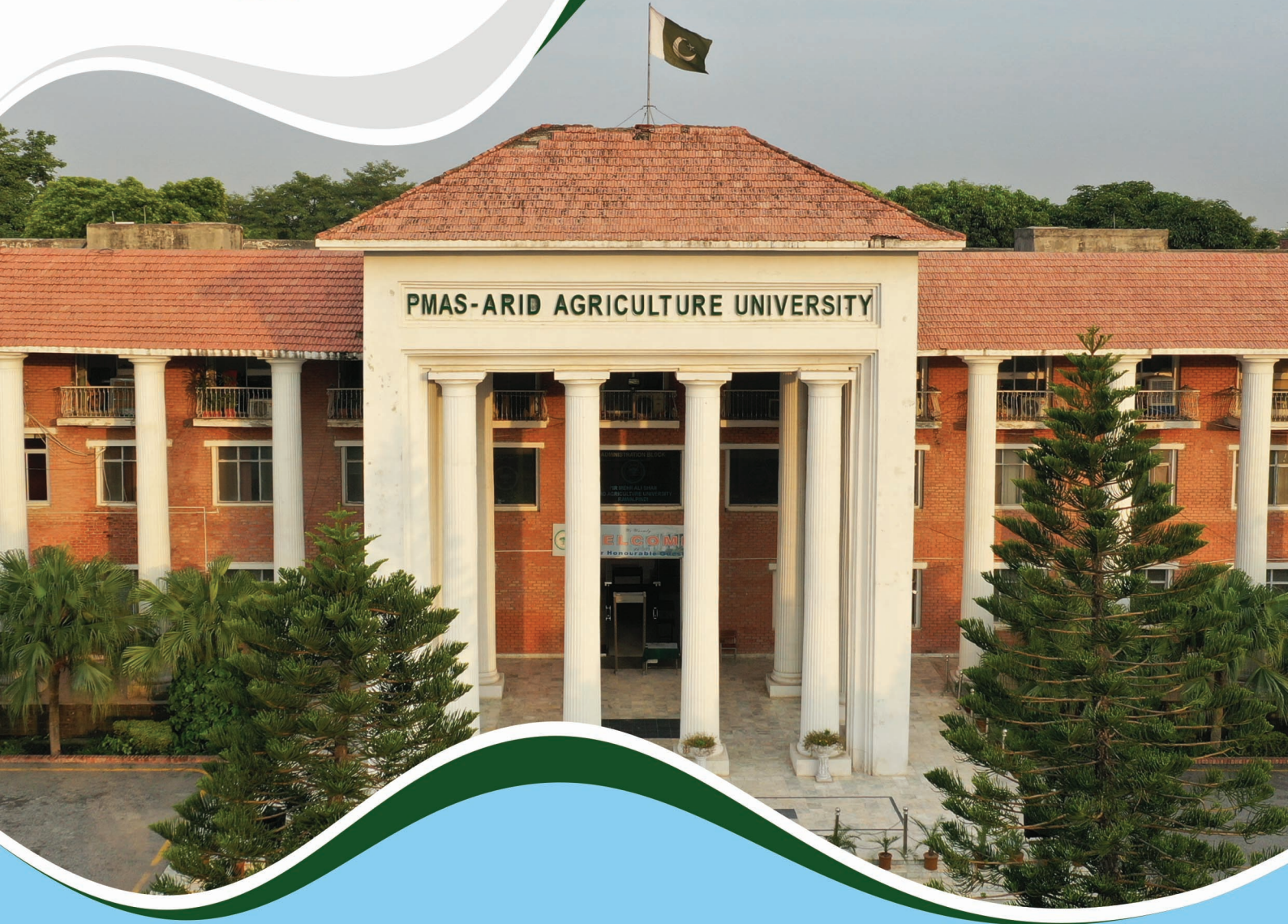




DAS-CATALOGUE



Prof. Dr. Qamar-uz-Zaman
Vice Chancellor

DIRECTORATE OF ADVANCE STUDIES

The Directorate of Advance Studies is always striving for excellence to promote quality and novel research in the university following the dynamic and enthusiastic approach of Worthy Vice Chancellor Prof. Dr. Qamar-uz-Zaman to uplift the research at the level of modern world. To accomplish the said objective following key initiatives have been taken by the Directorate of Advance Studies.

- a. The post graduate admission policy is designed by ensuring the availability of sufficient resources with the research Adviser.
- b. Post-Graduate Research evaluation committee has been formulated to facilitate the research scholars
- c. Research coordinators have been appointed in each department to facilitate the young scholars at different steps during their stay at the university.
- d. Maintenance of lab books is being strictly monitored to ensure the generation of quality research and its implications
- e. Regular meeting of the supervisory committee has been given a prime importance for continues guidance and to monitor the progress of research students
- f. Ethical and proprietary prospects of the research have been given prime importance
- g. Procedures are designed and implemented for synopsis and thesis evaluation
- h. Digitalization of Postgraduate Student records
- i. A comprehensive Seminar series has been designed for the training and Capacity Building of young faculty members and research Scholars



Dr. Muhammad Azam Khan
Director

POST GRADUATE RULES & REGULATION

**Master Degree Programme
(MS./MSc. Hons./M.Phill)**

Approved by:
The Syndicate in its 88th Meeting
on the Recommendations of Academic Council (66th Meeting)



**Directorate of Advanced Studies
PMAS - Arid Agriculture University Rawalpindi**

Master Degree Programs Offered

Faculty of Crops & Food Sciences

- . Agronomy
- . Horticulture
- . Entomology
- . PBG
- . Plant Pathology
- . Forestry
- . Agri Extension

Faculty of Sciences

- . Botany
- . Zoology
- . Biology
- . Statistics

Faculty of Vet. & Animal Sci.

- . Poultry Sciences
- . Vet. Pathology
- . Vet. Microbiology
- . Vet. Clinical & Surgery
- . Vet. Parasitology
- . Animal Nutrition
- . Livestock Management
- . AB&G

Faculty of Social Sciences

- . Economics
- . Agri-Economics
- . Education
- . Sociology
- . Anthropology

Faculty of AE&T

- . Agriculture Engineering

UIBB

- . Bio Chemistry
- . Bio Technology
- . Microbiology

IF&NS

- . Food Technology
- . FS&QM
- . HN&D

IS&ES

- . Soil Science
- . Environmental Sciences

IGEO

- . Geo Informatics

UIMS

- . Management Sciences
- . MBA

UIIT

- . Computer Sciences

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REGULATIONS RELATING TO THE AWARD OF MASTER'S DEGREE PROGRAMS

These rules will be applicable on the master's degree Programs offered in the various Faculties/Institutes at PMAS-Arid Agriculture University having nomenclature of MSc (Hons) / MS / M.Phil. admitted from Fall Semester 2020-21. These rules have been designed in accordance with the HEC letter 1-4 (MS/PhD) / QAD / HEC / 2018 / 86 / 293 dated December 03, 2018; approved by the University Syndicate in its 82nd Meeting held on 25th June 2019 on the recommendations of 61st meeting of University Academic Council held on 29th April 2019.

1. Initiation of Degree: -

Two (2) Ph.D. Faculty Member are compulsory to initiate any Master (MSc (Hons)/MPhil/MS) degree program and prior NOC is required from the HEC and relevant council (if applicable).

2. Pre-Requisite for Admission:-

- a) Sixteen years of schooling or 4-year education (124/120 credit hours) after HSSC/F.A./F.Sc./Grade 12, equivalent will be required for admission in the master's degree Programs (MSc (Hons)/MPhil/MS).
- b) Required aggregated CGPA of not less than 2.50 under semester system or 45% of the marks secured under annual examination system or its equivalent in the field of study or related disciplines from Higher Education Commission, Islamabad recognized institutions.
- c) Entry test (Admission test) will be conducted by the university itself through committee approved for the purpose or by engaging renowned testing service provider and it is mandatory to qualify with 50% marks.
- d) Merit will be determined on the basis of Marks obtained in last Degree/Certificate.

3. Admission Authority: -

- a) The admission to the degree program will be granted by the Director Advanced Studies on the recommendations of the Admission Committee constituted with the approval of Vice Chancellor and notified by Directorate of Advance Studies.
- b) The Admission Committee shall consider the applications for admission and formulate its recommendations, according to the prescribed formula approved by the Academic Council and submit it to the Director Advanced Studies.
- c) The Director Advanced Studies may refuse admission to the any degree program without assigning any reason.
- d) The admission will be granted on provisional basis subject to the verification of submitted documents with application and deficiency courses if required and recommended by the admission committee etc.
- e) The admission can be cancelled any time if found any discrepancy/hide of fact at any stage and disciplinary proceedings will be initiated.
- f) Students who have been imposed a major penalty by the university will not be allowed to take admission in any further degree programs, however; if admission was granted by hiding the facts, it can be cancelled any time and student have no right to challenge such cancellation.

- g) NOC from employer for admission in any Master's degree program is required if the applicant is in service. Both NOC and study leave is mandatory at the time of first enrollment otherwise admission will be withdrawn. This rule is also applicable on employees of PMAS-Arid Agriculture University Rawalpindi.

4. Duration of Degree Programs:-

- a) In accordance with HEC letter No 1-3/AD-QA/HEC/NQAC (21)/2016/53 dated 18th March 2016, Minimum and Maximum duration of Master (MSc (Hons)/MPhil/MS) degree program is from 1.5 to 4 years and is not extendable.
- b) All the Master (MSc (Hons)/MPhil/MS) degree program will be full time and no part time admission will be granted.
- c) All the programs will be offered in morning session, not in after noon/evening.
- d) The University Academic Council shall determine the number of students to be admitted in each degree programs.

5. Degree Awarding Requirement:-

For award of Master (MSc (Hons)/MPhil/MS) degree, candidates will need to complete minimum 30 credit hours (24 credit hours of course work along with a minimum of 6 credit hours for research work/thesis) in accordance with the approved scheme of study of respective degree program.

6. Migration:-

The student who wants to migrate from PMAS-Arid Agriculture University Rawalpindi to other university can apply for NOC to the Registrar Office, after clearance from all departments and DAS, Registrar Office will issue the NOC of incomplete degree and student can also get incomplete degree Detailed Mark Sheet by applying in the office of Controller of Examinations.

The student who intends to migrate from other institution to the PMAS-Arid Agriculture University Rawalpindi in any Master's degree programs will be entertained according to following rules & regulations after fulfilment of University Admission Criteria:

- a) Migration is not allowed from the institution of Rawalpindi/ Islamabad and any affiliated institutions.
- b) Migration will not be allowed in first semester.
- c) Migration is only allowed against the vacant seat.
- d) Reason of migration must be genuine and plausible.
- e) The student shall have to study the deficiency course, if any, pointed out by the migration committee.

Migration Committee: -

Each Faculty/Institution will constitute its own migration committee to scrutinize and recommend the cases consisting of the following: -

- a) Dean/Director (Convener),
- b) Chairperson Teaching Department,
- c) Registrar or his nominee,
- d) Controller of Examinations or his nominee,

- e) Director Advanced Studies or his nominee

Procedure for Migration: -

- a) The applications shall be submitted to the Dean/Director of the respective Faculty/ Institute/, which will be forwarded to the migration committee.
- b) The application must accompany the followings:
 - i. No Objection Certificate (NOC) about migration from the parent institution.
 - ii. Certificate of good conduct and behavior from the parent institution.
 - iii. Detailed Marks Certificate and the courses studied by the applicant in his/her parent institution and course contents of the courses for equivalence of his/her studies.
- c) The migration committee shall evaluate the students by interview/test, if needed, identify the deficiency courses and equivalence of already studied courses and forward to Registrar Office with its recommendations.
- d) Registrar Office will notify the migration after obtaining approval of the Vice Chancellor.
- e) Credits earned by the migrated students can be transferred subject to acceptance by the Migration/ Equivalence Committee and the minimum acceptable CGPA.
- f) If a student migrated from CGPA/GPA system, then his/her CGPA/GPA will be accepted as such of his/her previous University/Institution.
- g) If a migrated student awarded grades (A, B & C) instead of CGPA/GPA system by the previous University/Institution then his/her CGPA/GPA will be calculated on minimum scale of grades.

7. Course Work:-

- a) Minimum Course Work for Master (MSc (Hons)/MPhil/MS) degree programs will be 24 credit hours (excluding Seminar and Special Problem); however, the supervisory committee may include course(s) if required to strengthen the specific thesis research project.
- b) The students will follow the scheme of study as approved by the Academic Council from time to time.
- c) The Ratio of Major to Minor Courses shall be 2:1 (two third credits from the major field of study and One third from minor field of study).
- d) The minor field shall not exceed three. Minor course should be taken from the approved scheme of study of the relevant department.
- e) The student shall not be enrolled for more than 18 and less than 10 credits in a semester except during the last semester. These credits will include the credits earned in respect of deficiency courses.
- f) Statistics shall be compulsory minor for Masters' Degree students in all disciplines from the approve course of department of statistics.
- g) All the approved specialized course bearing course code of 7XX series can be offered to the students according to scheme of study and need of the research project.
- h) Out of the total number of credits required for Master program; two credits shall be earned through Seminar and Special Problem (one credit hour each).
- i) There shall be 6 (Six) credit hours allocated for the Research and thesis which shall be counted towards calculation of CGPA.
- j) No course shall be conducted unless there are at-least 6 students enrolled for postgraduate

courses. In special case however, if the students are less than the required number, permission of the Vice Chancellor shall have to be obtained to conduct the course. However, the condition will not be applicable for the students when they have already completed the minimum required time for their respective degree program.

- k) English shall be the medium of instruction and examination except in case of Islamic Studies, which shall be in Urdu. However, foreign students and those exempted by the B o a r d o f Intermediate and Secondary Education will be allowed to take this examination in English.
- l) **Deficiency:** - If the course qualified by a candidate does not provide adequate background for the degree course which he intends to take up, he may be required to make up the deficiency by taking one or more additional course(s) as may be prescribed/determined by the concerned authority. Deficiency courses will be mandatory to pass but these will not be counted in calculating GPA/CGPA and will not have any effect on the academic position of a student.

8. Procedure of Course Work Enrollment:-

- a) At the beginning of each semester a student must enroll in courses of studies on the prescribed form.
- b) A student, who maintains the minimum CGPA for promotion and meets the requirement in his respective program, will be promoted to the next semester. If he/she does not maintain the required CGPA, he/she shall be ceased on the University Rolls and the ceased period shall not be counted towards his academic residency period.
- c) A student who does not meet the requirements for promotion may have to repeat the whole semester (only once during the degree program), the course grades, which he earns i n t h e repeated semester, shall replace the previously earned course grades. However, if he/she again does not meet the requirements for promotion in the repeated semester or in any other examination after availing this one chance, he/she shall cease to be on the University rolls.
- d) The enrollment shall not be complete unless a student makes payment of all the prescribed fees and submit the prescribed form in the respective office. The student shall not be allowed to sit for the semester examination unless all payments are made.
- e) Enrollment and fee payment shall be completed on the days notified for this purpose, provided that the Authority concerned may, in special circumstances and on payment of a late fee applicable at the time, permits a student to enroll within seven days after the commencement of the semester.
- f) Enrollment forms (GS-10) by the fourth week of the commencement of semester to be submitted to the Director Advanced Studies who shall approve the same and send a copy each to the Controller of Examinations and other concerned.
- g) A student admitted to the course shall, for so long as he/she has not completed all the requirements for the degree, enroll himself/herself for each semester, failing which his/her admission shall stand cancelled, unless he/she gets permission for discontinuation.

9. Discontinuation: -

- a) A student enrolled in a semester may discontinue his/her studies with the permission of an admission office due to illness duly certified by a Registered Medical Practitioner, countersigned by the University Medical Officer or under the circumstances beyond his/her

control, to be determined in each case on a written application by the student. The respective Dean/Director of the Faculty / Institution / Division / Directorate concerned will notify the same.

- b) The minimum period of discontinuation of studies by a student can be one semester or one year but not exceeding two years for entire degree Program.
- c) Discontinued period will be counted towards academic residence (i.e., 4 years Maximum). If any special permission is required that also must be within the residency period of degree program (4 years).
- d) Upon completion of 4 years from the date of admission, no request will be entertained, and he/she will be no more student of the university. However fresh admission can be granted by following all the procedure.
- e) If discontinuation is prior to Enrollment in a semester, he/she does not have to pay the fees.
- f) HEC scholarship holders are not allowed discontinuation for more than six months.

10. Improvement of Grade: -

- a) During the specified minimum duration for completing the degree, a student may repeat those courses of the previous semester(s) in which he/she had secured the grade 'F', provided the course load does not exceed the maximum limit of credit hours in a semester. Repetition of lowest grade(s) will be allowed after completing last semester of course work or minimum residency if, the CGPA is less than the degree requirement.
- b) The grades that a student earns in the repeated courses shall replace the previously earned course grades. However, the previous grade shall stand if the repeated grade is less than the previous one.
- c) The prerequisite courses in which the student has failed, will have to be cleared immediately at the next available opportunity, provided that his maximum workload, including the courses being repeated by the student, will not exceed the normal workload.
- d) Master's Degree student can not avail the summer session.

11. Academic Standing: -

- a) **Grade Point Average:**
 - (i) Maximum grade point average 4.00
 - (ii) Minimum grade point average for obtaining Master's Degree 2.50
- b) To remain on the rolls of the University a student shall be required to maintain the following GPA/CGPA in each semester.

Semester	CGPA
1st	1.50
2nd	1.75
3rd	2.00
4th	2.50

- c) A student, who obtains CGPA of 2.00 or above but less than 2.50, upon the completion of entire approved course work or minimum residency, may be allowed to repeat the courses of the previous semesters in which he/ she had obtained the lowest grades in order to improve the CGPA so as to obtain the minimum of 2.50 within the maximum time allowed for the award of degree, failing which he/ she shall cease to be on the roll.

- d) A student will be required to repeat those courses of the previous semesters in which he/she had failed at the first available opportunity, provided that his/her maximum workload, including the courses being repeated by him/her will not exceed the normal workload.
- e) All postgraduate students are required to submit their Course Work Program (Proforma G S 12) to the Controller of Examinations through the Director, Advanced Studies by 8th week of the final semester for Master Students: before the start of the 3rd semester for full time students and before the start of 4th semester for part time students.

12. Supervisory Committee: -

- a) Each student will have a Supervisory Committee to advise him/her in his/her Program of studies and research.
- b) The Supervisory Committee shall consist of at least three members of the faculty, two from major field and one from related field of study. If necessary, an outstanding specialist in a major or minor field of study is available outside the University he/she may be appointed as member/co-supervisor in the supervisory committee.
- c) One of the teacher/ members from the major field shall act as supervisor on the recommendations of the Chairperson or Board of Studies.
- d) The supervisory committees and titles will be approved by the respective Deans / Directors and notified by the Director (Advanced Studies) as delegated by AS&RB. However, the synopsis will be approved by the Director (Advanced Studies).
- e) A PhD faculty member can supervise the research of 12 (Twelve) graduate students (with maximum of five (5) Ph.D. students)
- f) MS/MPhil Faculty Member (with 5 years of relevant research/teaching/professional experience) can supervise upto 5 (five) Master students.

13. Research Title and Synopsis: -

- a) The supervisory committee will be constituted and submitted along with titles to the Directorate of Advance studies before mid-term examination of first (1st) semester.
- b) Research duration for the applied research students must be two seasons (two conditions) in order to be able for publication.
- c) Synopsis must be submitted before the start of the 3rd semester after open house defense at department level. Following committee is suggested for the synopsis defense: -
 - i. Chairperson of Teaching Department
 - ii. Research Coordinator of the concerned department
 - iii. Concerned Supervisory Committee
 - iv. DAS or his Nominee

Numerical grade for each consideration listed below according to the following scale:

Unsatisfactory:	<60
Satisfactory:	60-70
Good:	70-80
Very Good:	80-89
Excellent:	90-100
Unable to Judge	U

CONSIDERATION	RATING (Numerical - Each section having 10 marks Maximum)
1. Clarity of written presentation	
2. Clarity of verbal presentation	
3. Feasibility of research: related to student ability	
4. Overall quality of proposal	
5. Background preparation: knowledge of theory	
6. Background preparation: knowledge of methodology	
7. Background preparation: practical skills	
8. Familiarity with relevant literature	
9. Impact of research on the field/society	
10. Response to questions	
Cumulative Marks	

TOR'S of the Committee: -

- The committee will be proposed by the chairperson of teaching department.
- The committee will be approved by the Vice Chancellor and notified by DAS for one year for each department separately.
- The Quorum of the Committee must be at least 4 members.
- The Open House Defense must be arranged before the start of 3rd semester.
- In case the student fails in the synopsis defense, he/she will be eligible to defend the synopsis again after two months/ Sixty (60) days from the date of defense.
- The minutes of the meeting/defense should be signed by the committee and be attached with the synopsis while submitting to DAS.
- To pass the student, the criteria will be marks based assessment (with 60% as passing marks).
- Faculty members and research students of the department will be the participants/ audience.
- If a student fails to submit synopsis to DAS office after open house defense before the deadline, no further enrollment will be done, and student have to discontinue.
Chairperson of the department will be responsible to look after the matter regarding enrollment of the said student.

14. Registration of Lab Note Book: -

- It is mandatory for each Research student to registered lab Note book with Quality Enhancement Cell (QEC) in the first semester of enrollment.
- Student should write all the details of his synopsis and research work by hand regularly and countersigned by the supervisor and committee members.
- Meetings of the supervisory committee is mandatory once in each semester and proceedings should be recorded in Lab Note Book registered by QEC.

15. Plagiarism Policy: -

This university follows the zero-tolerance policy regarding plagiarism and all the Master's degree synopsis and thesis should be checked for plagiarism by the supervisors carefully prior to submission to DAS and plagiarism report should be attached along with the synopsis and thesis first draft. As per the HEC guidelines the Similarity Index should be less than 19%. (not more than 5 % from single source).

16. Research and Thesis Completion: -

- a) There shall be 6 (Six) credit hours allocated for the Research and thesis which shall be counted towards calculation of CGPA.
- b) Research duration for the applied research students must be two seasons/two locations/two conditions in order to be able for publication.
- c) Directorate of Advance Studies will notify the date for submission of first draft of thesis in each semester.
- d) First draft of the thesis will be prepared and after signature from supervisory committee will be submitted to DAS through chairman/Director for all MSc. (Hons)/MPhil/MS degree programs along with plagiarism report duly signed with stamp and verified by the supervisor.
- e) The supervisor and supervisory committee will check the thesis and shall be responsible for all type of research and contents.
- f) The DAS will check the formatting according to the theses manual approved by the AS&RB.
- g) After clearance from DAS the (3 copies) semi-final thesis will be submitted along-with panel of examiners (From the list approved by the AS&RB on the recommendations of board of studies).

17. Thesis Evaluation: -

- a) After receiving the thesis from DAS and verified report of similarity index from Supervisor, Controller of Examination (COE) will process the thesis for evaluation and viva etc.
- b) The external examiner shall be appointed by the Vice-Chancellor or Director Advance Studies (As power delegated by the Vice Chancellor under section 15(4-g) of the university out of the panel of three (3) experts (in the major field of research) proposed by the supervisor from the list approved by the AS&RB on the recommendations of board of studies.
- c) Upon nomination of external examiner, the COE will send the thesis to the external examiner for evaluation.
- d) The COE shall get the thesis evaluated within three months after the date of its submission/resubmission in his office. Any delay beyond three months must be brought to the notice of the Vice-Chancellor for special permission one time only.
- e) The date, time and venue of thesis examination must be notified by the supervisor after taking consent from the external examiner and will be informed to DAS and COE.
- f) A board of examiners comprising of the Supervisory Committee and one external to evaluate the thesis.
- g) The thesis will be evaluated Numerically numerical grade on the following Scale:

- i. Unsatisfactory: <60
- ii. Satisfactory: 60-69
- iii. Good: 70-79
- iv. Very Good: 80-89
- v. Excellent: 90-100
- vi. Unable to Judge U

Consideration	Thesis (50 marks) 10 each Section	Thesis Defense (50 Marks) 10 each Section
Grasp of subject, powers of criticism and awareness of previous work		
Resourcefulness, alertness to significance of findings		
Diligence, care, technical skill in carrying out research		
Organization of thesis and presentation, findings and discussion		
Quality of thesis & presentation (audio visual aids, lucidity, grammar, writing and presentation style)		
Average Score		

Recommendation (Grading options include):

- i. Approved as submitted.
 - ii. Approved upon specific corrections being made (revisions must be clearly specified and a clear timetable for completion of the revisions must be presented to the student, normally with a maximum of one month to complete the revisions);
 - iii. Rejected but with permission to re-submit a revised thesis for re-examination (a clear timetable for completion must be presented, normally with a maximum of 6 - m o n t h to re-submit); and
 - iv. Rejected outright.
- h) All the members of the Board of Examiners present shall sign the result sheet E-32 and thesis defence examiners report prescribed for this purpose at the end of the examination. The major supervisor will submit the results to the Controller of Examinations within 24 hours.
- i. In case of disagreement among the examiners regarding the acceptance of the thesis, it shall be referred to another external examiner appointed by the Vice C h a n c e l l o r

- whose decision shall be final.
- ii. If a candidate fails in the thesis examination, he/she may enroll again and submit a revised thesis on payment of the prescribed examination fee but he/she shall not be entitled to resubmit his/her thesis before the expiry of six months after the date of the declaration of the result of the last thesis examination. He/she can avail this chance only once.
 - i) All the members of Supervisory Committee present shall sign the thesis after the viva-voce examination ensuring the necessary corrections and incorporating therein any suggestions by the Board of Examiners.

18. Research Paper Requirement: -

The students will be required to submit the proof (E-mail/ letter) of one submitted/accepted research review paper in any Journal/proceedings (preferably in HEC recognized Journal) along with their hard bound thesis.

19. Final Thesis Submission: -

On successful completion of viva-voce examination the student will be required to incorporate the necessary changes as suggested by the examiners (if any) and submit the final thesis in (4) four Hard Bound Format in DAS within 02 (two) months from the date of viva-voce examination, failing which the candidature for the degree shall stand cancelled. However, in a hardship case, these students shall submit the hard bound thesis within extended period of (4) four-month, but only after Vice Chancellor's permission obtained through proper channel on his/her request, containing special reasons of delay, duly certified by the Supervisor.

Flow Chart for MS/M.Phil & M.Sc (Hons.) Synopsis

Synopsis will be defended at departmental level then submitted to DAS before the enrollment of 3rd semester otherwise no further enrollment will be allowed and student have to discontinue



Draft of the Synopsis will be prepared and duly checked by relevant supervisory and scrutiny committee. It will be submitted to DAS through Chairman/Director for all MS/M.Phil & M.Sc (Hons.) degree programs along with Plagiarism report signed and stamped by supervisor.



Clearance from DAS will allow submission of Four (4) copies



Supervisor will ensure the incorporation of suggested correction from DAS and forward four (4) Copies to DAS



incorporation of suggested correction in synopsis and will notify and send to COE, Dean, Chairman, Supervisor, etc.

MS/M.PHIL./M.SC. (HONS.)

SYNOPSIS DEFENCE PROTOCOL

1. The Research coordinator of the department will coordinate with the Committee and intimate about the time and venue of Synopsis Defence.
2. **At the Synopsis Defence:**
 - a) Research Coordinator will explain the procedure to the examiners and audience. Questions will arise from the scientific content of the work presented but will not range randomly over the entire field. The student is being examined for competence by evaluating his/her ability to put together a viable research project and to defend the rationale and methodology.
 - b) Research Coordinator will introduce the student and explain that the student will give a 20 minute presentation. Research Coordinator will introduce the synopsis defence committee and explain that the examiners will question the student following the presentation (usually there are two rounds of questions). Please note that the Research Coordinator may also participate in the questioning.
 - c) Following the questioning period, the student and audience will be asked to withdraw.
 - d) The student will be asked to join the defence committee following their deliberations. Research Coordinator will convey the result of the synopsis defence to the student, and the committee and student will have an opportunity to discuss the outcome of the exam.
 - e) A copy of the evaluation summary report signed by all committee members, along with a formal letter, will be sent to the student by the Research Coordinator.
3. **After the Synopsis Defence:**
 - a) The supervisor will be asked to comment on the defence (especially questions the student had difficulty with). The committee will be asked to complete evaluation form.
 - b) Research Coordinator will lead a discussion on the evaluation of the student.
 - c) All committee will participate in this discussion and in the final decision. If there is an impasse, Research Coordinator will cast the deciding vote. A consensus evaluation form will be completed by the Research Coordinator and signed by all defence committee members.
 - d) Recommendations will be recorded.
 - e) Research Coordinator will invite the student to join the examining committee immediately following their deliberations. The student will be formally informed of the outcome of the exam by the Research Coordinator. Research Coordinator will facilitate discussion between the student and committee, allowing time for the committee to give feedback and/or the student to ask questions.

Flow Chart for MS/M.Phil & M.Sc (Hons.) Thesis

First draft of the thesis will be prepared and after signature from supervisory committee will be submitted to DAS through chairman/Director for all MS/M.Phil & M.Sc (Hons.) degree programs along with Plagiarism report signed and stamped by supervisor.



DAS will check the format of thesis and after clearance will allow to submit 3 (Three) copies (Semi Final) and will ensure proper formatting according to the requirements.



Supervisor will ensure the incorporation of suggested correction from DAS and generate similarity index report. Supervisor will verify the report, hence be responsible for any kind of plagiarism



Supervisor will forward the semi-final thesis (two copies) to DAS through Chairman/Director concerned along with Penal of Examiners.



DAS will ensure the corrections as suggested in formatting and forward thesis to COE



After receiving the thesis from DAS, COE will process the thesis according to already set procedure for evaluation and viva etc.



After appointment of examiner by Vice-Chancellor or DAS, Thesis will be sent to external examiner by COE and viva exam must be conducted within three (3) months from the dispatch date of thesis.



Supervisor will ensure corrections suggested by external examiner. The four (4) hard bound copies will be submitted to DAS within 2 months for all master students after viva exam and will be sent to COE for notification.

THESIS DEFENSE PROTOCOL FOR EXTERNAL EXAMINERS AND SUPERVISORY COMMITTEE MEMBERS

What happens at the Thesis Defense?

1. M.Sc. (Hons.)/MS/M.Phil thesis defenses are chaired by the Department Research Coordinator or his Designated Person.
2. External examiner, Supervisor and supervisory committee is mandatory during the defense.
3. Student Presentation (normally 15-20 minutes).
4. The External Examiner leads the first round of questions (at least ten minutes).
5. Student defends the thesis verbally.
6. Questions from the Supervisory Committee and Supervisor (Each member at least ten minutes).
7. Student defends the thesis following each examiner's questions.
8. A second round of questions follows (External examiner and each member at least ten minutes).
9. Questions are accepted from the audience.
10. In-camera meeting of Examining Committee to decide how thesis is to be graded, and a plan is discussed for revisions (The concerned student and audience will go out of the examination room).
11. Student will be called back and will be informed about the decision after in-camera discussion.

In-Camera Discussion:

1. Examining Committee members are advised of their grading options:
 - a) Approved as submitted.
 - b) Approved upon specific corrections being made.
 - c) Rejected, but with permission to re-submit a revised thesis for re-examination.
 - d) Rejected outright.
2. Each examiner completes the Examiner's Evaluation Report, independently and prior to any discussion.
3. Each examiner offers their judgment, briefly; beginning with the External.
4. A more detailed discussion is encouraged by the Chair.
5. The Chair will summarize the finding of the Examining Committee, including the following:
 - a) Grading category/outcome achieved.
 - b) Required/recommended revisions, or the process by which the student is informed of those revisions that are required versus recommended.
 - c) The names of those who are responsible for supervising the revision process and who have agreed to re-read the revised thesis; and,
 - d) The date by which the revised, approved copies of the thesis must be submitted.

Notification of Exam Results:

Concerned Research Coordinator will formally inform, in writing, the graduate student, supervisor, Controller of examinations, Directorate of Advance studies and department head of the results of the examination.

POST GRADUATE RULES & REGULATION

**Doctoral Degree Programme
(Ph.D.)**

Approved by:
The Syndicate in its 88th Meeting
on the Recommendations of Academic Council (66th Meeting)



**Directorate of Advanced Studies
PMAS - Arid Agriculture University Rawalpindi**

Ph.D. Degree Programs Offered

Faculty of Crops & Food Sciences

- . Agronomy
- . Horticulture
- . Entomology
- . PB&G
- . Plant Pathology
- . Forestry

Faculty of Sciences

- . Botany
- . Zoology

Faculty of Vet. & Animal Sci.

- . Poultry Sciences
- . Vet. Pathology
- . Vet. Microbiology
- . Vet. Clinical & Surgery
- . Vet. Parasitology
- . Animal Nutrition
- . ABG
- . Livestock Management

Faculty of Social Sciences

- . Economics
- . Agri-Economics
- . Education
- . Sociology

Faculty of AE&T

- . Agriculture Engineering

UIBB

- . Bio Chemistry
- . Bio Technology

IF&NS

- . Food Technology

IS&ES

- . Soil Science
- . Environmental Sciences

IGEO

- . Geo Informatics

UIMS

- . Management Sciences

UIIT

- . Computer Sciences

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RULES & REGULATIONS FOR THE AWARD OF DOCTOR OF PHILOSOPHY DEGREE

These rules will be applicable for all the PhD Degree Program offered in the various Faculties/Institutes at PMAS-Arid Agriculture University Rawalpindi. These rules have been designed in accordance with the HEC letter No. 15- 54/C/2019/HEC(QAD)/24 dated 19th January 2021.

1. Initiation of Degree: -

- a) The University before initiation of any PhD Program requires meeting the standards as set by the HEC and ensuring the compliance of these programs. The purpose is to acquire all the resources mandatory as pre-requisite for the level of respective program.
- b) A no objection certificate ("NOC") from the HEC must be obtained prior to the launch of any PhD program. Following requirements are required to comply for obtaining NOC from HEC:
 - i. The Act/Charter of the university allows for the offering of the program.
 - ii. Approval has been granted by the Academic Council and University Syndicate to start the program.
 - iii. The university shall not have violated HEC rules, regulations or policies in any material respect in the last two years, provided if the university has adequately and timely taken remedial measures to rectify the violation, the HEC may at its sole discretion grant a waiver in respect of this requirement.
 - iv. If applicable, any necessary approvals shall have been obtained by accreditation councils to launch the program.
 - v. The curriculum of the program shall be consistent with any guidelines issued by the HEC.
 - vi. The admissions requirements of the new PhD program shall satisfy the HEC's minimum criteria for admission in PhD programs.
 - vii. The program completion requirements of the new PhD program shall satisfy the HEC's minimum criteria for award of PhD degrees.
 - viii. At least three (3) full-time faculty members holding PhD degrees in the relevant field shall be appointed to the department that will be offering the new PhD program.
 - ix. The intended PhD program shall include a residence requirement for PhD students of at least two years; and
 - x. As a general matter, universities shall establish PhD programs in core disciplines in social sciences, humanities and natural sciences, as may be notified by HEC from time to time. In order to launch PhD degree programs with specialized titles, the university shall submit for the HEC's review a statement of purpose explaining the need and rationale for launching such a program; provided, however, that universities that have been in existence for less than ten (10) years shall only be allowed to launch PhD programs in core disciplines.
- c) The process and timeline for requesting NOCs for the launch of PhD programs shall be as follows:
 - i. Universities intending to launch a new PhD program shall submit a duly filled out form for the launch of new PhD programs signed by the head of the relevant department who shall certify to the correctness of the information provided and shall ensure that all required documents are attached with the application.

- ii. Universities shall apply for the NOC before launching any new PhD programs, and no admissions shall be advertised unless the NOC has been obtained from the HEC.
- iii. Universities shall generally be allowed to launch no more than two (2) PhD programs in a single year. Universities intending to launch more than two (2) PhD programs in a year shall be required to submit a report demonstrating their capacity to initiate additional programs, which shall be reviewed by a special committee constituted by the HEC for this purpose.
- iv. Universities requesting NOCs for launching PhD programs in the fall semester shall apply no later than March 31 of the same year.
- v. Universities requesting NOCs to launch a PhD in the spring semester shall apply no later than September 30 of the previous year.
- vi. The HEC may, at its discretion, require an external review or a zero visit in connection with the launching of PhD programs by a university.
- d) Continuing Compliance with the HEC's Policies. In the event that a university's application for launching a PhD program is successful, the university shall be granted an NOC for starting the PhD program. Upon receiving the NOC from the HEC, the university may launch the program subject to the following conditions:
 - i. The university shall ensure that it will continue to comply with the requirements during the entire period that it offers the PhD program;
 - ii. If an ongoing program fails to meet any of the requirements, it shall immediately stop further admissions to the program and notify the HEC, including providing information on remedial actions being taken by the university; and
 - iii. Faculty members may supervise no more than five (5) PhD students at any time.
- e) Cancellation of NOC. In the event that a PhD program fails to meet the requirements set forth in this policy and the university does not take necessary and proper remedial action, the HEC may cancel the NOC awarded to the University for the Non-Compliant Program. Upon cancellation, the university shall not be permitted to apply for a fresh NOC to restart the program for a period of at least two (2) years.

2. Pre-Requisite for Admission: -

- a) For admission into the PhD minimum CGPA 3.0 (out of 4.0 in the Semester System) or First Division (in the Annual System) in Mphil / MS / Equivalent degree is required.
- b) All applicants to PhD programs shall be required to take one of the following non-subject specific admission tests with qualifying 70% marks and having validity of one year:
 - i. The Graduate Record Examination (GRE) test administered by the Education Testing Service;
 - ii. A graduate admission test (GAT) administered by the Education Testing Council; or
 - iii. An equivalent test developed by the university (Subject + English + Analytical Reasoning / Mathematics)
- c) Admission test will be conducted by the university itself through a committee and qualifying score for this will be 70% score.
- d) The Applicant must submit a valid comprehensive research proposal and the consent letter from concerned HEC approved supervisor along with justification of resources.

3. Admission Authority: -

- a) The admission to the PhD degree program will be granted by the Director Advanced Studies on the recommendations of the Admission Committee constituted with the approval of Vice Chancellor and notified by Directorate of Advance Studies.
- b) The Admission Committee shall consider the applications for admission to different courses and interview the candidates and formulate its recommendations, according to the prescribed formula approved by the Academic Council and submit it to the Director Advanced Studies.
- c) The admission will be granted on provisional basis subject to the verification of submitted documents with application and deficiency courses if required and recommended by the admission committee etc.
- d) The admission can be cancelled any time if found any discrepancy/hide of fact at any stage and disciplinary proceedings will be initiated.
- e) Students who have been imposed a major penalty by the university will not be allowed to take admission in any further degree programs, however; if admission was granted by hiding the facts, it can be cancelled any time and student have no right to challenge such cancellation.
- f) NOC from employer for admission in any Ph. D degree program is required if the applicant is in service. Both NOC and study leave (minimum three years) are mandatory at the time of first enrollment otherwise admission will be withdrawn. This rule is also applicable on employees of PMAS-Arid Agriculture University.

4. Duration of Degree Programs: -

- a) The duration of Doctorate (PhD) degree program is 3(Three) years minimum and 8 (Eight) year maximum; from date of admissions to result notification and is not extendable.
Minimum: 3 Years
Maximum: 8 Years (including discontinuation if any)
- b) All the PhD degree program will be full time and no part time admission will be granted.
- c) PhD Degree program will be offered only in morning session, not in after noon/evening.

5. Migrations: -

There is no provision of Migration in any case both in and out.

6. Course Work: -

- a) Minimum Course work for PhD degree programs will be 18 credit hours preferably in the first year is required to be completed, however the supervisory committee may include course(s) if required to strengthen the specific thesis research project.
- b) The students will follow the scheme of study as approved by the Academic Council from time to time.
- c) The Ratio of Major to Minor courses shall be 2:1(Two-third credits from the major field of study and One-third from minor field of study).
- d) Integrated Agriculture course is compulsory for Agriculture students as minor.
- e) The minor field courses shall not exceed three.
- f) The student shall not be enrolled for more than 15 and less than 8 credits in a semester. These credits will also include the credits earned in respect of deficiency courses.

- g) Statistics shall be compulsory for PhD degree students in all disciplines.
- h) All the approved specialized course bearing course code of 7XX/8XX series can be offered to the students according to scheme of study and need of the research project.
- i) Each PhD student need to enroll two (2) Seminar titled "Seminar-I" and "Seminar-II" having one credit hour each, in separate semester, respectively.
- j) No course shall be conducted unless there are at-least 6 students enrolled for postgraduate courses. In special case however, if the students are less than the required number, permission of the Vice Chancellor shall have to be obtained to conduct the course. However, the condition will not be applicable for the students when they have already completed the minimum required time for their respective degree programs.
- k) English shall be the medium of instruction and examination.
- l) **Deficiency:** - If the course qualified by a candidate does not provide adequate background for the degree course which he/she intends to take up, he/she may be required to make up the deficiency by taking one or more additional course(s) as may be prescribed/determined by the concerned authority. Deficiency courses will be mandatory to pass but these will not be counted in calculating GPA/CGPA and will not have any effect on the academic position of a student.

7. Procedure of Course Work Enrollment: -

- a) At the beginning of each semester a student must enroll in courses of studies on the prescribed form GS-10.
- b) A student, who maintains the minimum CGPA for promotion and meets the requirement in his respective program, will be promoted to the next semester. If he/she does not maintain the required CGPA, he/she shall be ceased on the University Rolls and the ceased period shall not be counted towards his academic residency period.
- c) The enrollment shall not be complete unless a student makes payment of all the prescribed fees and submit the prescribed form in the respective office. The student shall not be allowed to sit for the semester examination unless all payments are made.
- d) Enrollment and fee payment shall be completed on the days notified for this purpose, provided that the Authority concerned may, in special circumstances and on payment of a late fee applicable at the time, permits a student to enroll within seven days after the commencement of the semester.
- e) Enrollment forms (GS-10) by the fourth week of the commencement of semester to be submitted to the Director Advanced Studies who shall approve the same and send a copy each to the Controller of Examinations and other concerned.
- f) A student admitted to the course shall, for so long as he/she has not completed all the requirements for the degree, enroll himself/herself for each semester, failing which his/her admission shall stand cancelled, unless he/she gets permission for discontinuation.

8. Discontinuation: -

- a) A student enrolled in a semester may discontinue his/her studies with the permission of Directorate of Advanced St e determined in each case on a written application by the student. The Directorate of Advance studies will notify the same with the approval of Vice Chancellor.

- b) The minimum period of discontinuation of studies by a student can be one semester but not exceeding two years (4 Semester) for entire degree Program.
- c) Discontinued period will be counted towards academic residence (i.e. 8 years Maximum). If any special permission is required that also must be within the residency period of degree program (i.e. 8 years Maximum starting from the date of first enrollment).
- d) Upon completion of (8) Eight years from the date of admission no request will be entertained, and he/she will be no more student of the university. However, fresh admission can be granted by following all the procedure.
- e) If discontinuation is prior to Enrollment of a semester, he/she does not have to pay the fees (date of commencement of semester according to academic calendar).
- f) HEC scholarship holders are not allowed discontinuation for more than one semester.

9. Academic Standing: -

- a) Grade Point Average: Grade point will be as follows: A for 4, B for 3, C for 2 and F for failure (that is zero).

Maximum grade point average	4.00
Minimum grade point average	3.00

 for obtaining the degree
- b) To remain on the rolls of the University a student shall be required to maintain the minimum CGPA of 2.50
- c) A student, who obtains CGPA of 2.50 or above but less than 3.00, upon the completion of entire approved course work or minimum residency, may be allowed to repeat the courses of the previous semesters in which he/ she had obtained the lowest grades in order to improve the CGPA so as to obtain the minimum of 3.00 within the maximum time allowed for the award of degree, failing which he/she shall cease to be on the roll.
- d) A student will be required to repeat those courses of the previous semesters in which he/ she had failed at the first available opportunity, provided that his/her maximum workload, including the courses being repeated by him/her will not exceed the normal workload.
- e) All PhD students are required to submit their course work program (Proforma GS-12) to the Controller of Examinations through the Director, Advanced Studies.

10. Supervisory Committee: -

- a) Each student will have a Supervisory Committee to advise him/her in his/her Program of studies and research.
- b) The Supervisory Committee shall consist of at least three members of the faculty, two from major field and one from related field of study. If necessary, an outstanding specialist in a major or minor field of study is available outside the University he/she may be appointed as a member of the Supervisory Committee/Co-Supervisor.
- c) One of the teacher/ members from the major field shall act as supervisor, on the recommendations of the Chairperson or Board of Studies. The supervisor must be faculty member of same department of the University in which the student is enrolled, and PhD student will only be supervised by HEC approved supervisor.
- d) The supervisory committees and titles will be provisionally approved by the respective

Deans / Directors and notified by the Directorate of Advanced Studies as delegated by AS&RB. However, the synopsis will be approved by the Director, Advanced Studies. Accordingly, after open house defense of synopsis the research title and supervisory committee will be placed before AS&RB for final approval. Later on, any minor change in the title and supervisory committee will be approved by the Dean / Director concerned and will be notified by DAS, however, for any major change in research will be reported to AS&RB.

- e) A HEC approved supervisor can supervise the maximum five (5) PhD students, in case of any violation supervisor will be banned from supervising new PhD scholar for five year and disciplinary action will be initiated against department chair.
- f) A student who wants to change his/her supervisor due to any issue/conflict will have only one chance to change the supervisor with the consent of proposed supervisor. However, the case will be investigated by the Committee comprising of followings:
 - i) Dean /Director
 - ii) Chairperson
 - iii) Research Coordinator
 - iv) Senior Faculty Member
 - v) Director Advanced Studies.

The committee also gets feedback from the existing supervisory committee regarding the queries and conflicts raised by the applicant in order to change his / her supervisor. If the student has already prepared the synopsis and research project with the supervisor, then he/she will have to prepare a new proposal with new topic keeping in view the specialization of newly allotted supervisor.

- g) The Faculty Member having less than 3 years of service in superannuation cannot take Ph.D. student, however if allotted due to shortage of faculty member will be transferred at the time of retirement. A student whose research is almost completed and ready to defend the thesis within 6 months after the date of retirement of supervisor can continue with the said faculty member.

11. Research Title and Synopsis: -

- a) The supervisory committee will be constituted and submitted along with proposed research title to the Directorate of Advance Studies before mid-term examination of 2nd semester.
- b) The supervisor will move the request for open house defense of PhD student to Directorate of Advance Studies for public notification/circulation.
- c) The open house defense of synopsis is mandatory before the start of 4th semester, otherwise no further enrollment will be done, and student have to discontinue.
- d) Research duration for the applied research students must be two years.
- e) Synopsis must be submitted to Directorate of Advanced Studies before the start of the 4th semester after open house defense at university level. Following committee is suggested for the synopsis defense: -

i.	Dean of the Faculty/Director of the Institute	(Chair)
ii.	Chairman of Teaching Department	(Member)
iii.	Supervisor and Supervisory Committee	(Member)
iv.	Director QEC or His Nominee	(Member)
v.	Director Advanced Studies or His Nominee	(Member)
vi.	Research Coordinator	(Member)

Numerical grade for each consideration listed below according to the following scale:

Unsatisfactory	:	<60
Satisfactory	:	60-70
Good	:	70-80
Very Good	:	80-89
Excellent	:	90-100
Unable to Judge	:	U

CONSIDERATION	RATING (Numerical - Each section having 10 marks Maximum)
1. Clarity of written presentation	
2. Clarity of verbal presentation	
3. Feasibility of research: related to student ability	
4. Overall quality of proposal	
5. Background preparation: knowledge of theory	
6. Background preparation: knowledge of methodology	
7. Background preparation: practical skills	
8. Familiarity with relevant literature	
9. Impact of research on the field/society	
10. Response to questions	
Cumulative Marks	

TOR'S of the Committee

- The Quorum of the Committee must be at least 60 % members.
- The Open House Defense must be arranged before the start of 4th semester.
- In case the student fails in the synopsis defense, he/she will be eligible to defend the synopsis again after two months/ sixty (60) days from the date of defense.
- The minutes of the meeting/defense should be signed by the committee and be attached with the synopsis while submitting to DAS.
- To pass the student, the criteria will be marks based assessment i.e., 60% passing marks. All the members of the committee will individually assess the performance of the student during synopsis defense and complete the Evaluation Performa. The student will be considered pass if third-fourth (¾) quorum will declare him/her pass.
- Faculty members and research students of the university will be the participants/audience.
- If a student fails to submit synopsis to DAS office after open house defense before the deadline, no further enrollment will be done, and student have to discontinue. Chairpersons of the department will be responsible to look after the matter regarding enrollment of the said student.

- h) The code of ethics will be followed during the defense as prepared by Postgraduate Research Evaluation & Review Committee (PGRE&RC).
- i) The synopsis should not be more than 25-30 pages.

12. Registration of Lab Note Book: -

- a) It is mandatory for each PhD student to register lab Note Book with QEC in the First semester of enrollment.
- b) Student should write all the details of his synopsis and research work by hand regularly and countersigned by the Supervisor and Committee Members.
- c) Meetings of the Supervisory Committee is mandatory once in each semester and proceedings should be recorded in Lab Note Book registered by QEC.
- d) The Director QEC or his nominee will visit the department regularly at least once in a semester and will check the lab note book and countersigned. The missing gaps/corrections will be highlighted. This visit / meeting will be organized in coordination with the Chairman and Research Coordinator of the respective department.

13. Cancellation of Admission: -

The admission of student can be cancelled on the written report of supervisor due to non-serious attitude toward academic/research activities, not attending the supervisory committee meetings, and not observing the proper attendance in the department. The case will be placed in the Departmental Board of Studies. The minutes will be sent to Directorate of Advance Studies. The DAS will take the approval of Vice Chancellor and notify.

14. Comprehensive Examination: -

It is compulsory to clear the comprehensive examination within first two (2) years otherwise student admission/registration will be terminated/cancelled on written report of the Chairman. There are two parts of comprehensive examination (Written and Oral). A student who is unable to qualify either the Written or in the Oral part twice; his/her admission will automatically be stand cancelled. The Chairman of the department cannot do further enrollment.

The committee of the comprehensive examination will be notified by the Directorate of Advanced Studies after the approval of Vice Chancellor.

Written Part:

- a) After the completion of the approved course (minimum CGPA 3.00) successfully, the Ph.D. student shall have to appear in the written comprehensive examination, scheduled to be held as per rule in the following semester. However, if the student is unable to appear in the above mentioned exam, the Advanced Studies & Research Board, may on written request of the student containing special reasons, grant permission to appear in the examination to be held as per rules in the next consecutive semester.
- b) The comprehensive examination will cover both the major and minor fields of study and will consist of a written part followed by an oral part. It will be designed to ascertain whether the student has attained the breadth of knowledge and the intellectual maturity necessary to become a successful scholar in his chosen discipline. It will not be a mere re-examination of previous courses but will test the student's ability to integrate and assimilate the knowledge obtained from the courses, seminars, and independent studies.

- c) Examiners for the comprehensive examination shall be appointed by the Vice Chancellor from the persons proposed by the DAS out of the panels of names recommended by the supervisor. However, written comprehensive examination committee should be different from the supervisory committee of the student, if the faculty members are available in the department.
- d) To pass the comprehensive examination, a student must obtain not less than grade B in the written and the oral parts, separately. A fraction in the total marks in either case shall be counted as one mark.

Procedure:

- a) The Controller of Examinations shall, with the approval of the Vice Chancellor, notify the date, time and venue of the Examination, on the recommendation of the Chairman, Comprehensive Examination Committee, at least two weeks before the commencement of the examination.
- b) The written comprehensive examinations of Ph. D students would be held during fifteenth/sixteenth week of each semester (Fall & Spring) and the duration of each paper (A, B & C) would be four hours. The Controller of Examinations shall notify the exact schedule after its approval from the Vice- Chancellor.
- c) The Vice Chancellor shall appoint for each student a Board of Examiners comprising teachers drawn as far as practicable from the fields of study taken up by the student.
- d) The Vice Chancellor shall designate one of the members to act as Chairman of the Board. The Board shall be notified by the DAS.
- e) The Vice Chancellor shall, on the recommendations of the Directorate of Advance studies allocate to each member of the Board (here-in-after called member) a particular field or fields in which he has to set questions. The number of papers shall not exceed three (two in major and one in minor fields).
- f) A student shall answer questions set by each member on a separate answer book and will be evaluated by each member. To pass, a student must get not less than B grade separately in the questions set by each member.
- g) Each member shall, within seven days after the examination return the marked Answer Books to the Chairman who will compile the result and send the same and the award lists of the examiners along with the Answer Books to the Controller of Examinations for result notification.

Oral Part:

- a) The Controller of examinations shall on the recommendation of the Chairman, Board of Examiners after written request by the concerned student showing his readiness to appear in oral exam, notify the date, time and venue for the Oral Comprehensive Examination within time limit of six months of the date of declaration of the result of the Written Comprehensive Examination (Discontinuation period will not be counted). If a candidate fails to appear in oral comprehensive examination within the prescribed time limit, the result of the written Comprehensive Examination shall stand canceled, and he shall have to appear again in the written Comprehensive Examination.
- b) The Board for oral examination shall consist of the same examiners who took written examination and in addition the Dean of the Faculty, and two senior teachers to be nominated by the Vice Chancellor. This will be notified by the DAS.
- c) A student shall not be eligible to sit in the oral part, unless he/she has qualified in the written part of the Examination.

- d) if a student fails to qualify either in the written or oral part, he/she shall have to appear again in the part in which he/she failed, but only once in the exam to be held as per rule in the next consecutive semester.
- e) The Chairman of the Board of Examiners shall be responsible for the conduct of the oral examination and shall determine the order in which each member of the Board shall put questions to the students; the members shall be free to ask any number of questions.
- f) At the conclusion of the oral examination, each member shall separately grade the student and the Chairperson of the Board of Examiners shall compile the result and send the same along with the award lists of the examiners to the Controller of Examinations for result notification.
- g) To pass the oral Examination, a student must secure not less than B grade in the questions asked by each member, separately.
- h) Dean is a regular member of the committee. The presence of the Chairman of the Comprehensive Committee is Compulsory. However, in exceptional cases exemption of one member from committee is allowed.

15. Research and Thesis Completion: -

There shall be 50 credit hours allocated for the Research and Thesis. A candidate who has passed the comprehensive examination shall be allowed to submit his/her thesis. But, before submission, he/she will have to defend his/her thesis, at university level. This presentation shall be evaluated by the Supervisory Committee and if found acceptable, the final submission may be allowed.

Thesis Defense:

After the completion of Research, the supervisor will move the request for thesis defense.

- a) Thesis will be open house defense at university level.
- b) DAS will notify the date, time and venue of PhD thesis defense on the request of supervisor.

The Following committee is suggested for thesis defense:

i.	Dean of the Faculty/Director of the Institute	(Chair)
ii.	Chairman of teaching department	(Member)
iii.	Supervisor and Supervisory Committee	(Member)
iv.	Director QEC or His Nominee	(Member)
v.	Director Advanced Studies or His Nominee	(Member)
vi.	Research Coordinator	(Member)

Numerical grade for each consideration listed below according to the following scale:

Unsatisfactory	:	<60
Satisfactory	:	60-70
Good	:	70-80
Very Good	:	80-89
Excellent	:	90-100
Unable to Judge	:	U

**Examiners and committee members are encouraged to consider the quality of the student's final work in the context of background, time to completion, commitment to graduate student affairs and other leadership activities, and their degree of independence in their chosen field.*

Consideration	Thesis defense (100 Marks) 20 each Section
Grasp of subject, powers of criticism and awareness of previous work	
Resourcefulness, alertness to significance of findings	
Diligence, care, technical skill in carrying out research	
Organization of presentation, findings and discussion	
Quality of presentation (audiovisual aids, lucidity, grammar, writing and presentation style)	
Average Score	

Recommendation (Grading options include):

- 1) *Approved as presented;*
- 2) *Approved upon specific corrections being made* (revisions must be clearly specified and a clear timetable for completion of the revisions must be presented to the student, normally with a maximum of one month to complete the revisions);
- 3) *Rejected but with permission to re-submit a revised thesis for re-examination* (a clear timetable for completion must be presented, normally with a maximum of one year to re-submit); and
- 4) *Rejected outright.*

TOR'S of the Committee:

- a) The Quorum of the Committee must be at least 60% members.
- b) The Open House Defense must be arranged within 12 Semesters.
- c) In case the student fails in the thesis defense, he/she will be eligible to re-defend (one time) thesis again with the interval of 6 months.
- d) If the thesis defense was done in the 12th semester and failed to defend in open house, then he/she must discontinue the said semester otherwise he/she will be no more student of the university.
- e) The minutes of the meeting/defense should be signed by the committee and be attached with the thesis while submitting to DAS.
- f) To pass the student, the criteria will be marks based assessment i.e. 60% passing marks. All the members of the committee will individually assess performance of the student during thesis defense and complete the Evaluation Performa. The student will be considered pass if third-fourth ($\frac{3}{4}$) quorum will declare him/her pass. Faculty members and research students of the university will be the participants/audience.

Thesis Submission Procedure (First draft)

- a) Directorate of Advance studies will notify the date of thesis in each semester.
- b) First Draft of the thesis can be submitted within 12 Semester; no thesis will be entertained after 6 years including the discontinuation period.
- c) The thesis must be an original and scholarly contribution to the knowledge of the candidate's chosen field of study.

- d) First draft of the thesis will be prepared and after signature from Supervisory Committee will be submitted to DAS through Chairman/Director for all PhD degree programs along with Plagiarism Report duly signed, stamped and verified by the Supervisor and all requisite documents.
- e) The Supervisor and Supervisory Committee will check the thesis and shall be responsible for all type of research and contents.
- f) The DAS will check the formatting of the thesis according to the Theses Manual approved by the AS&RB.

16. Plagiarism Policy: -

Plagiarism Policy/Procedure for submission and approval of Ph.D. Thesis: -

- a) This university follows the zero-tolerance policy regarding plagiarism and all the PhD degree synopsis and thesis should be checked for plagiarism by the respective Supervisors. The similarity Index (excluding Bibliography) must be below 19% (not more than 5% from single source) as already implemented (according to HEC guideline).
- b) The supervisor will ensure incorporations suggested by the DAS and generate the similarity index report. The supervisor will send the soft copy of thesis (excluding title pages and reference) and similarity index report to QEC electronically/email. The Director QEC will generate the similarity index from soft copy of thesis. If the similarity index will be higher than 19% the Director QEC will inform the supervisor by email. The supervisor will correct the things suggested by QEC and will forward again thesis to QEC by email for similarity index clearance. The Director QEC will issue a certificate with signature and stamp clearly mentioning the Similarity Index % of the soft copy of thesis submitted to Directorate of QEC.
- c) In case the Project report submitted to the donor Agency/Data Published from research Project/ research paper(s) has already been published by the student from his/her PhD research, the supervisor will give certificate about self-plagiarism and indicate the paper title, journal details. The director QEC while checking the similarity index of said thesis will deduct/exclude self-plagiarism part and verify the S. I. Report according to HEC requirement and issue the certificate.
- d) If plagiarism in the thesis is found at any stage in future, the supervisor and student would be responsible.

17. Submission of Semi-Final Thesis (3 copies): -

- a) After verification and clearance of similarity index from QEC, the supervisor will forward the Semi-Final thesis to DAS through Chairman and Dean concerned along with following documents.
 - i. 3 copies of thesis
 - ii. Panel of experts with their consents from the approved list by board of studies and AS&RB
 - iii. Certificate of Submission of Ph.D. Thesis (Semi Final) for Foreign Evaluation
 - iv. Certificate for Checking Plagiarism (Annex-I)
 - v. PDF version of Ph.D. thesis in CD
- b) The DAS will ensure the corrections as suggested in formatting and forward the thesis to COE. After receiving the thesis form DAS and verified report of similarity index from Supervisor / QEC, COE will process the thesis for foreign evaluation.

18. Foreign Expert Evaluation and Thesis Processing: -

- a) The unbound thesis shall be referred to the Controller of Examinations duly certified by the Supervisory Committee that the contents and form of the thesis are satisfactory for submission along with a declaration signed by the student regarding plagiarism etc.
- b) The Controller of Examinations shall get the thesis evaluated through surface or electronic email; within three months after the date of submission/resubmission of thesis to his office. Any delay beyond three months must be brought to the notice of the Vice Chancellor.
- c) Examiners for the evaluation of thesis shall be appointed by the Vice Chancellor from the persons proposed by the supervisor from the list approved by AS&RB and Controller of Examinations out of the panel of names recommended by the Board of studies, from not less than two foreign countries (from the list of Technologically / Academically Advance Countries amended time to time from HEC). The number of external examiners shall be two.
- d) Each External Examiner shall explicitly state in his report:
 - i. Whether or not the thesis is of sufficient merit to justify the award of Ph.D. Degree to the candidate.
 - ii. Whether the candidate should be allowed to revise and re-submit his/her thesis.
- e) In the later case the broad lines on which the thesis should be revised must be clearly stated.
- f) If both the examiners approve the thesis, the candidate shall be recommended for the award of the degree after viva exam.
- g) If both the examiners reject thesis, the candidate shall be declared to have failed. However, the Advanced Studies & Research Board may allow a student to re-conduct his research and resubmit his thesis on a new topic as recommended by his Supervisory Committee. This facility would be available only once. However, if one of the examiners approves the thesis and the other rejects it, it shall be sent to a third examiner, for evaluation. If the third examiner approves the thesis, the candidate shall be recommended for the award of the degree, otherwise he shall be declared to have failed.
- h) If one of the examiners approves the thesis and the other is of the view that it is not acceptable in the form in which it has been presented but requires revision, the following procedure shall be followed:

The Supervisory Committee of the candidate may either:

 - i. Write to the examiners concerned explaining why it is not possible to revise the thesis and taking that it should be examined in its original form, or
 - ii. If the views of the examiner were acceptable to the Committee, the candidate will be required to revise and re-submit the thesis within a period not exceeding two semesters, for re-evaluation.
 - iii. If the examiner approves the original thesis or the revised thesis, as the case may be, the candidate shall be recommended for the award of the degree.
 - iv. In case of dis-agreement between the Supervisory Committee and the examiner, the matter shall be referred to the Advanced Studies & Research Board which may suggest such action as it may consider expedient.
 - v. If both the examiners express the opinion that thesis as presented, is not acceptable, but required revision the following procedure shall be adopted:
- i) In case the lines, on which the examiners have suggested revision of the thesis, are

substantially the same and are acceptable to the Supervisory Committee, they shall call upon the candidate to revise the thesis on these lines and re-submit it within a period not exceeding two Semesters, for re-evaluation. Any delay will be brought in the notice of vice chancellor for special permission.

- i. In case the lines on which the examiners have suggested revision are not acceptable to the Supervisory Committee, the matter shall be referred to the Advanced Studies & Research Board which may suggest such action as it may consider expedient.
- ii. In case a candidate, who is required to revise and re-submit his thesis, does not do so within the period allowed, he/she shall be declared to have failed.
- iii. After successful foreign evaluation the ring bound thesis will be submitted to DAS along with "Annotated Compliance Report" and certificates required. DAS will give the clearance and allow initiating viva process.
- iv. In case of positive reports from both foreigner evaluators the supervisor will prepare "Annotated Compliance Report" and certificates required for the purpose and ensure the suggested corrections and submit to DAS.
- v. In case of revision and re-submission from any of foreigner evaluator the supervisor will ensure the revision and generate the similarity index report again and get certificate from QEC and follow the same set procedure for foreign evaluation again and submit to COE through DAS.

19. Viva-Voce Examination: -

Upon Successful Foreign Evaluation and Clearance from the DAS student can initiate the Viva - Voce process. The details are as under:

- a) The supervisor will move a panel of four (preferably local) external examiners on the prescribed proforma to the Controller of Examination through Dean/Directors and Director Advanced Studies for viva exam with published research paper.
- b) For the appointment of internal examiner, the supervisor will forward the name of the supervisory committee member from major field through Chairperson to the Dean/Director for notification of internal examiner with a copy to Director Advanced Studies.
- c) The supervisor with the consent of external examiners and internal examiner will inform the date, time and venue for viva examination to Director Advanced Studies for notification. However, a gap of 10 days may be ensured between the dispatch date of thesis for external examiners and viva examination.
- d) After conducting the viva examination, the supervisor will send signed copies of certificate of approval to Director Advanced Studies and Controller of Examinations separately through respective Chairman and Dean within 24 hours of conduct of examination.
- e) The examination committee (external and internal) will ensure incorporation of suggestions/comments of foreign evaluators in the thesis by the students.
- f) In case of failure in the viva examination, the certificate of approval may be forwarded to Director Advanced Studies and Controller of Examination separately by the supervisor through Chairman and Dean within 24 hours along with justification of failure from both external and internal examiners. 2nd chance will be given with the approval of DAS within three months (only).
- g) After successful viva examination the student will submit following documents in the final hard bound copies of Ph.D. thesis:

- i. Original Ph.D. Author's declaration.
- ii. Original Plagiarism undertaking by the Ph.D. Scholar.
- iii. Original Certificate of Approval of Ph.D. thesis by Examination Committee.

20. Research Paper Requirements: -

Published paper is mandatory for award of PhD degree (pre-requisite for viva exam with page and volume number w.e.f. 01.01.2019 or with DOI published online.

For Science discipline: Paper published after 01.01.2019 will be considered only in impact factor Journal included in Thomson Reuter web of Sciences.

For Social Science discipline: Paper published in W, X and Y categories + ISI master list journals.

21. Final Thesis Submission: -

The 4 (four) hard bound copies will be submitted within one month of the date of viva examination along with PCD (PhD Country Directory as designed by HEC) Performa, failing w h i c h t h e candidature for the degree shall stand cancelled. However, in a hardship case, the student shall submit the hard bound thesis within extended period of one month but only after Vice-Chancellor's permission obtained through proper channel on his/her request, containing special reasons of delay, duly certified by the Supervisor. In this case, the Director Advanced Studies will notify the extended period of one month after seeking approval by the Vice-Chancellor.

22. Award of Degree: -

A candidate who has fulfilled all the requirements, prescribed for the course including proof of publication of one paper as above and success evaluation of thesis from foreigner evaluators & viva voce by external and internal examiners, shall be awarded the Degree of Doctor of Philosophy and copy of published paper should be added at the end of hard bound copies of thesis. In case of any violation of University PhD Policy/rule in addition to HEC guideline supervisor be banned from supervising new PhD scholar for five year and disciplinary action will be initiated against department chair and controller of examination.

FORMAT (INTERNAL STRUCTURE) OF THESIS

The final format of the thesis containing the preliminary pages and the text pages should be organized in the following sequence:

- Title page
- Certification page
- Dedication
- Contents
- List of Tables
- List of Figures
- Abbreviations
- Acknowledgments

The preliminary pages should be followed by the main text. The main text may contain the following chapters:

Sample- 1

	ABSTRACT
Chapter 1	INTRODUCTION
Chapter 2	REVIEW OF LITERATURE
Chapter 3	MATERIALS AND METHODS
Chapter 4	RESULTS AND DISCUSSION
	(This chapter can also appear as two separate chapters like Chapter 4 RESULTS & Chapter 5 DISCUSSION)
	SUMMARY
	LITERATURE CITED
	Note: Summary and Literature Cited should not be numbered as a Chapter.

Sample-2

In cases where a research topic dealing with different fields and demands a separate handling of different parts of the research, the main text may contain the chapters, appearing as a continues text in the following way:

Chapter 1	GENERAL INTRODUCTION
Chapter 2	RESEARCH ASPECT/FIELD (This chapter should consist of separate Abstract, Introduction, Review of Literature, Materials and Methods, Results and Discussion)
Chapter 3	RESEARCH ASPECT/FIELD (The number of such chapters may be developed according to the requirements of research proposal but the last chapter should be General Discussion).
Chapter 4	GENERAL DISCUSSION
	SUMMARY
	LITERATURE CITED
	Note: Summary and Literature Cited should not be numbered as a Chapter.

Flow Chart for Ph.D. Synopsis

Synopsis will be defended in open house before the enrollment of 4th semester be submitted to DAS otherwise no further enrollment will be allowed and student have to discontinue.



After successful open Defence the synopsis will be submitted to DAS along with minutes of the Defence, Plagiarism report and attendance of the participants.



All Ph.D. Synopses along with title and supervisory committee will be presented in AS&RB meeting for approval and DAS will notify.



DAS will check the format of Synopsis and after clearance will allow submission of Four (4) copies and will ensure proper formatting according to the requirements DAS will check the format of Synopsis and after clearance will allow submission of Four (4) copies.



Supervisor will ensure the incorporation of suggested correction from DAS and AS&RB and forward four (4) Copies to DAS.



DAS will ensure the incorporation of suggested correction in synopsis and will notify and send to COE, Dean, Chairman, Supervisor, etc. DAS will check the incorporation of suggested correction in synopsis and will notify and send to COE, Dean, Chairman, Supervisor, etc.

PhD SYNOPSIS DEFENCE PROTOCOL

1. The Research coordinator of the department will send the following documentation to synopsis defence committee:
 - a) Research Proposal
 - b) Notification of DAS for synopsis defence mentioning the time, date and venue
 - c) Abstract
2. **At the Synopsis Defence:**
 - a) The Chair will explain the procedure to the defence committee and audience. Questions will arise from the scientific content of the work presented but will not range randomly over the entire field. The student is being examined for competence by evaluating his/her ability to put together a viable research project and to defend the rationale and methodology.
 - b) The Chair will introduce the student and explain that the student will give a 20-minute presentation. The Chair will introduce the defence committee and explain that the examiners will question the student following the presentation. (Usually there are two rounds of questions). **Please note that the Chair may also participate in the questioning.**
 - c) Following the questioning period, the student and audience will be asked to withdraw.
 - d) The student will be asked to join the defence committee following their deliberations. The Chair will convey the result of the synopsis defense to the student, and the committee and student will have an opportunity to discuss the outcome of the exam.
 - e) A copy of the evaluation summary report ***signed by all committee members***, along with a formal letter, will be sent to the student by the Graduate Coordinator.
3. **After the Synopsis Defence:**
 - a) The supervisor will be asked to comment on the examination (especially questions the student had difficulty with). The committee will be asked to complete evaluation form.
 - b) The Chair will lead a discussion on the evaluation of the student.
 - c) All committee will participate in this discussion and in the final decision. If there is an impasse, the Chair will cast the deciding vote. A consensus evaluation form will be completed by the Chair and signed by all defence committee members.
 - d) Recommendations will be recorded.
 - e) The Chair will invite the student to join the examining committee immediately following their deliberations. The student will be formally informed of the outcome of the exam by the Chair. The Chair will facilitate discussion between the student and committee, allowing time for the committee to give feedback and/or the student to ask questions.

Flow Chart for Ph.D. Thesis *Before Evaluation*

Ph.D. thesis will be defended in open house and first draft will be prepared and after signature from supervisory committee be submitted to DAS through chairman/ Director and Dean concerned within 12 semesters.



DAS will check the format of thesis and after clearance will allow to submit 3 (Three) copies (Semi Final) and will ensure proper formatting according to the requirements.



Supervisor will ensure the incorporation of suggested correction from DAS and will generate similarity index report.

- Supervisor will send soft copy of thesis and S.I report to QEC by email.
- Director QEC will generate the similarity index from soft copy of thesis and if it falls within the limits of HEC, QEC will issue a certificate clearly mentioning the Similarity Index of the submitted thesis with title. Self S.I index Published paper from PhD research will be excluded.

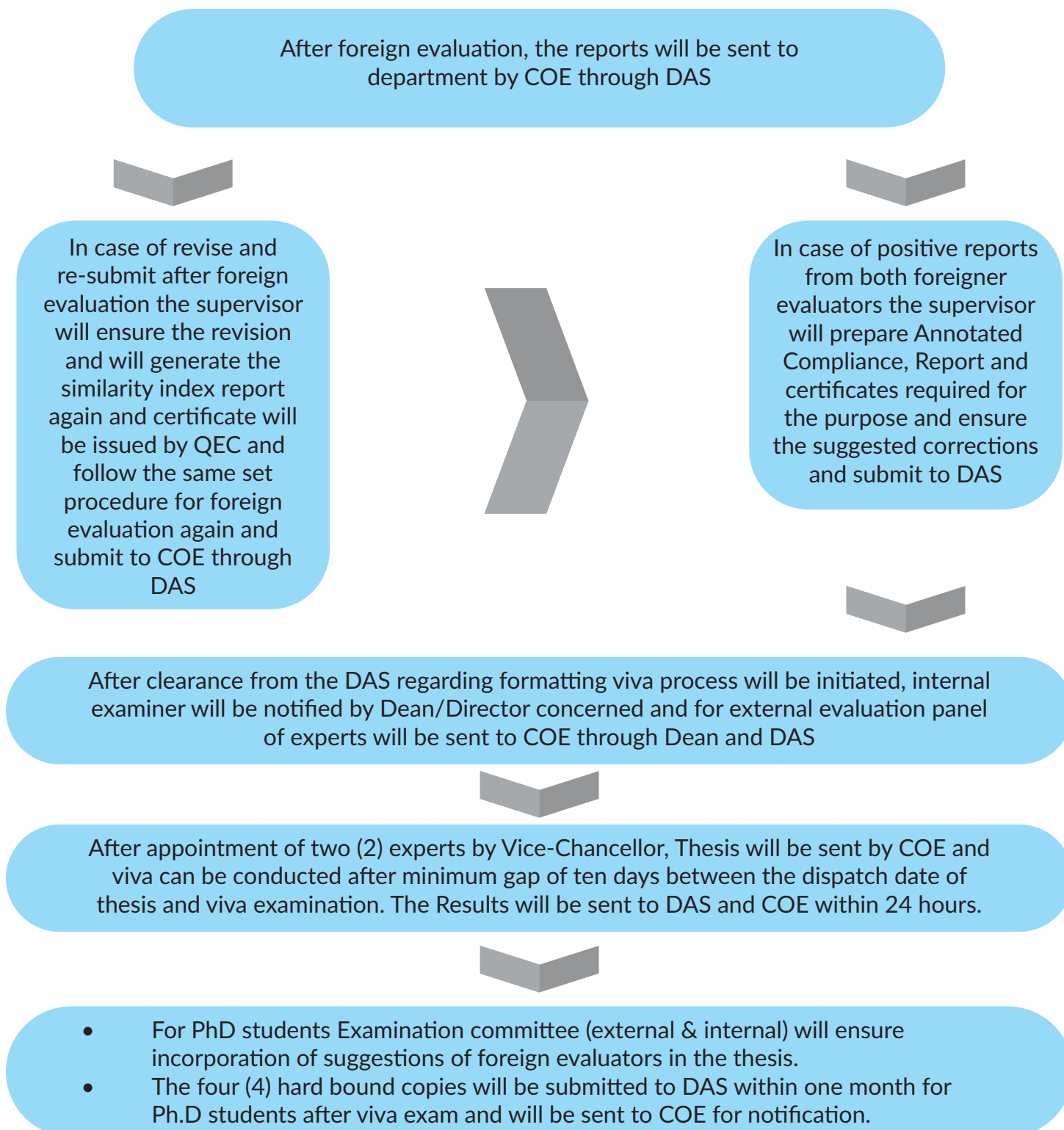


Supervisor will forward the semi-final thesis (three copies) to DAS through Chairman and Dean concerned after clearance from QEC along with Panel of Foreign Examiners



After receiving the thesis from DAS and certificate of similarity index from Supervisor /QEC, COE will process the thesis according to already set procedure for Foreign evaluation.

Flow Chart for Ph.D. Thesis After Foreign Evaluation



List of Technologically/Academically Advanced Countries for Evaluation of the PhD Dissertation

(HEC Policy on PhD Degree Programs-2021)
(For all subjects unless noted otherwise)

1	Afghanistan ^{1&7}	25	Japan
2	Australia	26	Luxemburg
3	Austria	27	Malaysia
4	Belgium	28	Netherland
5	Brunei ²	29	New Zealand
6	Bulgaria	30	Nigeria ²
7	Canada	31	Norway
8	China ³	32	Oman ⁷
9	Croatia ⁴	33	Poland
10	Czech Republic	34	Portugal
11	Denmark	35	Romania
12	Estonia ⁴	36	Russia
13	Finland	37	Singapore
14	France	38	Slovak Republic ⁴
15	Germany	39	Slovenia ⁴
16	Georgia ⁴	40	South Africa
17	Greece	41	South Korea
18	Hong Kong	42	Spain
19	Hungary	43	Sweden
20	Iceland	44	Switzerland
21	India ^{2&5}	45	Turkey
22	Iran ^{6&7}	46	United Kingdom
23	Ireland	47	United States
24	Italy	48	All Arab Countries ²

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- 1- Pashto
 - 2- Arabic, Islamiyat and Islamic Studies
 - 3- Sciences, Engineering & Technology
 - 4- Mathematics Only
 - 5- Brahvi, Punjabi, Saraiki, Sindhi and Urdu
 - 6- Persian
 - 7- Balochi

66th Academic Council (26-01-2021)

Reference style for thesis and synopsis manual (APA)

Reference in Text Citation
Single author (i) Citation of one reference with one author within or at the end of sentence is like this (Gardner, 2005). (ii) Start of Sentence is like this. Gardner (2005) has presented this study. _____
Two authors (i) In this study the authors (Pereira & Fontoura, 2012) (ii) Pereira & Fontoura (2012) has presented this study. _____
Multiple Authors (3 or above) (i) One reference by three or more authors is like this (Ashburner et al., 2000). (ii) Ashburner et al. (2000) has presented this study. _____
Multiple References In these studies (Ashburner et al., 2000; Pereira & Fontoura, 2012; Ramsin, 2010) have presented.

Literature Cited

Single author

Gardner, L. (2005). The use of stainless steel in structures. *Progress in Structural Engineering and Materials*, 7(2), 45-55.

Two authors:

Pereira, G. V., & Fontoura, L. M. (2012). Defining agile and planned method fragments for situational method engineering. VIII Simpsio Brasileiro de Sistemas de Informao, Fortaleza, Brasil, 660-665.

Three authors:

Klare, U., Kamler, J. F., & Macdonald, D. W. (2011). A comparison and critique of different scat- analysis methods for determining carnivore diet. *Mammal Review*, 41(4), 294-312.

Multiple authors

Ashburner, M., Ball, C. A., Blake, J. A., Botstein, D., Butler, H., Cherry, J. M., ... & Sherlock, G. (2000). Gene ontology: tool for the unification of biology. *Nature genetics*, 25(1), 25-29.



Directorate of Advanced Studies
Pir Mehr Ali Shah
Arid Agriculture University
Shamsabad, Murree Road, Rawalpindi

Contact Us:
Tel: +92-51-9292118 | Email: das@uaar.edu.pk
<https://www.uaar.edu.pk/das-home.php>