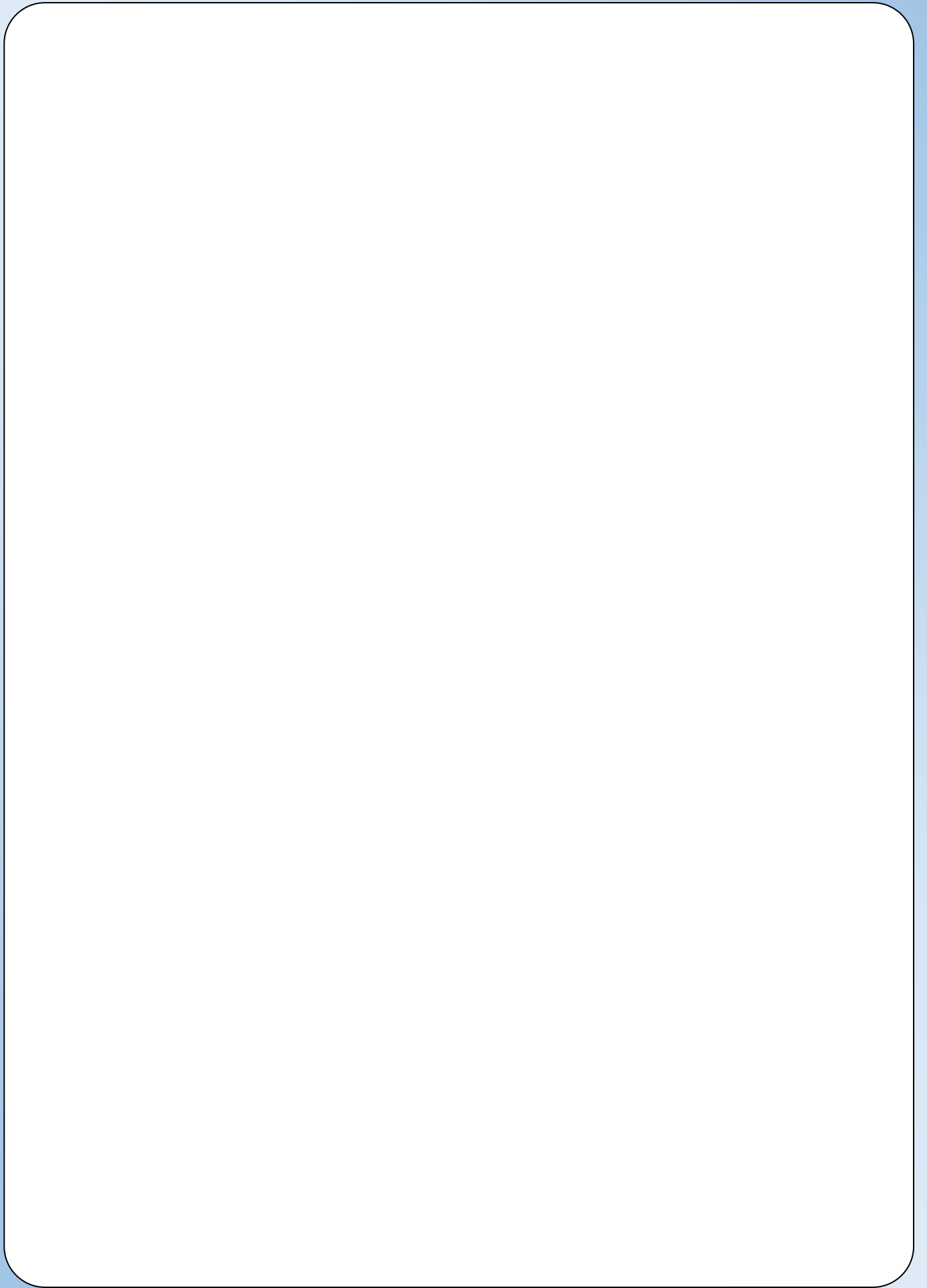


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1. PREAMBLE

The Doctor of Philosophy (Ph.D.) degree is one of the highest academic degrees awarded by a university and requires extensive study and intellectual effort. It is awarded to a candidate who has submitted a thesis or dissertation based on original and independent research in any particular subject/discipline, or more than one discipline (inter-disciplinary), and which makes a contribution to the advancement of knowledge in science, technology, humanities & social sciences.

2. DIRECTORATE OF RESEARCH (DoR)

DoR is the regulatory body for Ph.D. programs and research activities of the University.

2.1 Functions:

- 2.1.1 To coordinate with the Admission Cell and Exam Cell for conduct of the entrance examination for admission to the Ph.D. program (twice in a year).
- 2.1.2 To publish Ph.D. program regulations, details of the subject offered, vacancies in respective departments and details of the eligible Ph.D. supervisors on the University website.
- 2.1.3 To coordinate the research activity of all departments, including selection and admission of research scholars.
- 2.1.4 To organise the University Research Committee (URC) meetings.
- 2.1.5 To organise and coordinate the entire registration process.

2.2 University Research Committee (URC): There shall be one URC for the entire University

2.2.1 Constitution

President	Chairman
Pro-President	Member
All Deans	Member
Registrar	Member
Controller of Examinations	Member
Dean (Research)	Member Secretary

2.2.2 Functions

- To conduct a meeting every three months.
- To frame and revise policies for the Ph.D. programme.
- To ensure that all rules and regulations of the Ph.D. programme are strictly followed as per the UGC (Minimum Standards and Procedure for Award of Ph.D. Degrees) Regulations, 2023.
- To make periodic review of ordinances, regulations and instructions issued by UGC pertaining to the Ph.D. programme and give recommendations to the Academic Council for any modifications thereof.
- To scrutinize the biodata of prospective external research co-supervisors and to approve the issue of registration letters.

2.3 School Research Committee (SRC): There shall be one SRC for every School running Ph.D. programme

2.3.1 Constitution

Dean	Chairman
All Professors*	Members
1 Associate Professor*	Member
1 Assistant Professor*	Member
School Ph.D. Coordinator	Member Secretary

* Recognized as research supervisors and to be nominated by the President (Vice Chancellor).

** The chairman may invite more members, including a maximum of two external experts.

2.3.2 Tenure: The SRC will be constituted by the URC with approval of the President for a maximum tenure of two years. Majority of the members shall be present in the meetings.

2.3.3 Functions:

- To coordinate the research activities of the school.
- To select candidates for admission to Ph.D. programmes and allot supervisors in the relevant subject/discipline.
- To monitor the conduct of all Ph.D. courses running in the department.
- To monitor and evaluate the quality of research in the department / school.
- To take appropriate action on the recommendations of the Academic Council, URC.
- To recommend the panel of members (as proposed by the supervisor)
- To consider any matter related to the research programme of the department.
- To conduct at least two meetings in each semester and send the proceedings to DoR.
- To recommend RAC for each Scholar admitted in the school.
- External expert shall be called by SRC for the Synopsis presentation by the candidate/s

2.4 Research Advisory Committee

2.4.1 Constitution

Research Supervisor	: Chairman
One member from the concerned department	: Member
External Member	: Member
(In case of Inter disciplinary research topic)	

2.4.2 Functions

- To review the research proposal and finalize the topic of research.
- To guide the research scholar to develop the design and methodology of research and identify the course(s) that he/she may have to do.
- To periodically review and assist in the progress of the research work of the research scholar.

3. ELIGIBILITY CRITERIA FOR ADMISSION TO Ph.D. PROGRAM

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

- (i) 1-year/2-semester master's degree programme after a 4-year/8-semester bachelor's degree programme or a 2-year/4-semester master's degree programme after a 3-year bachelor's degree programme or qualifications declared equivalent to the master's degree by the corresponding statutory regulatory body, with at least 55% marks in aggregate or equivalent grade on a point scale wherever grading system is followed or equivalent qualification from a foreign educational institution accredited by an assessment and accreditation agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country to assess, accredit or assure quality and standards of the educational institution. A relaxation of 5% marks or its equivalent grade may be allowed for those belonging to SC/ST/OBC (non-creamy layer)/Differently-Abled, Economically Weaker Section (EWS) and other categories of candidates as per the decision of the Commission from time to time. Provided that a candidate seeking admission after a 4-year/8-semester bachelor's degree programme should have a minimum of 75% marks in aggregate or its equivalent grade on a point scale wherever the grading system is followed.
- (ii) In case of candidates holding a qualifying degree from foreign Universities/institutions, registration for Ph.D. at Sangam University will be confirmed after determination of equivalence by the Directorate of Research (DoR).
- (iii) A candidate would be allowed to register for Ph.D. in department relevant to his/her field of study, but the degree would be awarded from the faculty in which he/she has completed his/her PG degree.

4. DURATION OF THE PROGRAM

- (i) Ph.D. Programme shall be for a minimum duration of three (3) years, including course work, and a maximum duration of six (6) years from the date of admission to the Ph.D. programme.

- (ii) A maximum of an additional two (2) years can be given through a process of re-registration as per the Statute/Ordinance of Sangam University, however, that the total period for completion of a Ph.D. programme should not exceed eight (8) years from the date of admission in the Ph.D. programme. Provided further that, female Ph.D. scholars and Persons with Disabilities (having more than 40% disability) may be allowed an additional relaxation of two (2) years; however, the total period for completion of a Ph.D. programme in such cases should not exceed ten (10) years from the date of admission in the Ph.D. programme.
- (iii) Female Ph.D. Scholars may be provided Maternity Leave/Child Care Leave for up to 240 days in the entire duration of the Ph.D. programme.
- (iv) If a scholar fails to present his 6 monthly progress report and/or final research proposal within the stipulated time period, his/her minimum duration shall be extended accordingly but not exceeding the maximum duration of 6 years.

5. PROCEDURE FOR ADMISSION

- 5.1** Eligible candidates desirous of admission to the Ph.D. programme at SU shall apply through the online / offline application form. The candidate must ensure that the application is complete in all respects and all the necessary documents are uploaded before final submission of the application. Incomplete applications will not be accepted.
- 5.2** Normally, the candidates will be eligible for admission to the Ph.D. Program in the subject/discipline in which he/she has obtained the PG degree. It shall, however, be open for a candidate to apply for admission in another discipline related to the subject in which he/she has obtained a PG degree or has relevant work experience in the field of research. However, the University also promotes interdisciplinary research areas.
- 5.3** The candidate seeking admission as a part-time scholar must submit NOC from his/her current employer at the time of admission/registration in Sangam University.
- 5.4** Transfer Case from another University to Sangam University, Bhilwara.

- 5.4.1** Under normal circumstances, a candidate registered for Ph.D. in another University & seeking registration for Ph.D. at Sangam University, will be treated as a fresh Ph.D. candidate. He/she has to apply afresh and follow the registration process accordingly.
- 5.4.2** No credit will be given for work done in the previous registration. However, in special cases, such as the supervisor joining SU, the URC may permit a candidate registered with the supervisor in his/her earlier University, to transfer accumulated credits and register at Sangam University.
- 5.4.3** Registration for Ph.D. for such candidates will be through a protocol presentation covering all details of the case and work already done, to the URC. The URC, if satisfied with merits of the case, may recommend his/her registration at Sangam University.
- 5.4.4** In case the URC is satisfied, it may allow transfer of credits for the course work completed during the earlier registration. URC may also allow the work done during the earlier registration.
- 5.4.5** Such candidates will be required to submit a letter regarding cancellation of registration for Ph.D. from the previous University.
- 5.4.6** In case of relocation of an Ph.D. woman scholar due to marriage or otherwise, the research data shall be allowed to be transferred to the University to which the scholar intends to relocate, provided all the other conditions in these Regulations are followed in letter and spirit and the research work does not pertain to the project secured by the parent institution/ supervisor from any funding agency. The scholar will however give due credit guide in the parent institute for the part of research work already done.

6. ADMISSION PROCEDURE

- 6.1** There shall be two sessions for selection/provisional registration of research scholars in an academic year as follows:
- 6.1.1** January- June
- 6.1.2** July-December

6.2 The notification for the Ph.D. admissions shall be made available on SU website; Advertisement shall be circulated in the regional dailies.

6.3 The number of seats for admission, subject/discipline-wise distribution of available seats, criteria for admission, procedure for admission, and all other relevant information related to the Ph.D. program shall be made available on the SU website.

6.4 The procedure for selection of candidates for admission shall be based on both entrance test and personal interview.

6.4.1 Entrance Examination:

- The entrance examination will consist of 100 multiple choice questions of equal marks containing 50 questions each from Research Aptitude and Subject specialisation.
- There will be No Negative marking for incorrect answers.
- Candidates who have passed NET/JRF/SLET/GATE examinations are exempted from the written examination.
- Candidates will be selected as per the number of vacancies in the department.
- The Score / Application of the Entrance test shall be valid for two consecutive cycles of admission subject to availability of seats in the department / School.

6.4.2 Personal Interview: All the candidates have to appear before the interview board duly constituted by the SRC. Constitution of the Interview Board is as follows

1. All SRC members
2. Prospective supervisors

6.4.3 Functions: Interview board will ensure the transparency in the interview process, and proper evaluation of the applicant's subject knowledge, research and presentation skills i.e., whether: the candidate possesses the competence for the proposed research and look into the aspect that research work can be suitably undertaken at the University. The proposed area of research should contribute to new / additional knowledge.

6.4.4 The merit list duly approved by the URC nominee prepared by the interview board will be submitted to the DoR.

6.4.5 The CoE will compile and upload the final result on the University webpage after approval of the Hon'ble President.

7. ALLOCATION OF RESEARCH SUPERVISOR

7.1 The allocation of research supervisor for a selected research scholar shall be depend on the number of scholars per research supervisor as decided by the DoR, the available specialisation among the supervisors and research interest of the scholars as indicated by them at the time of interview.

7.2 Mutual consent of prospective supervisor & scholar will be duly considered but not binding during finalisation of Ph.D. Supervisor.

7.3 For external part-time candidates, there may be a co-supervisor at the place of work (University/ College/ Institution), if required.

7.4 The SRC will ensure that the selected research topic by the respective supervisors is novel and not a repetition of the work done earlier by the supervisor.

7.5 Candidates will have to qualify the entrance test and interview in his/her research discipline.

7.6 Upon qualifying, he/she will be registered in the faculty of his/her PG specialisation. The candidate will be assigned one supervisor/ co-supervisor from the Department/ School.

7.7 Based on the research requirements and recommendation of SRC, a co-supervisor from another Department can be appointed.

8. ELIGIBILITY AS RESEARCH SUPERVISOR

8.1 All Professors (with Ph.D. degree) working on regular basis in the Departments/ Schools/ Faculty of Sangam University, with at least 5 research publications in refereed journals and all regular Associate/Assistant Professors of Sangam University (with a Ph.D. degree) with at least 3 research publications in peer reviewed journals/reputed journals, can be recognized as research supervisors.

NOTE: The upper age limit for continuation of Supervisor is 70 years.

- 8.2** Scientists/Researchers working on a regular basis in various regional and national institutions / research laboratories/organisations/industries (which are recognized as research centres by Sangam University) and fulfilling UGC Regulations (as in force) will also be eligible for supervising research as external co-supervisors at Sangam University.
- 8.3** A research supervisor/co-supervisor who is a Professor, at any given point of time, cannot guide more than 8 Ph.D. scholars. Associate Professor and Assistant Professor as research supervisor can guide up to a maximum of 6 and 4 Ph.D. scholars respectively (counting one) for each scholar guided alone and ½ for guiding a scholar as co-supervisor). These will include part-time scholars and Ph.D. candidates registered with other Universities / Institutions, if any.
- 8.4** Further, a research supervisor cannot take more than 2 new research scholars in an academic session (July-June). However, to increase the number of research scholars working under eminent scientists/ academicians, the decision is left to the discretion of the President, based on the merit of the individual case.
- 8.5** No person will be allowed to guide his / her close relatives
- 8.6 Responsibilities of research supervisor**
- 8.6.1** To guide the scholar to select a problem / question for research.
- 8.6.2** To suggest the courses for Ph.D. course work.
- 8.6.3** To monitor the progress of the scholar.
- 8.6.4** To approve and forward all applications of the scholar.
- 8.6.5** To provide or arrange necessary facilities for carrying out research work.
- 8.6.6** To arrange for a change of supervisor(s), in the event of his/her leaving the University or going away from the University for a period of more than one year.
- 8.6.7** To suggest a panel of examiners to the DoR.
- 8.6.8** To ensure that the scholar has deposited all the fees regularly.
- 8.7** Guidelines for outside academicians/ researchers to register as Ph.D. co-supervisor at Sangam University.
- 8.7.1** Application for appointment as an external co-supervisor will be sent through the supervisor of the research scholar at Sangam University based on his/her requirement.

8.7.2 The eligibility of the proposed external co-supervisor will be ascertained by the DRC and approved by the DoR.

8.7.3 The approved person will then be registered as external co-supervisor till the completion of the Ph.D. of the research scholar at Sangam University.

8.8 Change of Supervisor: In exceptional cases, applications from a research scholar for change of research supervisor (s) shall be permitted on recommendation of the SRC after obtaining the consent of the present and proposed supervisor(s). Change of supervisor for the candidates not covered under above will be decided by URC as per vacancies and research topic of the student.

8.8.1 Supervisor leaving Sangam University/ resigning/ passing away:

8.8.2 If the research supervisor is on official leave for more than one year, or passes away, a new supervisor will be appointed by the DoR from the Department, subject to approval by URC.

8.8.3 Due to movement of faculty from Sangam University, who were supervising Ph.D. candidates, he/she can continue as supervisor if the candidate has submitted a synopsis before his/her movement for a maximum period of 1 year which may be extended to another period of 6 months with approval from the president.

9. PROGRAMME STRUCTURE

***Plagiarism, thesis evaluation and viva voce charges (To be submitted before Pre-Submission) as decided by Sangam University shall be paid by the candidate.**

The research scholar needs to pay the tuition fees regularly every semester till submission of the thesis. Late Fee as decided by the Management may be imposed if the fee is not submitted in given timelines.

9.1 Ph.D. Course Work & Progression

- (i) All the Ph.D. scholars will be required to undergo one-semester course work.
- (ii) All the Ph.D. Scholars will be required to attend the course work regularly during the Semester.
- (iii) A semester will be of 90 working days.
- (iv) Course work will consist of following:
 - A. Research Methodology

- B. ICT Lab Work/ Presentation
- C. Research & Publication Ethics
- D. Dissertation

End semester examination for Paper-I will consist of theory/ practical paper of 100 marks each for the above subjects. Candidates are required to pass in theory/ practical papers by scoring minimum of 55% marks.

- (v) Course work Dissertation will cover major research techniques and methodologies relevant to the area of research of the candidate as well as a review of relevant literature. Each department is free to design the curriculum for Dissertation based on the scholar's research requirement. Ph.D. students are expected to carry out course work for Dissertation on a self-study basis under supervision of concerned department.
- (vi) The candidate will be required to prepare an Assignment for End Semester Examination of Dissertation based on the review of relevant literature and research techniques and methodologies. The candidates will be required to make a presentation during Viva-Voce. On the basis of marks awarded in various courses by the examiners and performance in the Viva-voce, University will award grades for the course work. Candidates who fail in their coursework will be required to reappear in course work examination as and when the same is offered by the University.

SCHEME OF EXAMINATION OF Ph.D. COURSE WORK

Paper Code	Name of the Paper	Assignment Marks / Internal	Semester Exam Marks/Viva	Total	Contact Hours	Paper Credit	Exam Duration
RES-I	Research Methodology	40	60	100	3 L+1 T	4	3 Hrs.
RES-II	ICT Lab Work / Presentation (Practical)	40	60	100	2 P	2	1 Hr.
RES-III	Coursework related to Thesis Writing (Dissertation)	40	60	100	6 P	6	Report
RES-IV	Research and Publication Ethics	40	60	100	2 L	2	2 Hrs.

Total Credit for Paper 1: L (3)-T (1)-P (2): Total Credit 6

L = Lecture, T = Tutorial, P = Practical

Details syllabus of course work is as per ANNEXURE-1.

9.2 Research Progress

Every six months, research scholars must submit a progress report in prescribed format (ANNEXURE-2) to indicate satisfactory progress to the Supervisor, until submission of the thesis. The SRC will evaluate the progress through an open seminar and submit the evaluation report in prescribed format to the DoR.

NOTE: Failure to submit half yearly reports shall lead to automatic cancellation of registration.

9.3 Change of Area of Research and Title of Ph.D.

In general, any change in the title of the thesis is not permitted. However, requests for change of research specialization (within the approved broad area) shall be submitted to SRC with satisfactory academic reasons and subsequently approved by URC. Such requests shall be permitted only once. The SRC shall ensure that the course work undertaken by the scholar is relevant to the subject/ discipline requested for change.

9.4 Synopsis Submission

GUIDELINES FOR THE Ph.D. SYNOPSIS

Choosing your research problem

Topic of research or the research problem should be chosen with care because it will play a vital role in the Ph. D. program as well as shaping ones career. The first step in this direction should be to identify the broad area which usually is the area of specialization in post-graduation. You should choose an area where you feel the urge to explore deeper, which excites you because research is a long and arduous journey and there may be moments when only your passion for the subject will drive you. At the same time, it is important to see the practicality of the topic. Scholars in the applied subjects must gauge the practical utility of the proposed topic while scholars in humanities must be aware of the recent trends. Flipping through standard journals of respective subjects will certainly help in knowing the recent trends in research as well as confirming the uniqueness of the problem that you have in mind. In this regard, the Shodhganga portal of UGC is very useful to know the recently submitted Ph.D.'s in various universities across

India as well as formulation of the research topics. Supervisor with his experience and knowledge will help you in knowing about the practicality, facilities available and other practical aspects. Summing up, selection of topic will depend upon specialization, interest, contemporarily, uniqueness, availability of facilities and manageability.

Writing your Synopsis

Significance of synopsis or the research proposal cannot be overrated. Synopsis is virtually a blueprint of research which will guide you throughout your Ph.D. program. It will also act as a reference point for the examiner in evaluating your final thesis.

It is recommended that the synopsis must follow the format specified by the University and shall include following points:

1. Introduction

Introduction may include a brief background of the problem followed by necessity, utility and importance/ significance of the proposed research work for the Ph.D. Thesis. Introduction should be as brief as possible.

2. Literature Survey

Literature review surveys, scholarly articles, books and other sources (e.g. dissertations, conference proceedings) provides a description, summary, and critical evaluation of each work relevant to your research problem. It can be arranged thematically or chronologically. Works cited in the literature survey must have proper Referencing. The review of literature should lead to synthesis and identification of research gaps.

3. Objectives

In this section the scholar is supposed to give clear cut objectives of the research work related to his/ her proposed Ph.D. Thesis. Objectives shall be precisely stated, in numbered form.

4. Scope, Limitations and Delimitations

Scholar is supposed to state the scope, limitations and delimitations of the investigations/study.

Scope means what does your proposed research cover and what are its boundaries.

Limitations are the shortcomings, conditions or influences that cannot be controlled by the researcher that place restrictions on his/ her methodology and conclusions. Any limitations that might influence the results should be mentioned.

Delimitations are choices made by the researcher which should be mentioned. They describe the boundaries that you have set for the study, for example, the things that you are not doing (and why you have chosen not to do them); the population you are not studying (and why not); and the methodological procedures you will not use (and why you will not use them).

5. Research Methodology/ Requirements of the Research Work

This section should be precise, focused and must include the following:

Statement of Research Problem: Research design: The design of a study defines the study type (e.g. descriptive, correlational, semi-experimental, experimental, review, meta-analytic) and sub-type (e.g., descriptive-longitudinal case study), independent and dependent variables, research questions, hypotheses, experimental design, and if applicable, data collection methods and a statistical analysis plan.

Synopsis is to be prepared as per the format and content guidelines given in ANNEXURE 3.

9.5 Guidelines for Thesis Submission

9.5.1 Format of Thesis Preparation:

This document lists the general and specific requirements governing thesis preparation including guidelines for structuring the content (ANNEXURE-4)

9.5.2 Guidelines for Pre-Thesis Submission:

The University will conduct pre-submission presentation for which only those scholars will be eligible who have:

- a. Completed at least thirty-four months from the date of their respective date of admission.
- b. Successfully cleared Ph.D. Course Work examination.
- c. Submitted all six-monthly progress reports through their supervisors,
- d. Published at least three research papers in international/national (In a UGC listed Journal) journals of repute having good impact factor, co-authored with their respective supervisors, as research scholars of Sangam University, Bhilwara,
- e. Cleared all pending dues.
- f. Completed their proposed work as approved in Synopsis and are ready for presentation of their work.

Such candidates, whenever they become eligible for pre-submission presentation, may apply to the DoR through their respective supervisors in the prescribed application (ANNEXURE-5).

- (i) Two copies of spiral bound draft of complete thesis.
- (ii) Supervisor should forward soft copy of the thesis to research cell after ensuring that the thesis has been prepared as per the standards laid down with forwarding from Dean of respective School.
- (iii) No dues certificate from accounts, Library, Department Library, Research Section and Student Section shall be obtained.

It is worth mentioning that research scholars are supposed to defend their research work before the Pre-Submission Board by way of a presentation of followed by a session of questions–answers for which they should mail their PPT presentation through their supervisors two days prior to the date of viva. It is expected that apart from meeting out the objectives of the research work

with suitable research methodology, scholars should be able to present their work to the satisfaction of the Board.

Further, they must have all the data (experimental readings/ questionnaires/ interview schedules/ photographs etc.) relevant to their research, at the time of presentation for ready reference.

9.5.3 Guidelines for Submission of Final thesis

- (i) After getting approval from the Pre-Submission Defense Committee the candidate can finalize his/ her thesis. The supervisor shall intimate to the DoR that the thesis is ready for submission (ANNEXURE-6). He/ She shall make sure that the thesis is presentable in all aspects and shall forward three copies of the summary of the thesis to the University. The candidate shall submit his/her thesis within six months of the intimation of the supervisor and only in extraordinary cases shall the President extend the time.
- (ii) The thesis (**SIX COPIES**), when received, shall be referred for evaluation to the supervisor and two External examiners, who will be appointed in the following manner. The supervisor (the main Supervisor in case of co-supervision) of the candidate will suggest a panel of eight names (out of eight names, four names must be from outside India/ State) of external experts (including adequate data regarding designation and address) competent to evaluate the thesis. The panel will be submitted to the President, who will appoint two external examiners out of this panel. If necessary, he/she may call / recommend for additional names for the panel from the supervisor. The viva voce examination based, among other things, on the critiques given in the evaluation report, shall be conducted by the Research Supervisor and at least one of the two external examiners and shall be open to be attended by Members of the University Research Committee (URC), all faculty members of the Department, other research scholars and other interested experts/ researchers.

(iii) The viva-voce of the research scholar to defend the thesis shall be conducted only if the evaluation report(s) of the examiner(s) on the thesis recommends acceptance. If one of the evaluation reports of the examiner in case of a Ph.D. thesis recommends rejection, the Institution shall send the thesis to an alternate examiner out of the approved panel of examiners and the viva-voce examination shall be held only if the report of the alternate examiner is satisfactory. If the report of the alternate examiner is also unsatisfactory, the thesis shall be rejected, and the research scholar shall be declared ineligible for the award of the degree.

9.6 Award of the Degree/ Provisional Certificate

9.6.1 After satisfactory completion of the viva-voce examination, the report of viva- voce will be submitted to the office of CoE by the DoR with approval by the Chairman, URC.

9.6.2 Provisional Certificate, if requested, will be issued on payment of prescribed fee.

9.6.3 The Provisional Certificate will be valid till the next convocation of the University.

9.6.4 The date of award of Provisional Certificate will be the date of successful completion of the viva voce examination.

10. REREGISTRATION

10.1 Scholars who fail to complete the Ph.D. work within the prescribed time limit will be given only one chance to re-register for Ph.D., provided they continue the same topic under the same supervisor. They must apply for re-registration prior to the expiry of the prescribed maximum period.

10.2 The re-registered scholars are permitted to submit the thesis after one year but not later than two years after re-registration.

10.3 Re-registered scholars will continue to be governed by the same regulations under which they have been previously registered. However, the fees must be

paid as per the regulations in force.

11. CANCELLATION OF REGISTRATION

- 11.1** Requests for cancellation of the Ph.D. registration may be submitted either by the research supervisor or by the scholar. However, the final decision rests with the URC.
- 11.2** The cancellation may be revoked upon request within three months to a maximum of 5 years after the date of cancellation by paying the prescribed cancellation revoke fee, along with the fees due to the University. After this period, the registration shall be cancelled once for all.
- 11.3** The Research Supervisor may recommend the cancellation of the registration of his / her scholar if they fail to show reasonable progress and are not in contact with the supervisor. Non-Submission of Six-Monthly progress reports for two consecutive semesters may be considered as reasonable ground for the same.

12. DEGREE REQUIREMENTS

- 12.1** The essential requirements for the award of Ph.D. degree to scholars are as follows:
- 12.2** Minimum CGPA of 5.5 in Course Work. Examination completed within the first year of provisional registration.
- 12.3** Institute residential requirement of 18 weeks.
- 12.4** Three Research Articles to be published in UGC CARE listed Journals.
- 12.5** Satisfactory defence of thesis during viva-voce examination
- 12.6** Satisfactory completion of all the stages of the programme including Pre-Thesis Viva.

ANNEXURE- 1

(Syllabus of Pre-Ph.D. Course work)

PRE. PH. D. COURSEWORK SYLLABUS

Paper-I: Research Methodology

Teaching Scheme

Lectures: 04 Hrs/week

Examination Scheme

Duration: 3 Hrs

Theory: 100 Marks

Course objectives:

- To understand the role of research methodology in engineering
- To understand literature review process and formulation of a research problem
- To understand data collection methods and basic instrumentation
- To learn various statistical tools for data analysis
- To learn technical writing and communication skills required for research
- To create awareness about intellectual property rights and patents

Unit –I: Introduction to Research Method

(08 hrs.)

Definition of research, Nature and scope of research , Importance of research in current scenario, Characteristics of research, Types of research- Descriptive vs. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical, Overview of research methodology in various areas of engineering/Management/Legal Studies/ Basic and Applied Science, Introduction to problem Identification and solving, basic research terminology such as Exposition, concept, construct, types of variables , definition and types of hypothesis, proposition etc., Role of Information and Communication Technology(ICT) in research.

Unit –II: Research Problem Formulation and methods

(08 hrs.)

Literature review, sources of literature, various referencing procedures, maintain literature data using Endnote2, Identifying the gap areas from the literature review and research database, Problem Formulation, Identifying variables to be studied, determine the scope,

objectives, limitations and or assumptions of the identified research problem, Justify basis for assumption, Formulate time plan for achieving targeted problem solution, Important steps in research methods: Research design , types of Observation and communication , Laws and Theories, Development of Models. Developing a research plan: Exploration, Description, Diagnosis and Experimentation

Unit-III: Data collection

(08 hrs.)

Static and dynamic characteristics of instruments (structured and unstructured questionnaire) used in experimental setup, calibration of various instruments, sampling methods, sample size determination, methods of data collection, Selection of Appropriate Method for Data Collection, Data collection using a digital computer system, case studies of data collection

Unit –IV: Planning & doing Data Analysis

(08 hrs.)

Editing , coding and data entry ,Data processing, data analysis strategies, and tools, data analysis with statistical packages, Basic Concepts concerning testing of hypotheses, procedures of hypothesis testing, generalization, and interpretation Applied statistics: Regression analysis, Parameter estimation, Univariate and Bivariate Multivariate statistics, Factor analysis , T test , Z test , chi square tests, Principal component analysis Software tools for modelling, Simulation, and analysis

Unit-V: Research reports and Thesis writing

(08 hrs.)

Structure and components of scientific research reports, types of research report, developing a research proposal. Thesis writing: different steps and software tools in the design and preparation of thesis, layout, structure and language of typical reports, Illustrations and tables, bibliography, referencing and footnotes, word processing tools such as Latex Oral presentation: planning, software tools, creating and making effective presentations, use of visual aids, importance of effective communication.

Unit-VI: IPR

(05 hrs.)

IPR: intellectual property rights and patent law, techniques of writing a Patent, filing procedure, technology transfer, copyright, royalty, trade-related aspects of intellectual property rights

Reference/Text Books:

1. Donald R cooper Pamela Schindler, Business Research methods, 13th Edition, McGraw hill, New Delhi
2. Ranjit Kumar, Research Methodology: A Step by Step Guide for Beginners, SAGE publications Ltd., 2011.
3. Zikmund, W.G., Business Research methods, Cengage, latest edition
4. S.D. Sharma, Operational Research, Kedar Nath Ram Nath & Co., 1972
5. B.L. Wadehra, Law relating to patents, trademarks, copyright designs and geographical indications, Universal Law Publishing, 2014.
6. C. R. Kothari, Research Methodology: Methods and Trends, New Age International, 2004

Paper-II: ICT LAB WORK

Teaching scheme
Lectures: 02 Hrs/week

Examination Scheme
Theory: 100 Marks
Duration: 1 Hrs

Unit-I: Word Processing:

Word features, Creating, Saving and Opening Documents in Word, Interface, Toolbars, Ruler, Menus, Keyboard shortcut, Editing, Previewing, Printing and Formatting a document, Advanced Features of MS Word, Find and replace, using thesaurus, Using Auto-Multiple Functions, Mail Merge, Handling Graphics, tables and Charts, Covering a word Document into various Formats like –Text, Rich Text format, WordPerfect, HTML,PDF etc.

Unit-II: Worksheet:

Excel: Worksheet Basics, working with single and multiple workbook, working with formula & cell referencing, Auto sum, Copying formulae, Absolute & relative addressing, Worksheet with ranges, Formatting of worksheet, Previewing and printing Worksheet, Graphs, and charts, Database, Creating and using Macros, Multiple Worksheets-concepts, creating and using, Data analysis and display.

Unit-III: Presentation:

PowerPoint: Creating Slideshow with animations. Auto Wizard, Creating a blank presentation, auto layout, Screen layout, and views, insert a new slide, applying design template, changing slide layout, reordering and hiding slides, slideshow, and editing custom slide, resizing a textbox, Text Box Properties, Delete a text Box, Bulleted Lists, numbered lists, adding notes , video and audio, Adding text editing options, Formatting text, Replace fonts, Line spacing ,change case spelling check, colour schemes, Adding clip art, Adding an image from a file, Editing graphic, Auto Shapes, WordArt, backgrounds, Action Buttons, Slide Animation, Preview Slide transactions, Slide Show options, Slide Master, Header and Footer, Slide Numbers, Date and Time.

Educational and Research Resources on Net: Encyclopaedia, Wikipedia, On-line Tutorials, and lectures, virtual labs, Open Course-wares, Electronic Journals, E-Books, digital Libraries, and Searching research Information.

Unit-IV: Professional Written Communication:

Students prepare E-mails, Letters, memos, proposals, formal and informal reports, work plans, and progress reports.

Unit-V: Oral Communication:

Impromptu and Extemporaneous methods of delivery. Oral Presentations using visual aids such as handouts, overhead transparencies and presentation software such as PowerPoint.

Paper-III: DISSERTATION

Teaching scheme
Lectures: 06 Hrs/week

Examination Scheme
Theory:100 Marks

Assignment related to Paper-III: DISSERTATION (Cover Research Techniques and Methodology relevant to the area of research work)

- Q.1** Every research activity is guided by a goal and is undertaken to meet a certain requirement. What is the goal of your research project? Discuss the importance of your research project and the requirements expected to be met on completion.
- Q.2** Every research problem has a genesis and is supposed to be unique. What was the base of choosing your research area and how can you satisfy that it is unique? Discuss with details of initial work and basis of claiming its uniqueness, with details examined.
- Q.3** What do you understand about research methodology? Discuss various types of research and justify categorization of your project into the specific type of research. What could be the possible problems and limitations of your work?
- Q.4** How would you prove your point of view? Explain the design of research and approach to proving or disproving your assessment and statement of the problem.
- Q.5** What type of data do you need to collect for your research work? Describe your approach to the following:
- Research design
 - Questionnaire / experiment design
 - Date type and approach to data collection
- Q.6** What do you understand by data analysis and inference? Explain your approach to the analysis of data and making inferences.
- Q.7** How references and bibliography are appended in the text and report? Discuss the use of references in various documents like a research paper, Report, Presentation etc. Give examples of each.
- Q.8** Write a short note on the following:
- Hypothesis making and proving
 - Sampling design and data collection
 - Tools for data analysis and report writing

Paper-IV: RESEARCH AND PUBLICATION ETHICS

Teaching scheme:
Lectures: 02 Hrs/week

Examination Scheme
Theory: 100 Marks
Duration: 3 Hrs

OVERVIEW

- This course has a total of 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.

SYLLABUS IN DETAIL

Theory

- **UNIT-1: PHILOSOPHY AND ETHICS (4hrs)**
 1. Introduction to Philosophy: definition, nature and scope, concept, branches
 2. Ethics: Definition, moral philosophy, nature of moral judgments and reactions.
- **UNIT-2: SCIENTIFIC CONDUCT (4hrs.)**
 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-3: 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 contributorship
 6. Identification of publication misconduct, complaints and appeals
 7. Predatory publishers and journals

PRACTICE

UNIT-4: OPEN ACCESS PUBLISHING (4hrs.)

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

UNIT-5: PUBLICATION MISCONDUCT (4 hrs.)

A. Group Discussions (2 hrs.)

1. Subject specific ethical issues, FFP, authorship
2. Conflicts of interest
3. Complaints and appeals: examples and fraud from India and abroad

B. Software tools (2 hrs.)

1. Use of plagiarism software like Urkund, Turnitin and other open source software tools.

UNIT-6: DATABASES AND RESEARCH METRICS (7 hrs.)

A. Databases (4hrs.)

1. Indexing databases
2. Citation databases: Web of Science, Scopus etc.

B. Research Metrics (3hrs.)

1. Impact factor of journal as per Journal Citation Report, SNIP, SJR, IPP, Cite Score
2. Metrics: h-index, g index, i10 index, altmetrics

ANNEXURE-2

SIX MONTHLY PROGRESS REPORT FORMAT

Date: _____

To,

Directorate of Research
Sangam University, Bhilwara
NH-79 Chittor By-pass Road,
Bhilwara-311001
(Rajasthan)

Subject : Submission of Six Monthly Progress Report of Ph.D. work

Dear Sir,

I am submitting herewith six monthly progress reports from the period of.....to My admission date is.....

I have shared the progress of the work with the guide and the report is prepared in consultation with the Research Guide.

Yours sincerely,

(Signature)
Research Student
Name:
Reg.No.
Department:
Name of Supervisor:
Name of Co-Supervisor:

Signature of Supervisor

Signature of Co-Supervisor

Details of Conference Presentation/Workshops etc. attended

Conference Presentations:

Workshops & Training Programme Attended:

Give account of your work plan for the next six months.

Remarks of the Research Guide	
1	
2	
3	
4	Overall Satisfaction with the Quality of Work: Below Expectations Meets Expectations Exceeds Expectations
5	Overall Pace of Work: Too Slow Slow Right Pace Hurried Too Hurried

Signature of Supervisor/Research Guide

Signature of Dean

Date:

FOR OFFICE USE ONLY:

Date of Receipt from the Research Student	
Report Submitted Within Time / Late Submission	
Date of Next Report	
Signature of Dealing Assistant	

ANNEXURE-3

.....TITLE OF SYNOPSIS.....



A
Synopsis
of
PROPOSED PLAN OF RESEARCH WORK

for
Title Registration to the Degree of
DOCTOR OF PHILOSOPHY

in
----- <Name of Subject> -----
under the
Faculty of -----

Submitted by
----- <Name of Research Scholar> -----

Under the Supervision of
----- <Name of Research Supervisor(s)> -----
Designation
----- <Name of Department > -----
----- <Name of College > -----

**SANGAM UNIVERSITY
BHILWARA (RAJASTHAN)-
311001 INDIA**

Month, Year

INSTRUCTIONS:

1. Paper Size and Margins

- (i) **Size:** - Standard A4 / Quarter (8.3 x 11.7 inch or 210 x 297 mm) size.
- (ii) **Margins:** - Left: 1.5 inch (3.81 cm), Right / Top / Below: 1.0 inch (2.54cm).
- (iii) **Orientation:** - Portrait (preferred) / Landscape (where it is required).

2. Title

- (i) **For English:** - Font Type: Times New Roman, Font Size: 18, **Bold**, Line Spacing: 1.15, **UPPERCASE**, Centrally Aligned.
- (ii) **For Hindi:** - Font Type: Mangal Unicode or Kruti Dev 010, Font Size: 20, **Bold**, Line Spacing: 1.15, Centrally Aligned.

3. Central Part

- (i) **For English:** - Font Type: Times New Roman, Font Size: 12, Line Spacing: 1.15, Centrally Aligned.
- (ii) **For Hindi:** - Font Type: Mangal Unicode or Kruti Dev 010, Font Size: 14, Line Spacing: 1.15, Centrally Aligned.
- (iii) Font Size of **PROPOSED PLAN OF RESEARCH** and **DOCTOR OF PHILOSOPHY** will be 16, **Bold** (in English) and 18, **Bold** (in Hindi / Urdu).

4. Name & Address of the University:

- (i) **For English:** - Font Type: Times New Roman, Font Size: 24, **Bold**, **UPPERCASE**, Line Spacing: 1.15, Centrally Aligned.
- (ii) **For Hindi:** - Font Type: Mangal Unicode or Kruti Dev 010, Font Size: 26, **Bold**, Line Spacing: 1.15, Centrally Aligned.

5. Month, Year:

- (i) **For English:** - Font Type: Times New Roman, Font Size: 18, **Bold**, Lowercase, Centrally Aligned.
- (ii) **For Hindi:** - Font Type: Mangal Unicode or Kruti Dev 010, Font Size: 20, **Bold**, Centrally Aligned.

SANGAM UNIVERSITY, BHILWARA

CONTENTS OF SYNOPSIS

Format

The proposed plan of research work should be prepared by including following contents and submitted in **THREE COPIES** duly signed by Research Scholar, Research Supervisor and the Dean of the respective School:

1. Name and Address of the Research Scholar
2. Name of the Subject
3. Name of the Faculty
4. Name and Designation of the Research Supervisor
5. Name of the Research Centre /Department
6. Facilities Available at the Research Centre /Department
7. Title of the Proposed Research Work (12-18 words)
8. Introduction (Max. 1200 words)
 - Topic area / Introduction / background of the study
 - Statement of the problem
 - Research questions/Hypotheses (As may be applicable)
 - Objectives of the study (Max Six in Numbers)
 - Significance / Relevance of the study
 - Scope of the study
 - Definitions of key term used
9. Literature Review (Max. 1500 words)
 - Report on Literature survey done in field of Study (Use in text citation)
 - Interlocking findings and Research Gap
 - Your preliminary work on the topic
 - Rephrase your research question(s) in this context
10. Research Methodology (around 1200 words)
 - Description of study area
 - Research design
 - Sources of data (Primary and Secondary Sources)
 - Sample size and sampling techniques with justification
 - Data collection instruments
 - Data collection procedures
 - Data analysis method to be employed.
 - Ethical issues if any
 - Expected result/ outcomes
11. Tentative Duration for Completion of the Proposed Research Work (Show using Gantt Chart)
12. Bibliography (or References)

} **Page 1**

Date:

Signature of the Research Scholar

SANGAM UNIVERSITY, BHILWARA

It is certified that outlines of the synopsis which are prepared by Mr./Ms./Mrs. have been verified and submitted to forward to the Directorate of Research, Sangam University, Bhilwara

Date:

Signature of the
Research Co-supervisor, *if any*

Signature of the
Research Supervisor

The synopsis which is prepared by Mr./Ms./Mrs. and verified by the research supervisor(s) is forwarded.

Date:

Signature & Seal of the Dean

SANGAM UNIVERSITY, BHILWARA

IMPORTANT INSTRUCTIONS:

1. Paper Size and Margins:

- (i) **Size:** Standard A4 / Quarter (8.3 x 11.7 inch or 210 x 297 mm) size except maps, drawing, graphs, *etc.*
- (ii) **Margins:** Left: 1.5 inch (3.81 cm), Right/Top/Below: 1.0 inch (2.54cm). (iii) **Orientation:** Portrait (preferred) / Landscape (where it is required).

2. Typing Work:

The text must be typed on one side of the **Executive Bond** paper (back-to-back i.e. both sides) using normal typeface / electronic typing / PC word processing.

3. Headings:

- (i) **For English:** Font Type: Times New Roman, Font Size: 14, **Bold**, Line Spacing: 1.5, Capitalize Each Word of Headings, Left Aligned.
- (ii) **For Hindi:** Font Type: Mangal Unicode or Kruti Dev 010, Font Size: 16, **Bold**, Line Spacing: 1.5, Left Aligned.

4. Running Part:

- (i) **For English:** - Font Type: Times New Roman, Font Size: 12, unbold, Line Spacing: 1.5, Justified.
- (ii) **For Hindi:** - Font Type: Mangal Unicode or Kruti Dev 010, Font Size: 14, Line Spacing: 1.5, Justified.

5. Figures and Tables:

- (i) Each figure must have a brief (one phrase or sentence) title that describes its contents. The title should follow the format "Figure 1: Figure Title". In the text, figures should be indicated by consecutive number as **Fig. 1, Fig. 2**, and so on.
- (ii) Each table must have a brief (one phrase or sentence) title that describes its contents. The title should follow the format "Table 1: Table Title". In the text, tables should be indicated by consecutive number as **Table 1, Table 2**, and so on.

6. References Writing:

Research scholar may be used **ANY ONE** of the following referencing styles during the citation and writing of references:

- (i) American Psychological Association (APA) Style
- (ii) Institute of Electrical and Electronic Engineers (IEEE) Style
- (iii) Modern Language Association (MLA) Style
- (iv) Chicago Style
- (v) Oxford Style
- (vi) Modern Humanities Research Association (MHRA) Style
- (vii) Vancouver Style
- (viii) Royal Society of Chemistry (RSC) Style
- (ix) American Chemical Society (ACS) Style
- (x) Harvard Style

ANNEXURE-4

.....TITLE OF THESIS.....



A
Thesis

Submitted to the
SANGAM UNIVERSITY

in the Partial Fulfillment of the Requirements for the
Award of the Degree of

DOCTOR OF PHILOSOPHY

in

-----<Name of Subject>-----

under the

School of -----

Submitted by

-----<Name of Research Scholar>-----

Enrolment No.:

Under the Supervision of

----- <Name of Research Supervisor(s)> -----

Designation

----- <Name of Department > -----

**SANGAM UNIVERSITY
BHILWARA (RAJASTHAN)-311001
INDIA
Month, Year**

INSTRUCTIONS:

1. Paper Size and Margins:

- (i) **Size:** Standard A4 / Quarter (8.3 x 11.7 inch or 210 x 297 mm) size.
- (ii) **Margins:** Left: 1.5 inch (3.81 cm), Right/Top/Below: 1.0 inch (2.54cm).
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- (ii) **For Hindi:** - Font Type: Mangal Unicode or Kruti Dev 010, Font Size: 12, Line Spacing: 1.15,Centrally Aligned.
- (iii) Font Size of **SANGAM UNIVERSITY** and **DOCTOR OF PHILOSOPHY** will be 16 (in English) and 18 (in Hindi).

4. Name & Address of the University:

- (i) **For English:** - Font Type: Times New Roman, Font Size: 24, **Bold**,**UPPERCASE**, Line Spacing: 1.15, Centrally Aligned.
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5. Month, Year:

- (i) **For English:** - Font Type: Times New Roman, Font Size: 18, **Bold**,Lowercase, Centrally Aligned.
- (ii) **For Hindi:** - Font Type: Mangal Unicode or Kruti Dev 010, Font Size: 20, **Bold**, Centrally Aligned.

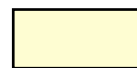
6. Colour of the Cover Page:

Candidates should submit the thesis along with specific colour on cover page which is notified by the University faculty wise as per the details given below:

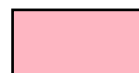
1. School of Basic and Applied Sciences: Light Blue



2. School of Commerce and Management: Cream



3. School of Engineering and Technology: Light Pink



4. School of Legal Studies: Black



5. School of Arts and Humanities and School of Agriculture Science and Technology: Dark Tan



SANGAM UNIVERSITY

CONTENTS OF THESIS

The Ph.D. thesis should be prepared by including following contents and submitted in **SIX COPIES** duly signed by Research Scholar, Research Supervisor and forwarded by the Dean of the Research Center:

- Certificate** (*To be given by Research Supervisor's*)
- Declaration** (*To be given by Research Scholar and certified by Research Supervisor's*)
- Anti-plagiarism Certificate** (*To be given by Research Scholar and Research Supervisor's*)
- Acknowledgement**
- Abstract**
- Contents / Index** **Page No.**
 - Abbreviations --
 - Lists
 - Tables --
 - Figures --
 - Drawings / Illustrations, Maps, *etc.* if any --
 - Chapters --
 - Summary of the Ph.D. Thesis --
 - Research Publications in Referred Journals --
 - Paper Presentations in Conferences / Seminars --
 - Conferences / Seminars / Webinars *etc.* Attended --
 - **Chapter Wise Details**
 - Suggested list of chapters
 - Chapter 1 - Introduction
 - Chapter 2 - Review of Related Literature
 - Chapter 3 - Research Methodology
 - Chapter 4 - Analysis and Interpretation (Can be added sub chapters)
 - Chapter 5 - Conclusion and Recommendations
 - **References**
 - **Bibliography**
 - **Summary of the Ph.D. Thesis**
 - **Research Publications in Referred Journals (with Reprints)**
 - **Paper Presentations in Conferences/Seminars (with Abstracts and Certificates)**
 - **Conferences / Seminars / Webinars *etc.* Attended (with Certificates)**

Important Instructions:

1. Paper Size and Margins:

- (i) **Size:** Standard A4 / Quarter (8.3 x 11.7 inch or 210 x 297 mm) size except maps, drawing, graphs, *etc.*
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- (ii) Each table must have a brief (one phrase or sentence) title that describes its contents. The title should follow the format "Table 1: Table Title". In the text, tables should be indicated by consecutive number as **Table 1, Table 2,** and so on.

6. References Writing:

Research scholar may be used **ANY ONE** of the following referencing styles during the citation and writing of references:

- (i) American Psychological Association (APA) Style
- (ii) Institute of Electrical and Electronic Engineers (IEEE) Style
- (iii) Modern Language Association (MLA) Style

Annexure 3.1

CERTIFICATE

(To be given by the Research Supervisor)

I/ We feel great pleasure in certifying that the Ph.D. thesis entitled ".....

....."

submitted by Mr./Ms./Mrs. to the Sangam University in the partial fulfilment of the requirements for the award of the degree of Doctor of Philosophy is based on the research work carried out under my/our guidance.

He/ She has completed the following requirements as per UGC Regulations and research ordinance of the University:

- (a) Satisfactory Completion of the Ph.D. Course Work.
- (b) Submission of Half Yearly Progress Reports.
- (c) Fulfilment of residential requirement of the Research Centre (*Minimum 200 Days*).
- (d) Presentation of research work before the Departmental Committee.
- (e) Publication of at least two research paper in the referred research journal of national and international repute.
- (f) Two paper presentations in the Conferences/ Seminars.

I/We recommend the submission of the Ph.D. thesis and certify that it is fit to be evaluated by the examiners.

Date:

Place:

Signature

Research Co-supervisor, if any

Signature

Research Supervisor

Forwarded by Dean/ Incharge

Annexure 3.2

DECLARATION

(To be given by the Research Scholar)

I,....., hereby certify that the research work presented in my Ph.D. thesis entitled“..... which is carried out by me under the supervision of Professor / Dr. and submitted in the partial fulfillment of the requirement for the award of the degree of Doctor of Philosophy of the Sangam University, represents my ideas in my own words and where others’ ideas or words have been included in this thesis, I have adequately cited and referenced the original sources.

The work presented in this thesis has not been submitted elsewhere for the award of any degree or diploma from any other institution or university in India or abroad. I declare that I have adhered to all the principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea / data / fact / source in my submission.

I understand that any violation of the above will cause for disciplinary action by the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

Date:

Place:

Signature

(Name of the Research Scholar)

This is to certify that the above statement made by Mr./Ms./Mrs.
..... (Enrollment Number) is correct to the best of my/our knowledge.

Date:

Place:

Signature

Research Co-supervisor, *if any*

Signature

Research Supervisor

Annexure 3.3

Anti-Plagiarism Certificate

(To be given by the Research Scholar and Research Supervisor)

It is certified that the Ph.D. Thesis entitled “.....
.....
.....”
submitted by Mr./Ms./Mrs has been
examined with the anti-plagiarism tool.

We undertake that:

- a. The thesis has significant new work/knowledge as compared with already published or are under consideration to be published elsewhere. No sentence, equation, diagram, table, paragraph or section has been copied verbatim from previous work unless it is placed under quotation mark and duly referenced.
- b. The work presented is original and own work of the author *i.e.*, there is no plagiarism. No ideas, processes, results or words of others have been presented as the author's own work
- c. There is no fabrication of data or results which have been compiled and analyzed.
- d. There is no falsification by manipulating research materials, equipment or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.
- e. The thesis has been checked by using tool/software and found within the limits as per UGC plagiarism policy and instructions issued from time to time.

Report is also enclosed along with this Ph.D. thesis.

Date:

Place:

Signature

(Name of the Research Scholar)

Signature

Research Co-supervisor, if any

Signature

Research Supervisor

ANNEXURE-4

Copyright Transfer Certificate

COPYRIGHT TRANSFER CERTIFICATE

Title of the Thesis:

Research Scholar Name:

Copyright Transfer

The undersigned hereby assigns to the Sangam University all rights under copyright that may exist in and for the above thesis submitted for the award of the Ph.D. degree.

Signature of Research Scholar

ANNEXURE-5

Sangam University

NH-79, Chittor Road, Rajasthan-312901

www.sangamuniversity.ac.in

APPLICATION FORM

[Ph.D. Pre-Thesis Submission Presentation]

Details of Scholar:

Name of Scholar	
Father's Name	
Enrollment Number	
Subject	
Department	
Coursework qualified	Yes [] / No []
Title of the Thesis	

Details of Supervisor:

Name of Supervisor	
Name of Co-Supervisor (if any)	
Contact details of Co-Supervisor	

Details of Publications (Please attach copy of Published Papers)

Research Paper 1:

Title of Paper	
Name of Journal (with Volume, Issue No., Year and Page No.)	
ISSN No. of Journal	
Journal Indexed in	UGC [] / WoS [] / Scopus [] / Others (give details below)
Others (Journal Indexed)	

Research Paper 2:

Title of Paper	
Name of Journal (with Volume, Issue No., Year and Page No.)	
ISSN No. of Journal	
Journal Indexed in	UGC [] / WoS [] / Scopus [] / Others (give details below)
Others (Journal Indexed)	

Research Paper 3:

Title of Paper	
Name of Journal (with Volume, Issue No., Year and Page No.)	
ISSN No. of Journal	
Journal Indexed in	UGC [] / WoS [] / Scopus [] / Others (give details below)
Others (Journal Indexed)	

I confirm that I have completed my thesis work and would like to present the same for Pre-Thesis submission presentation.

Date of Application: _____

Place: _____

Name and Signature of Scholar

Mobile/ Contact No. _____

Supervisor Recommendation: _____

Date: _____

Signature of Supervisor:

Forwarded by Dean: _____

ANNEXURE-6

Certificate by Supervisor regarding accomplishment of Objectives

It is hereby certified that Mr. / Ms. _____ having Enrollment No. _____ has undertaken research work for the award of Ph.D. in _____ under my supervision. He/ She has achieved the desired objectives as laid down in the Synopsis to my satisfaction and also incorporated the suggestions / recommendations made during Pre-Ph.D. Viva held on _____.

He / She may please be permitted to submit Final Thesis for onward evaluation by experts.

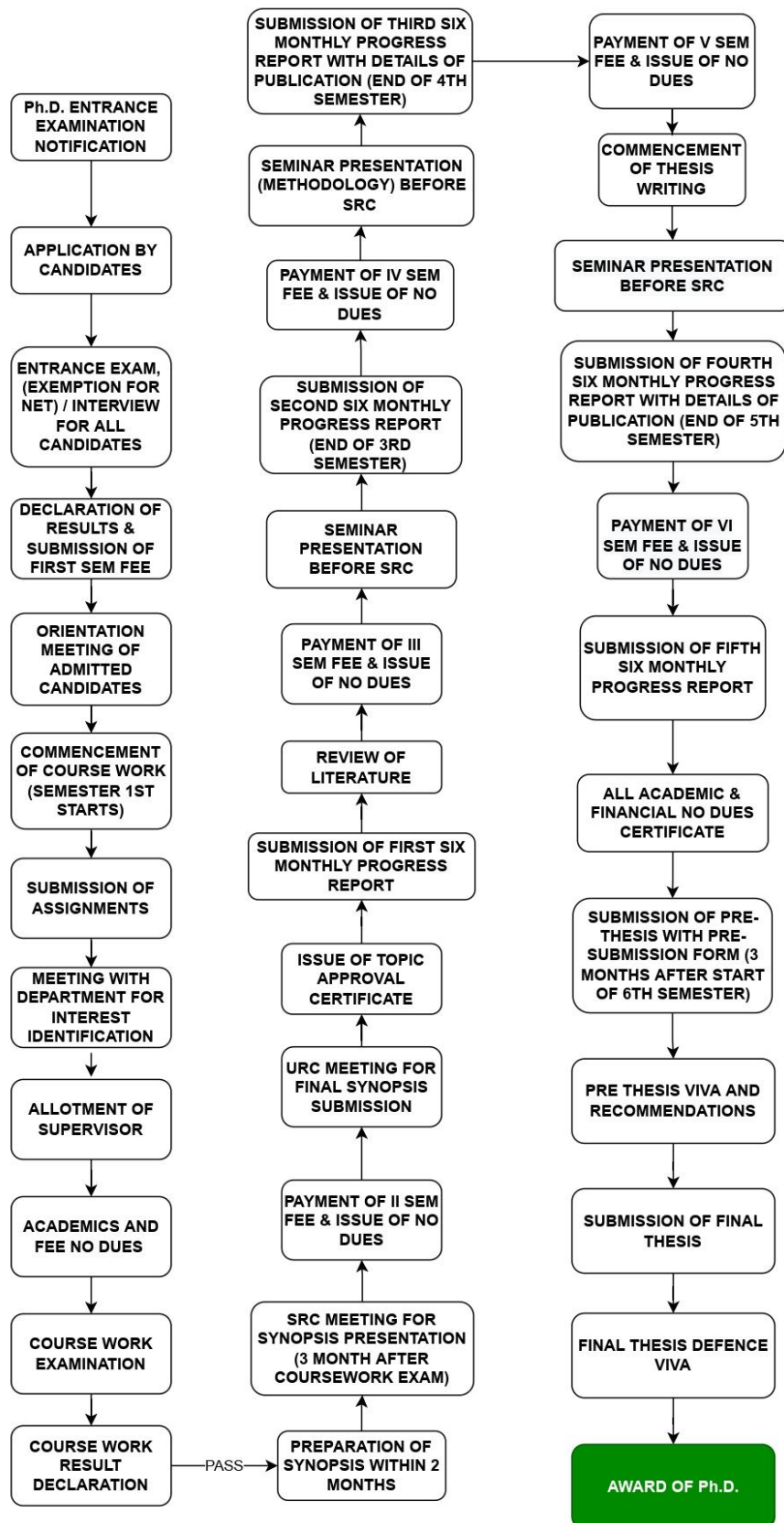
Signature : _____
Name of Supervisor : _____
Designation: _____
Date : _____

Forwarded

Signature of Dean

Name : _____
Date : _____

FLOW CHART



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