

# **DAWOOD UNIVERSITY OF ENGINEERING & TECHNOLOGY**

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# **DUET PHD REGULATIONS 2024**

This document consists of two parts namely Part A and Part B

PART A: Applies to All Students Admitted for Ph.D Program of the University in Batch 2021-2023.

PART B: Applies to All Students Admitted for Ph.D Program of the University in Batch 2024 and onwards.

# REVISED REGULATIONS FOR PH.D PROGRAM, 2021

# (Second Revision)

# 1. Short Title:

In pursuance of the provisions contained in Section 32(1)(b) & (c) of the DUET Act, 2013 (Sindh Act No. XII of 2013) as amended by the Sindh Universities and Institutes Laws (Amendment) Act, 2018 (Sindh Act No. XV of 2018) and read with HEC's Notification # 15-54/C/2019/HEC(QAD)/24, dated: 19<sup>th</sup> January, 2021, these regulations may be called the "Regulations for Ph.D Program, 2021".

#### 2. Commencement:

These regulations shall come into force with immediate effect.

# 3. Application:

These regulations shall apply to all students admitted for Ph.D Program of the University in Batch 2021-2023.

## 4. <u>Definitions:</u>

- (1) In these regulations, unless the context otherwise requires, certain common expressions shall have the same meanings as assigned to them under Section 2 of the DUET Act, 2013 (Sindh Act No. XII of 2013), as amended:
  - i. "University" means the Dawood University of Engineering and Technology, Karachi.
  - ii. "Act" means the Dawood University of Engineering and Technology Act, 2013 as amended by the Sindh Universities and Institutions Laws (Amendment) Act, 2018.
  - iii. "Syndicate" means the Syndicate of the University.
  - iv. "Academic Council" means the Academic Council of the University.
  - v. Advanced Studies and Research Board means the Advanced Studies and Research Board (ASRB) of the University.
  - vi. "Vice Chancellor" means the Vice Chancellor of the University.
  - vii. "Pro Vice Chancellor" means the Pro Vice Chancellor of the University.
  - viii. "Dean" means the Dean of faculty concerned.
  - ix. "Director" means the Director of Postgraduate Studies.
  - x. "Controller of Examinations" means Controller of Examinations of the University.
  - xi. "Supervisor / Co-Supervisor" means a University teacher (holding PhD degree in the relevant field) appointed by the ASRB of University as Supervisor / Co-Supervisor
  - xii. "Chairperson" means the Chairperson of the Department where with a student is registered in PhD program.
  - xiii. "Board of Studies" means the Board of Studies (BoS) PhD program where PhD student is registered.
  - xiv. "Semester" means a period of 16 weeks of academic teaching / activities.
  - xv. "Credit Hour" means three (03) hours of teaching for a particular course in a classroom per week in a semester.
  - xvi. "Regular Semester" means Spring or Fall semester.
  - xvii. "Credit Hour" means three (03) hours of teaching for a particular course in a classroom per week in a semester.
  - xviii. "Internal" means an expert having the degree of PhD in the relevant field from inside the department or the University.
  - xix. "External" means an expert having the degree of PhD in the relevant field from and who is not university employee/University Teacher.
  - xx. "Foreign Expert" means an expert from technologically / academically advanced countries as prescribed by HEC, Pakistan.

- xxi. "Similarity Index" means a report generated by a plagiarism checking through HEC's approved software for a particular piece of writing.
- xxii. "Thesis / Dissertation" means a piece of writing by a scholar involving original study of a subject through academic research.

## 5. Minimum criteria for admission in PhD programs

- (1) <u>Completion of Prior Degree:</u> To be eligible for admission to the PhD Degree Program, a candidate must possess his or her BS (Engineering / Science / Technology) / MS / MPhil (Engineering / Science / Technology) or equivalent degrees (i-e sixteen-year education in Engineering, Science or Technology).
- (2) <u>Minimum GPA requirement:</u> A minimum CGPA of 3.0 (out of 4.0 in the semester system) or First Division (in the annual system) in the most recent degree obtained is required, whether such was degree obtained from Pakistani or foreign universities.
- (3) <u>Testing requirement:</u> Applicants to PhD programs shall be required to fulfill any one of following testing requirements.
  - (a) The Graduate Record Examination (GRE) International test administered by the Education Testing Service.
  - (b) A graduate admission test administered by the Education Testing Council (ETC). In the case of ETC test, a minimum of 60% marks is required to be eligible for admission in PhD Program.
  - (c) With the permission of the HEC, an equivalent test developed by the university, or by another university, for admissions to graduate programs. In the case of test developed by university, a minimum of 70% score is required to be eligible for admission in PhD Program.
- (4) Subject tests at the discretion of the university.
- (5) If the applicant has a strong interest in pursuing a PhD degree in a different discipline and admissions committee is satisfied that the applicant's prior education has sufficiently prepared him or her to undertake the course of studies of the doctoral program (or, in the opinion of the admissions committee, the preparation can be deemed satisfactory by taking a few additional courses after starting the program), the applicant shall be considered for admissions notwithstanding their prior qualification in a different discipline. However, at the time of admission, the admission committee will identify the deficiency courses and along with their credit hours which student must complete within one year of their regular studies.
- (6) <u>Statement of Purpose:</u> As part of the application for admission to PhD programs, applicants shall be required to submit a statement of purpose (essay of up to **1000 words**, explaining his/her purpose in pursuing a PhD, specific communication areas that you would like to explore, and why he/she would like to study in specified program), which shall form an integral part of the application. The admissions committee shall use the information provided to ascertain the preparedness and interest of the candidate in pursuing doctoral studies, and whether the department has the requisite resources to train and supervise the doctoral candidate in the subspecialty he or she is interested in.
- (7) **Recommendations**: University require two letters of recommendation from faculty members at applicant's qualifying degree institution who can attest to his/her potential as a graduate student.

# 6. **Procedure for Admission:**

- (1) The applicant will submit the application form duly completed in all respects along with the relevant documents by the last date fixed.
- (2) Each application for admission will be processed separately by the Directorate of Postgraduate.
- (3) Incomplete application forms or applications not accompanied by the relevant documents and / or processing fee, or applications received after the due date will not be considered.

#### 7. Mode of Study in PhD program:

- (1) The language of the Study, medium of instructions, examination, thesis shall be English.
- (2) The official timing shall be observed from 9:00 am to 9:00 pm.
- (3) The student may be registered for a full time or part time program.
- (4) A full-time student, if employed, will have to obtain study leave from employer before registration.
- (5) A part time student, if employed, will have to obtain No Objection Certificate (NOC) from his / her employer before registration.
- (6) There shall be a residency requirement for a period of at least two years.

# 8. <u>Departmental Admission Committee:</u>

- (1) Departmental admission committee shall consist of:
  - i. Chairperson, who shall be convener.
  - ii. Two University Teachers with PhD Qualification appointed by Vice Chancellor.
  - iii. One Professor, Meritorious Professor, or Tenure Track Professor, other than the University Professor, in relevant field appointed by Vice Chancellor.
- (2) The **Departmental Admission Committee** reserves the right to refuse admission to any applicant without assigning any reason or cancel the admission of a student at any stage if his / her conduct or progress in studies is not found satisfactory.
- (3) Departmental Admission Committee shall ensure that the total number of students enrolled in any PhD program should not excess the [Total number of dedicated faculty members for the program with PhD Degree] \*5.
- (4) Students seeking admission are required to pay the fees at the time of admission as approved by the University authorities.
- (5) Every candidate admitted in PhD shall be enrolled in this University on payment of the prescribed fee.

# 9. Merit Policy:

(1) Admission in PhD program shall be granted purely on merit basis. The merit list of the candidates for admission shall be determined according to following weightage.

S. No	Criteria	Points
01	Percentage of marks (GPA) in Qualifying Degree	40
02	Test Score	40
03	Statement of Purpose	20

# **10.** Degree Completion Timeline:

- (1) The PhD degree shall be awarded by universities after a minimum of three (3) years and not more than eight (8) years after the enrolment of the student; provided that for students who are unable to complete the program within eight (8) years, ASRB may extend the period up to one (01) year on account of any special circumstances on the recommendation of the supervisor / co- supervisor(s) provided further that in no event shall the PhD degree be awarded more than ten (10) years after the enrolment of the student in the program.
- (2) The duration starts from date of the enrollment of the student in the PhD program.
- (3) The date of notification of the award of the PhD degree after the PhD defense shall be the date of the completion of PhD studies.
- (4) There shall be a residency requirement for a period of at least two years.

#### 11. Course Work and Credit for prior coursework and Residency Requirement:

- (1) Each student enrolled for PhD program must complete the required course work.
- (2) Each PhD Degree Program shall carry number of approved courses of defined Credit Hours.
- (3) PhD Degree Program shall have minimum 48 Credit Hours of course work including compulsory and elective courses followed by the comprehensive examination.
- (4) Following details as been provided at **Annexure A.**

- i. Complete structure of PhD program
- ii. Distribution of Courses and Credit Hours
- iii. Scheme of Study
- iv. List of University Compulsory Courses:
- v. Distribution of Marks:
- vi. Grading Policy
- vii. Computation of the GPA
- viii. Semester Examination
- ix. Course/Semester registration and Enrollment
- x. Course Add/Drop
- xi. Procedure of Conducting Examination and Declaration of Results:
- xii. Migration of Student from other University/Institution:
- xiii. Leaves of absence/ Freezing of Studies.
- xiv. Reasons for Leaves of Absence
- xv. Voluntary withdrawal
- (5) In case of those students who have previously completed a graduate degree in the relevant discipline (MS/MPhil or equivalent), at the time of admission, departmental/program admission committee shall notify details of credit, each student shall receive for prior coursework, provided that such credit shall not in any case exceed from 50% of the total credit requirement of the program.
- (6) If the applicant is pursuing a PhD degree in a different discipline, the admission committee shall identify the deficiency courses, and along with their credit hours which student must complete within one year of their regular studies.

# 12. <u>Comprehensive Examination:</u>

- (1) Following the completion of coursework, every PhD student shall be required to pass a comprehensive examination to be granted candidacy as PhD researcher; provided that if the student fails to pass the comprehensive test, he or she shall be allowed one more attempt to take the test.
- (2) After the declaration of the result/completion of all the requirements for the course work, the minimum required CGPA for eligibility to appear in the comprehensive examination is 3.00/4.00, the Assistant Director (AD) PGS shall write student to fulfill the administrative requirements for the written comprehensive exam within two weeks' time. It may include fee clearance, exam request form submission, proposed date within the allowed duration of three months from the date of declaration of the result of the last course taken by the candidate.
- (3) Candidate may be asked to submit a tentative synopsis of the research work/selected specific research area before the written exam. Two relevant courses to that synopsis may be chosen from the candidate's transcript either by PhD review committee or the candidate by self.
- (4) Written exam shall be scenario based that includes a complex problem to be solved by using the knowledge area(s) of interest identified by the candidate either by synopsis or the opted courses.
- (5) 2 internal experts and 1 external Expert from the relevant area may set the question paper with mutual consultation and assess the paper individually. The paper shall be submitted to the Controller of Examinations directly by the experts. The qualitative assessment shall be done based on the approach presented to solve the given problem. The outcomes may be Pass, Pass with condition (to appear and pass the oral examination), Failure with retake and Failure.
- (6) In the written component, the scenario-based test that includes a complex problem will be conducted, and oral component shall be conducted as part of the qualitative assessment. The panel of experts as given at (4) shall be approved by the Vice Chancellor:
- (7) The declaration of the result shall be carried out by the CoE based on the outcomes as follows: **Pass**: All or majority of experts are satisfied.

Pass with Condition: Majority of the experts are partially satisfied.

**Failure with retake**: None of the experts are satisfied at all. Candidate should follow the whole process as defined for written comprehensive exam and re appear.

**Failure**: None of the experts are satisfied at all in the second attempt. It leads to termination from the PhD program. The transcript may be issued for the taken courses after due clearance.

The Director shall convey the decision to the students and the PhD review committee not later than 3 weeks from the date of conduct of the written examination.

# 13. Approval of Supervisor and Optional / Elective Courses:

- (1) To select a research supervisor, the student should talk to faculty members in potential areas of research interest.
- (2) Every doctoral student must apply for the appointment of research supervisor, with consent Letter from Supervisor before the start of third semester.
- (3) ASRB shall approve the appointment of research supervisor on the recommendation of the concerned Chairperson and duly endorsed by the concerned Dean.
- (4) At the time of appointment as supervisor, the faculty member shall be a full-time faculty member of the university in which the student is enrolled. Faculty members shall supervise no more than five (5) PhD students at any time.
- (5) The supervisor should prepare a list of optional courses the student intends to take to fulfill the requirements of the degree. The list of the subjects will then be given to the Chairperson, who shall forward it to the Director PGS to place in the ASRB for approval.
- (6) The Supervisor shall also be responsible for guiding the candidate in development of the research proposal and for working on the research plan.

# 14. Approval of Research Proposal:

- (1) Student will fill up the Research Proposal Proforma and pay the required processing fees through bank challan available in the office of the Chairperson.
- (2) The Research Proposal Proforma will be signed by the student himself / herself, his / her supervisor and co-supervisor(s) and Chairperson.
- (3) The Research Proposal proforma will be submitted in the office of the Chairperson with the following documents:
  - (a) Research Proposal: each page of the research proposal will be signed by the student and his / her supervisor and co-supervisor(s).
  - (b) A copy of the Bank Challan after the payment of the processing fees.
  - (c) The Similarity index of the scanning report (Plagiarism). It must be less than or equal to 19% and no single source should have a similarity index more than or equal to 5%.
  - (d) Attested copy of the Enrolment Card.
- (4) The Chairperson will process the application and forward to the Director PGS for the approval of the ASRB.
- (5) Student shall be eligible for initial seminar of his/her project after completion of first year.
- (6) The faculty member will not supervise or co-supervise his/her real closed relative.
- (7) The term 'close relation' includes spouse, children, sister, brother, grandchildren, nephew, niece, grandnephew, grandniece, uncle, aunt, first cousin, son-in-law and daughter-in-law of supervisor or supervisor's spouse.
- (8) The supervisor/Co-Supervisor will scan the research proposal of the student through Higher Education Commission (HEC) approved software for plagiarism and will submit the duly signed and stamped hard copy containing similarity index to Chairperson.
- (9) A candidate ordinarily shall not be permitted to modify his research objectives during study. If an occasion arises due to technical difficulties, the Vice Chancellor may on the recommendation of the ASRP permit any modification of the research objectives within one year of the date of approval of research proposal.
- (10) The candidate shall pursue his research work in this University. However, the candidate shall also be permitted to carry out his research work at another Institute or a Centre of repute provided the candidate's Co-supervisor belongs to that Department/Institute/Centre.
- (11) The supervisor and co-supervisor shall guide and supervise the research work seriously and a periodic assessment of the work should be done accordingly.

# 15. <u>Conduct of Initial Seminar:</u>

- (1) After approval of his / her research proposal by the ASRB, the student will be required to deliver initial seminar before the **Graduate Evaluation Committee** in presence of his/her supervisor and co-supervisor.
- (2) The student will prepare a presentation of 15-20 minutes duration under the guidance of his / her supervisor / co-supervisor(s).
- (3) The Director will submit the evaluations of **Graduate Evaluation Committee** to ASRB for final approval.
- (4) In case the Initial Seminar is not approved by the ASRB, the student will be asked to deliver another seminar by incorporating the suggestions and observations of the **Graduate Evaluation Committee**.

# 16. Evaluation of research proposal by experts:

- (1) After approval of the initial seminar, the research proposal must be evaluated by at least three experts (that are from other universities) in the relevant field, one Pakistan-based Distinguished National Professors, Meritorious Professors, or Tenure Track Professors, two PhD experts from academically advanced countries (HEC approved list of academically advanced countries for evaluation of PhD Dissertation).
- (2) Evaluation of best of two (02) experts out of three (03) shall be considered by ASRB for taking decision on approval/revisional or rejection of research proposal.
- (3) After completing all the formalities, including initial seminar, the student will proceed with his / her research work under the guidance of his / her supervisor(s) in accordance with the approved Regulations of PhD degree program, and deliver progress seminars and submit progress reports as required by the ASRB.

# 17. Conduct of 1<sup>st</sup> Progressive Seminar:

- (1) A student will be eligible to deliver 1<sup>st</sup> Progressive Seminar if his / her course work including comprehensive examination is completed, his / her initial seminar is approved by the ASRB and his / her research proposal is evaluated by the approved experts in the relevant field and approved by the ASRB.
- (2) The date of the conduct of the 1<sup>st</sup> Progressive Seminar will be announced by the Director.
- (5) The student will deliver presentation of 15-20 minutes duration before the **Graduate Evaluation Committee**, in presence of his/her Supervisor and co-supervisor.
- (3) Presentation prepared under the guidance of his / her supervisor / co-supervisor(s) will discuss the progress that he / she achieved after his / her initial seminar.
- (4) The Director will submit the evaluations of **Graduate Evaluation Committee** to ASRB for final approval.
- (5) In case the 1<sup>st</sup> Progressive Seminar is not approved by the ASRB, the student will be asked to deliver another seminar by incorporating suggestions and observations of the ASRB members and **Graduate Evaluation Committee**.

# 18. Conduct of 2nd Progressive Seminar:

- (1) A student will be eligible to deliver 2nd Progressive Seminar if his / her Progress  $-1^{st}$  seminar is approved by the ASRB and he / she has completed work on at least 50% of research objectives.
- (2) The date of the conduct of the Progress  $-2^{nd}$  seminar will be announced by the Director.
- (3) The student will deliver presentation of 15-20 minutes duration before the **Graduate Evaluation Committee**, in presence of his/her Supervisor and co-supervisor.
- (4) Presentation prepared under the guidance of his / her supervisor / co-supervisor(s) will discuss the progress that he / she achieved after his / her 1<sup>st</sup> Progressive Seminar.
- (5) The student will prepare a presentation of 15-20 minutes duration under the guidance of his / her supervisor / co-supervisor(s) and discuss.
- (6) The Director will submit the evaluations of **Graduate Evaluation Committee** to ASRB for final approval.

(7) In case the Progress  $-2^{nd}$  Seminar is not approved by the ASRB, the student will be asked to deliver another seminar by incorporating the suggestions and observations of the ASRB members and **Graduate Evaluation Committee**.

# 19. Conduct of Final Seminar/ Open defense:

- (1) A student will be eligible to deliver final seminar when:
  - i. He / She has Completed all Courses work (including deficiency courses) with CGPA 3.0.
  - ii. Successfully passed pass comprehensive examination.
  - iii. At least two progress seminars have already been approved by the ASRB.
  - iv. His / her final version of thesis book (loose bound) has submitted for evaluation.
  - v. He / she has published at least one research paper based on the PhD research in ISI Master List journals (only "W" category journals).
  - vi. He / She has completed residency requirement for a period of at least two years. He/ She has Pursued full-time research work for at least twenty-four months at the University.
  - vii. Fulfilled all other regulatory requirements prescribed by the University.
- (2) The student will inform the Director in written through his / her supervisor / co-supervisor(s) that he / she is ready for the final seminar.
- (3) The Director will announce the date for the conduct of the Final Seminar/ Open defense after taking the approval from Vice Chancellor.
- (4) The student will deliver presentation of 30-45 minutes duration before the **Graduate Evaluation Committee**, in presence of his/her Supervisor and co-supervisor.
- (5) Presentation prepared under the guidance of his / her supervisor / co-supervisor(s) will discuss the progress that he / she achieved after his / her 2<sup>nd</sup> Progressive Seminar.
- (6) The Director will submit the evaluations to ASRB for final approval.
- (7) If ASRB does not approve the final seminar, the student will be asked, to deliver another final seminar by incorporating suggestions and observations of the ASRB members and experts.
- (8) The final seminar of PhD should be an open defense.

# 20. Graduate Evaluation Committee:

#### The **Graduate Evaluation Committee** shall consist of:

- (a) Pro Vice Chancellor (Convenor)
- (b) Dean of concerned faculty.
- (c) Chairperson of concerned department/program
- (d) All members of ASRB (Presence of At least two members of ASRB other than Pro Vice Chancellor and Dean of concerned faculty is mandatory).
- (e) One internal expert in relevant field appointed by the Vice Chancellor.
- (f) One external expert in relevant field appointed by the Vice Chancellor.
- (g) Director (member/secretory).

# 21. Research Publication:

(1) Each PhD researcher shall be required to publish at least one original research paper as its first author during his or her doctoral studies in an ISI Master List journals (only "W" Category journals) for the award of PhD degree.

# 22. Doctoral Dissertation

Each PhD researcher shall write a doctoral dissertation reflecting relevance, credibility, effectiveness, and legitimacy of the research. The dissertation must be an original and innovative contribution to knowledge that contributes to solving socio-economic problems. To improve quality of a doctoral dissertation, the following guidelines are provided to aid the PhD researchers:

#### 22.1. Selection of Research Area

The research area of the PhD researcher must:

- (1) Corresponds to the community needs at regional and local levels and comply with the priority national research agenda.
- (2) Reflects the basic and pure research.
- (3) Signifies emerging areas of research that coincide with sustainable development goals (SGDs)

## 22.2. Quality in Reporting

The quality of presentation and reporting in dissertation shall reflect following characteristics:

- (1) The document is well written.
- (2) The contents are balanced, well organized, appropriately styled; clearly structured, and well cohered; and
- (3) The document is free from grammatical and spelling errors and flawed terminology.
- (4) Minor shortcomings such as inaccurate use of acronyms and clumsy looking sentence structure has been cared for.
- (5) Quantitative research proposals are required to include a valid statistical design for analysis of data.
- (6) The formatting shall be compatible to international standards.

#### 22.3. Methodological Quality

To produce PhD researchers capable of conducting research independently, ensuring technical soundness of their PhD dissertation is integral. Following guidelines shall be useful to make the PhD research methodologically sound:

- **A.** Guidelines ensuring the quality of Qualitative Research: A PhD research dissertation, based on the Qualitative Research methods should satisfy, at least, the following questions:
- a. "Does the research, as reported, illuminate the subjective meaning, actions and contexts of those being researched?"
- b. "Is there evidence of the adaption and responsiveness of the research design to the circumstances and issues of real-life social settings met during the course of the study?"
- c. "Does the sample produce the type of knowledge necessary to understand the structures and processes within which the individuals or situations are located?"
- d. "Is the description provided detailed enough to allow the researcher or reader to interpret the meaning and context of what is being researched?"
- e. "How are the different sources of knowledge about the same issue compared and contrasted?"
- f. "Are subjective perceptions and experiences treated as knowledge in their own right?"
- g. "How does the research move from a description of the data through quotation or examples, to an analysis and interpretation of the meaning and significance of it?"
- **B.** Guidelines ensuring the quality of Quantitative Research: A PhD dissertation with Quantitative Research methods should satisfy, at least, the following questions
- a. Reliability are the results repeatable?
- b. Validity does it measure what it says it does?
- c. Internal validity do the research results mean what they appear to?
- d. External validity can the results be generalized to other settings (ecological validity) and to other populations (population validity?
- e. Replicability are the results of the study reproducible?

# 22.4. Appropriateness of the Methods to the Aims of the Study

To achieve research objectives, alignment of research approach-methods is necessary. Therefore, a PhD dissertation at least:

- (1) Reflect a fair proportion of latest knowledge of contemporary techniques and methods in relation to study objectives.
- (2) Contain detailed and easily comprehensible discussions regarding the applied methods and techniques.
- (3) justify the use of methods and techniques to achieve study objectives.
- (4) Show evaluation of obtained results in relation with study objectives.

And:

- (5) The methods and techniques used should justify the results obtained.
- (6) The obtained results should support the study objectives.

#### 22.5. Relevance to the Policy and Practice

The research should have significantly answered the questions related to policy and practice in that area establishing its usefulness and usability. Accordingly, a PhD dissertation at least:

- (1) Reflect judicious evaluation of study results in relation with policy related aims and goals undertaken while starting the research.
- (2) by Discuss the practical implications of the study results in association with the developing practices in that area.
- (3) Establish usefulness of the study results for devising policy as stated in the beginning.
- (4) Discuss that how would the resulting policy be useful for organization/society.

And.

- (5) The study output should be significant enough to be published or to be patented.
- (6) The assessment of the results performed by the author must not be superficial and lacks substance.

# 23. Submission of Thesis Book and Scanning for finding authenticity:

- (1) The student will submit one hard copy (loose bound) and one soft copy of the thesis book to the Director along with the processing fees of the thesis evaluation through his / her supervisor.
- (2) Student will also submit the fees for anti-plagiarism services.
- (3) The Director will send the softcopy of the thesis to the focal person of the Anti-Plagiarism Cell of the University to scan it for finding authenticity of the thesis through HEC approved software for plagiarism.
- (4) If the scanning report has similarity index less than or equal to 19% and no single source has a similarity index greater than or equal to 5% the thesis will be accepted for viva voce examination. In case of failure, it will be returned to the student. This procedure will be repeated until minimum similarity index as defined above is fulfilled.
- (5) The student will submit required number of hard copies (loose bound) along with softcopy of the thesis to the Director through his / her supervisor for expert evaluators.

# **Thesis Evaluation by Experts:**

- (1) The thesis will be sent to same least three experts who initially evaluated the research proposal i-e one (i) Pakistan-based Distinguished National Professors, Meritorious Professors, or Tenure Track Professors, two PhD experts from academically advanced countries (approved list of academically advanced countries for evaluation of PhD Dissertation is provided in Annex I).
- (2) If any of the evaluators is not available, the ASRB shall appoint a new evaluator. The name of any new evaluator will be again proposed by the supervisor in consultation with the Chairperson of the Department and then shall be forwarded to Director PGS who shall then prepare the summary and present to the Vice Chancellor for approval, while maintaining the criteria mentioned in **section 16**.
- (3) Evaluation of best of two (02) experts out of three (03) shall be considered by ASRB for taking decision on approval/revisional or rejection of research proposal.
- (4) Evaluation of best of two (02) experts out of three (03) shall be considered for the evaluation of thesis.
- (5) The evaluation procedure and the approval of the dissertation by the external examiners shall be on the lines of PhD Thesis. The dissertation shall not carry any marks. It shall be either "approved" or "not approved". The dissertation should have been approved before the candidate can appear in the examination.

#### 25. Conduct of Viva-Voce Examination:

- (1) Once satisfactory report is received from the approved evaluators, the student will be allowed by the ASRB to appear in the viva voce examination to defend his / her thesis.
- (2) However, if the research work is not considered satisfactory by the evaluators, the student will incorporate suggestions given by evaluators and resubmit the modified thesis through his / her supervisor.
- (3) The student will submit two hard copies (loose bound) of the thesis book to the Director through his / her supervisor for viva voce.

- (4) The Chairperson of concerned program shall propose a panel of external and internal experts for the conduct of the viva voce examination. Chairperson of concerned program shall forward this panel of experts to the Vice Chancellor through the Director PGS for approval of one External and one Internal Examiner.
- (5) The Director will send the names of the approved examiners to the Controller of examinations along with two hard copies of the thesis book and the scanning report of the thesis.
- (6) The Controller of Examinations will send copies of the thesis to the approved examiners for their evaluation and conduct of final viva voce examinations.
- (7) The final viva voce examination will be conducted by the external and internal examiners in presence of the Director, Supervisor / Co-Supervisor(s) and Chairperson.
- (8) If the examiners recommend that the student is successful at the viva-voce examination, he / she may be declared to have passed the Doctor of Philosophy Degree examination.
- (9) In case there is divergence of opinion between the two viva-voce examiners, the candidate shall then be asked to appear in the second viva-voce examination.
- (10) No student shall be permitted a third examination of viva voce, instead he/she shall be awarded MS Degree.
- (11) In case the Supervisor is not available, the Vice Chancellor shall appoint any other suitable faculty member of University as the Supervisor, nominated by the Chairperson concerned and on the recommendation by ASRB.

# **Announcement of the result:**

- (1) Successful student shall submit six hard-bound copies prepared on guidelines and approved by University Authorities and evaluation report of the examiners duly signed by all concerned will be submitted to the Controller of Examination for announcement of the result.
- (2) The hard and softcopy of the thesis will be submitted to the HEC for PhD country directory.
- (3) A duly signed 'No Dues' certificate shall be required to be submitted along with the Thesis.
- (4) The hard and softcopy of the thesis for submission to HEC for PhD country directory must fulfill Following HEC standardized minimum requirements [HEC Specimen is attached as Annexure B].
  - (a) PhD thesis Author's declaration
  - (b) Plagiarism undertaking by the PhD Scholar.
  - (c) Certificate of approval of PhD thesis by Examination Committee

# 27. Award of PhD Degree:

- (1) The reports of the examiners (including those of the viva-voce) shall be placed before the Vice Chancellor through ASRB for approval. The decision of the Vice Chancellor shall be reported to the syndicate for ratification/approval.
- (2) The Thesis shall be the property of the University.
- (3) Prior to the actual award of the degree, the successful candidate, following the approval of the Vice Chancellor, will be issued a Provisional Certificate to the effect that the degree of the PhD has been awarded in accordance with the provisions of University Regulations.

# 28. Award of MS/MPhil Degrees based on PhD Studies:

- (1) If a student successfully completes the full set of requirements for the award of an MS/MPhil (or equivalent) degree during their PhD studies, the university may award the applicable degree to such students upon completion of the relevant requirements.
- (2) For the award of MS degree, a student must secure CGPA 3.00 aggregate in 30 credit hour or equivalent courses.

# 29. <u>Cancellation of Admission:</u>

- (1) Admission of any candidate enrolled in the PhD program may be cancelled under the following circumstances:
  - i. If the candidate is not regular in attending the University.
  - ii. If the candidate is involved in any serious disciplinary action.

- iii. If the candidate fails to pass comprehensive examination (as defined in section 12 of this policy).
- iv. If the candidate fails to successfully defend the research proposal after two attempts.
- v. If the candidate fails to demonstrate satisfactory progress

#### 30. Reporting to HEC for inclusion of successful candidate in HEC PhD Country Directory (PCD):

- (1) On the successful completion of all requirements for the award of PhD Degree, the Office of Controller of Examination shall issue such notification (templet is attached as **Annexure II**).
- Office of the controller of Examination shall also forward PCD proforma, signed by the Principal Supervisor, Controller of Examination, and the Vice Chancellor, of those who has successfully completed his/her PhD studies to HEC for entry in PhD Country Director (PCD) (Template is attached as **Annexure III**) along with following documents:
  - (i). A duly filled completion form of the university notifying that the PhD scholar has completed all the requirements for the award of the PhD degree.
  - (ii). A copy of PhD Dissertation for including in PhD Country Directory and for attestation of the PhD degree by the HEC.

#### 31. Supervisory Process

To guide the supervisory process of doctoral dissertation towards desired goals, the university shall: i) Devise a supervision manual and ensure its implementation and, ii) Constitute a Supervisory Committee for each individual doctoral student.

- (1) The research supervision manual shall elaborate the following areas to guide the supervisory process:
  - (i). Description of roles of supervisor & supervisee
  - (ii). Prescription of supervision timespan
  - (iii). Guidance about preparation for best supervision
  - (iv). Guidance to discuss questions and problems with constructive comments observing the element of mutual respect.
  - (v). Guidance about setting reasonable amount of work and receiving constructive feedback.
  - (vi). Directions for supervision per the social norms.
  - (vii). Provision of tentative timetable and schedule of meetings
  - (viii). Provision of proformas/registers showing meetings and research records etc.
  - (ix). Provision of grievances policy.
- (2) There shall be a Supervisory Committee, for each doctoral researcher, to supervise doctoral research:
  - (i). Supervisor (Convener)
  - (ii). Co-supervisor (if any) (Member)
  - (iii). Minimum 2 PhD faculty members, of whom one faculty member shall be from the other department of the same university. (Member)

# 32. PhD Review Committee:

- (1) The Directorate of Postgraduate shall have a review committee comprising the following:
  - (a) Pro Vice Chancellor (**Convener**)
  - (b) All Deans
  - (c) Three University Teachers appointed by the Vice Chancellor.
  - (d) Director (Member/ Secretary)
- (2) The Committee shall be responsible to assess and monitor the progress of the students during the semester and the results of courses work.
- (3) In case of any discrepancy in the result, during scanning process, committee shall seek approval of the Vice Chancellor for re-totaling the scripts by committee.
- (4) The PhD Review Committee shall regularly monitor the progress of the research scholar and submit progress report to ASRB.

#### 33. Equivalence Committee of the University:

- (1) Equivalence Committee of the University shall consist of:
  - i. Pro Vice Chancellor (convener).
  - ii. All Deans
  - iii. Chairperson of the concerned Program
  - iv. Director, Postgraduate studies
  - v. Controller of Examination
- (2) Equivalence Committee shall consider applications of course exemption/transfer of credit hour(s) on a case to case and course basis with reference to program specific study schemes and course outlines.

# 34. Transfer of Credits:

- (1) Transfer of credits earned in other HEC recognized institutions of Higher Education may be approved in individual cases up to a maximum determined by the Equivalence Committee of the University.
- (2) The transfer of credits is permissible for credits earned by the candidate before admission in University from HEC recognized institute of Higher Education.
- (3) The maximum number of credits that may be transferred shall not exceed 12 credit hours.

# 35. Academic dishonesty:

- (1) Falsification of data, misrepresentation of another's work as one's own (such as cheating on examinations, reports or quizzes, purchasing material from the web), plagiarism from the work of others, or the presentation of substantially similar work for different courses (unless authorized to do so), is academic dishonesty and is a serious offense. Knowingly helping other students cheat or plagiarize will also be considered academic dishonesty.
- When an act of plagiarism, is found to have occurred, depending upon the seriousness of the proven offence, will advise the Competent Authority, shall take disciplinary action(s) against the teacher, researcher and / or staff found guilty of the offence in accordance with Plagiarism Policy of the University.

# **36.** Compliance to Policies of the University:

All other regulations/policies for University students such as plagiarism policy of University, Policy on protection against sexual harassment, payment/refund of various fees, approval/change of topic of PhD thesis, completion of course work, passing of comprehensive examination, delivery of seminar, submission of progress report, leave of absence, no objection certificate/study leave from employer, preparation and evaluation of thesis, publication of research paper, conduct of thesis examination, declaration of result, award of degree etc. shall also apply to PhD degree program.

# 37. Grievance Management Cell

To handle the grievances of the postgraduate students, a "Grievance Management Cell" shall be established at the Directorate of Postgraduate Studies. The functions of the "Grievance Management Cell" shall be as follows:

- (1) <u>Aims of the policy and nature of the grievances:</u> In general, all grievances of academic nature include, but not limited to, issues related to student progress, assessment, curriculum, and awards during study.
- (2) The structure of the Grievance Management Cell: The structure shall be hierarchal, starting from lowest authority like Head/Chair of the Department, then the concerned Dean of Faculty and Director Postgraduate Studies shall finally be presented to the Academic Board/Committee constituted to hear grievances in case the grievance/complaint is not settled at each level. However, the intent of the system should be to resolve the grievance/complaint at lowest level with minimal impact.

# 38. Conflict Resolution:

In case of a conflict in the interpretation of PhD Regulations at any stage, the matter may be resolved by ASRB.

# 39. Amendment to Regulations:

These Regulations may be amended from time to time as deemed fit by the authorities of University.

# REVISED REGULATIONS FOR PH.D PROGRAM, 2024

#### (To be Applied on Batch 2024 and Onwards)

#### 1. Short Title:

In pursuance of the provisions contained in Section 32(1)(b) & (c) of the DUET Act, 2013 (Sindh Act No. XII of 2013) as amended by the Sindh Universities and Institutes Laws (Amendment) Act, 2018 (Sindh Act No. XV of 2018) and read with HEC's Notification # 15-54/C/2019/HEC(QAD)/560, dated: 10<sup>th</sup> July, 2023, these regulations may be called the "Regulations for Ph.D Program, 2024".

#### 2. Commencement:

These regulations shall come into force with immediate effect.

# 3. Application:

These regulations shall apply to all students admitted for PhD Program of the University in Batch 2024 and onwards.

#### 4. Definitions:

- (1) In these regulations, unless the context otherwise requires, certain common expressions shall have the same meanings as assigned to them under Section 2 of the DUET Act, 2013 (Sindh Act No. XII of 2013), as amended:
  - i. "University" means the Dawood University of Engineering and Technology, Karachi.
  - ii. "Act" means the Dawood University of Engineering and Technology Act, 2013 as amended by the Sindh Universities and Institutions Laws (Amendment) Act, 2018.
  - iii. "Syndicate" means the Syndicate of the University.
  - iv. "Academic Council" means the Academic Council of the University.
  - v. Advanced Studies and Research Board means the Advanced Studies and Research Board (ASRB) of the University.
  - vi. "Vice Chancellor" means the Vice Chancellor of the University.
  - vii. "Pro Vice Chancellor" means the Pro Vice Chancellor of the University.
  - viii. "Dean" means the Dean of faculty concerned.
  - ix. "Director" means the Director of Postgraduate Studies.
  - x. "Controller of Examinations" means Controller of Examinations of the University.
  - xi. "Supervisor / Co-Supervisor" means a University teacher (holding PhD degree in the relevant field) appointed by the ASRB of University as Supervisor / Co-Supervisor
  - xii. "Chairperson" means the Chairperson of the Department where with a student is registered in PhD program.
  - xiii. "Board of Studies" means the Board of Studies (BoS) PhD program where PhD student is registered.
  - xiv. "Semester" means a period of 16 weeks of academic teaching / activities.
  - xv. "Credit Hour" means three (03) hours of teaching for a particular course in a classroom per week in a semester.
  - xvi. "Regular Semester" means Spring or Fall semester.
  - xvii. "Credit Hour" means three (03) hours of teaching for a particular course in a classroom per week in a semester.
  - xviii. "Internal" means an expert having the degree of PhD in the relevant field from inside the department or the University.
  - xix. "External" means an expert having the degree of PhD in the relevant field from and who is not university employee/University Teacher.

- xx. "Foreign Expert" means an expert from technologically / academically advanced countries as prescribed by HEC, Pakistan.
- xxi. "Similarity Index" means a report generated by a plagiarism checking through HEC's approved software for a particular piece of writing.
- xxii. "Thesis / Dissertation" means a piece of writing by a scholar involving original study of a subject through academic research.

#### 5. Minimum criteria for admission in PhD programs

(1) <u>Completion of Prior Degree:</u> To be eligible for admission to the PhD Degree Program, a candidate must possess his or her MS / MPhil (Engineering / Science / Technology) or equivalent degrees (i-e eighteen-year education in Engineering, Science or Technology) OR

Students pursuing MS/MPhil studies and interested in continuing to PhD may be granted provisional admission upon satisfaction with the Admission Committee regarding Statement of Purpose and students' commitment to the PhD program, provided that confirmation of the admission shall be subject to the fulfilment of the following conditions within a period of one year from the date of provisional admission:

- (d) Award of MS/MPhil degree.
- (e) Clearance of the admission test.
- (2) <u>Intra-disciplinary Qualifications:</u> The university shall allow the intra-disciplinary admissions to outstanding students, who fulfil the following requirements
  - (a) The applicant has a strong interest in pursuing a PhD in a different discipline.
  - (b) The applicant has passed GRE-Subject/Equivalent Test with minimum 50% marks in the discipline of admission and has taken 6-9 CH of deficiency courses of level 7.
  - (c) The admission committee is satisfied that the applicant's knowledge of the primary area (level 7) has sufficiently prepared him or her to undertake the course of study of the doctoral program (or, in the opinion of the admissions committee, the preparation can be deemed satisfactory by taking a few additional courses after starting the program).

#### (3) <u>Minimum GPA/Percentage requirement:</u>

- (a) For admission in PhD programs, a minimum CGPA of 3.0 (out of 4.0 in the semester system) or 60% (in the annual system) in the MS/MPhil/equivalent degree being considered for admission, is required, whether such degree was obtained from Pakistani or foreign universities.
- (b) If the CGPA/Percentage is not mentioned on the transcript, the candidate must produce equivalent weightage from the parent university.
- (c) The students having strong demonstrated interest in obtaining PhD degree, but their CGPA is below 3.00 (out of 4.0 in the semester system) or 60% marks (in the annual system) in the most recent degree obtained, may be admitted to a PhD program after fulfilling the following requirements:
  - i. Shall study additional courses of 9-12 CH of level 7 taking a zero semester and score minimum 3.00 out of 4.00 GPA, and
  - ii. The admission committee is satisfied that the applicant's knowledge of primary area (level 7) has sufficiently prepared him or her to undertake the course of studies of the doctoral program.
- (4) <u>Testing requirement:</u> Applicants to PhD programs shall be required to fulfill any one of following testing requirements.
  - (a) Conduct the test equivalent to GRE/HAT General developed at the University, with the passing score of 60% OR
  - (b) Accept a test equivalent to GRE/HAT General, conducted by testing bodies accredited by HEC, with a passing score of 60%.
  - (c) The university may also conduct the subject test if required.

- (5) <u>Statement of Purpose:</u> As part of the application for admission to PhD programs, applicants shall be required to submit a statement of purpose, which shall form an integral part of the application. The admissions committee shall use the information provided to ascertain the preparedness and interest of the candidate in pursuing doctoral studies, and whether the department has the requisite resources to train and supervise the doctoral candidate in the subspeciality in which the applicant is interested. A statement of purpose shall, at least, include the following:
  - (a) Title of the potential research proposal.
  - (b) Clear articulation of the current understanding of the intended field and ideas for potential research.
  - (c) Explanation of the intended impact of the proposed research.
  - (d) The prospective candidates shall demonstrate passion and enthusiasm for the area of research.
- (6) **Recommendations**: University require two letters of recommendation from faculty members at applicant's qualifying degree institution who can attest to his/her potential as a graduate student.
- 6. <u>Coursework Requirement</u>: The following requirements shall be fulfilled before the award of a PhD Degree:
  - (a) The students shall complete the coursework of at least:
    - i. 18 credit hours if they are from the same discipline.
    - ii. The courses shall be offered through regular classes (i.e., classes taught on campus by full-time faculty members of the university)
    - iii. The courses shall preferably be of 800 level.
    - iv. PhD degree should be based on research, not only on credit hours.

#### 7. Comprehensive Examination:

- (1) Following the completion of coursework, every PhD student shall be required to pass a comprehensive examination to be granted candidacy as PhD researcher; provided that if the student fails to pass the comprehensive test, he or she shall be allowed one more attempt to take the test.
- (2) After the declaration of the result/completion of all the requirements for the course work, the minimum required CGPA for eligibility to appear in the comprehensive examination is 3.00/4.00, the Assistant Director (AD) PGS shall write student to fulfill the administrative requirements for the written comprehensive exam within two weeks' time. It may include fee clearance, exam request form submission, proposed date within the allowed duration of three months from the date of declaration of the result of the last course taken by the candidate.
- (3) Candidate may be asked to submit a tentative synopsis of the research work/selected specific research area before the written exam. Two relevant courses to that synopsis may be chosen from the candidate's transcript either by PhD review committee or the candidate by self.
- (4) Written exam shall be scenario based that includes a complex problem to be solved by using the knowledge area(s) of interest identified by the candidate either by synopsis or the opted courses.
- (5) 2 internal Experts and 1 external Expert from the relevant area may set the question paper with mutual consultation and assess the paper individually. The paper shall be submitted to the Controller of Examinations directly by the experts. The qualitative assessment shall be done based on the approach presented to solve the given problem. The outcomes may be Pass, Pass with condition (to appear and pass the oral examination), Failure with retake and Failure.
- (6) In the written component, the scenario-based test that includes a complex problem will be conducted, and oral component shall be conducted as part of the qualitative assessment. The panel of experts as given at (4) shall be approved by the Vice Chancellor:
- (7) The declaration of the result shall be carried out by the CoE based on the outcomes as follows: **Pass:** All or majority of experts are satisfied.

Pass with Condition: Majority of the experts are partially satisfied.

**Failure with retake:** None of the experts are satisfied at all. Candidate should follow the whole process as defined for written comprehensive exam and re appear.

**Failure:** None of the experts are satisfied at all in the second attempt. It leads to termination from the PhD program. The transcript may be issued for the taken courses after due clearance.

- The Director shall convey the decision to the students and the PhD review committee not later than 3 weeks from the date of conduct of the written examination.
- (8) The required coursework, comprehensive exam, and defense of synopsis/research proposals should be completed within the 1st six semesters of the registration into a PhD program. In case of noncompliance, the registration shall be cancelled and transcripts for completion of coursework may be issued to the student.
- (9) In an event of force majeure i.e., noncompliance on account of circumstances beyond the control of student, the ASRB may grant the extension.

# 8. Procedure for Admission:

- (1) The applicant will submit the application form duly completed in all respects along with the relevant documents by the last date fixed.
- (2) Each application for admission will be processed separately by the Admission Committee.
- (3) Incomplete application forms or applications not accompanied by the relevant documents and / or processing fee, or applications received after the due date will not be considered.

# 9. Mode of Study in PhD program:

- (1) The language of the Study, medium of instructions, examination, thesis shall be English.
- (2) The official timing shall be observed from 9:00 am to 9:00 pm.
- (3) The student may be registered for a full time or part time program.

# 10. Admission Committee:

- (1) The **Admission Committee** reserves the right to refuse admission to any applicant (if the conditions for admission, as outlined in these regulations, are not met) at the time of admissions.
- (2) However, for admissions cancelation during the course of the degree program, the Chairperson may refer the matter to the ASRB through the Director provided:
  - (a) the progress of the student is not satisfactory, OR
  - (b) the student has neglected to enroll for a semester without providing any valid justification as determined by the university.
- (3) Students seeking admission are required to pay the fees at the time of admission as approved by the University authorities.
- (4) Every candidate admitted in PhD shall be enrolled in this University on payment of the prescribed fee.
- (5) Admission Committee shall consist of:
  - (a) Convenor: A senior university teacher with PhD qualification (to be appointed by the Vice Chancellor).
  - (b) Members: Four Senior University Teachers (to be appointed by Vice Chancellor).
  - (c) Director: Ex-officio member.
  - (d) Assistant Director (Admissions): Ex-officio member/Secretary of the admission committee.

# 11. Merit Policy:

(1) Admission in PhD program shall be granted purely on merit basis. The merit list of the candidates for admission shall be determined according to the following weightage.

S. No	Criteria	Points
01	Test Score	60
02	Percentage of marks (GPA) in Qualifying Degree	20
03	Statement of Purpose & Interview	20

#### 12. Degree Completion Timeline:

- (1) The PhD degree shall be awarded by university after a minimum of three (3) years (i.e., 6 regular semesters) and not more than seven (7) years (i.e., 14 regular semesters) after the enrolment of the student; provided that for students who are unable to complete the program within seven (7) years, ASRB may extend the period up to one (01) year on account of any force majeure i.e., delay on account of circumstance beyond the student's control on the recommendation of the supervisor / cosupervisor(s), provided further that in no event shall the PhD degree be awarded more than the maximum duration prescribed by the HEC (i.e., 8 years after the student's enrolment in the program).
- (2) The duration starts from the date of the student's enrollment in the PhD program.
- (3) The date of notification of the award of the PhD degree after the PhD defense shall be the date of the completion of PhD studies.

# 13. Course Work and Credit for prior coursework and Residency Requirement:

- (1) Each student enrolled for PhD program must complete the required course work.
- (2) Each PhD Degree Program shall carry number of approved courses of defined Credit Hours.
- (3) PhD Degree Program shall have minimum 18 Credit Hours of course work including compulsory and elective courses followed by the comprehensive examination.
- (4) Following details as been provided at **Annexure A.** 
  - i. Complete structure of PhD program
  - ii. Distribution of Courses and Credit Hours
  - iii. Scheme of Study
  - iv. List of University Compulsory Courses:
  - v. Distribution of Marks:
  - vi. Grading Policy
  - vii. Computation of the GPA
  - viii. Semester Examination
  - ix. Course/Semester registration and Enrollment
  - x. Course Add/Drop
  - xi. Procedure of Conducting Examination and Declaration of Results:
  - xii. Migration of Student from other University/Institution:
  - xiii. Leaves of absence/ Freezing of Studies.
  - xiv. Reasons for Leaves of Absence
  - xv. Voluntary withdrawal
- (5) If the applicant is pursuing a PhD degree in a different discipline, the admission committee shall identify the deficiency courses, and along with their credit hours (6-9 CH) which student must complete within one year of their regular studies.

# 14. Approval of Supervisor

- (1) To select a research supervisor, the student should talk to faculty members in potential areas of research interest.
- (2) Every doctoral student must apply for the appointment of research supervisor, with consent Letter from Supervisor before the start of third semester.
- (3) ASRB shall approve the appointment of research supervisor on the recommendation of the concerned Chairperson and duly endorsed by the concerned Dean.
- (4) At the time of appointment as supervisor, the faculty member shall be a full-time faculty member of the university in which the student is enrolled. Faculty members shall supervise no more than five (5) PhD students at any time.
- (5) The Supervisor shall also be responsible for guiding the candidate in development of the research proposal and for working on the research plan.

#### 15. Approval of Research Proposal:

- (1) Student will fill up the Research Proposal Proforma and pay the required processing fees through bank challan available in the office of the Chairperson.
- (2) The Research Proposal Proforma will be signed by the student himself / herself, his / her supervisor and co-supervisor(s) and Chairperson.
- (3) The Research Proposal proforma will be submitted in the office of the Chairperson with the following documents:
  - (a) Research Proposal: each page of the research proposal will be signed by the student and his / her supervisor and co-supervisor(s).
  - (b) A copy of the Bank Challan after the payment of the processing fees.
  - (c) The Similarity index of the scanning report (Plagiarism). To be scanned by the Antiplagiarism Cell, DUET. The scanning report must be less than or equal to 19% and no single source should have a similarity index more than or equal to 5%.
  - (d) Attested copy of the Enrolment Card.
- (4) The Chairperson will process the application and forward it to the Director PGS for the approval of the ASRB.
- (5) Students shall be eligible for the initial seminar of their research work after completion of the first year.
- (6) The faculty member will not supervise or co-supervise his/her real closed relative.
- (7) The term 'close relation' includes spouse, children, sister, brother, grandchildren, nephew, niece, grandnephew, grandniece, uncle, aunt, first cousin, son-in-law and daughter-in-law of supervisor or supervisor's spouse.
- (8) The supervisor/Co-Supervisor will scan the research proposal of the student through Higher Education Commission (HEC) approved software for plagiarism and will submit the duly signed and stamped hard copy containing similarity index to Chairperson.
- (9) A candidate ordinarily shall not be permitted to modify his research objectives during study. If an occasion arises due to technical difficulties, the Vice Chancellor may on the recommendation of the ASRB permit any modification of the research objectives within one year of the date of approval of research proposal.
- (10) The candidate shall pursue his research work in this University. However, the candidate shall also be permitted to carry out his research work at another Institute or a Centre of repute provided the candidate's Co-supervisor belongs to that Department/Institute/Centre.
- (11) The supervisor and co-supervisor shall guide and supervise the research work seriously and a periodic assessment of the work should be done accordingly.

#### 16. Conduct of Initial Seminar:

- (1) After approval of his / her research proposal by the ASRB, the student will be required to deliver initial seminar before the **Graduate Evaluation Committee** in presence of his/her supervisor and co-supervisor.
- (2) The student will prepare a presentation of 15-20 minutes duration under the guidance of his / her supervisor / co-supervisor(s).
- (3) The Director will submit the evaluations of **Graduate Evaluation Committee** to ASRB for final approval.
- (4) In case the Initial Seminar is not approved by the ASRB, the student will be asked to deliver another seminar by incorporating the suggestions and observations of the **Graduate Evaluation Committee**.

#### 17. Evaluation of research proposal by experts:

- (1) After approval of the initial seminar, the research proposal must be evaluated by
  - a. At least two external experts who shall be:
    - i. PhD faculty member from the world top 500 universities ranked by the Times Higher Education or QS World Ranking in the year corresponding to dissertation evaluation year OR

- ii. Pakistan-based Distinguished National Professors, Meritorious Professors from any national university; or professors from top universities ranked by HEC; or professors from any Pakistani University having a minimum H-Index 30 for sciences, 15 for Social Sciences or 8 for Art & Humanities as determined by Web of Science.
- b. The following general guidelines shall, at least, be observed while selecting external evaluator:
  - a. Relevance of Expertise: in the same or related fields as in the dissertation.
  - b. No Conflict of Interest: in personal, financial, or professional stakes in a particular decision or outcome.
  - c. Objectivity: capable of making unbiased evaluations.
  - d. Diversity: in terms of geography, culture, professional backgrounds etc.
  - e. Reputation: must be good in the field, with a track record of fair and thorough evaluations.
  - f. Availability: should have the time and availability to review the dissertation.
  - g. Professionalism: capable of conducting themselves in a professional and respectful manner throughout the evaluation and defense process (if applicable).
  - h. Communication: capable of providing clear and constructive feedback on the dissertation.
  - i. Confidentiality: capable of maintaining confidentiality and protecting the intellectual property of the dissertation.
  - j. Compatibility: well-versed with the research methodology, approach, and theories used in the dissertation.

# 18. Conduct of 1<sup>st</sup> Progressive Seminar:

- (1) A student will be eligible to deliver 1<sup>st</sup> Progressive Seminar if his / her course work including comprehensive examination is completed, his / her initial seminar is approved by the ASRB and his / her research proposal is evaluated by the approved experts in the relevant field and approved by the ASRB.
- (2) The date of the conduct of the 1<sup>st</sup> Progressive Seminar will be announced by the Director.
- (5) The student will deliver presentation of 15-20 minutes duration before the **Graduate Evaluation Committee**, in presence of his/her Supervisor and co-supervisor.
- (3) Presentation prepared under the guidance of his / her supervisor / co-supervisor(s) will discuss the progress that he / she achieved after his / her initial seminar.
- (4) The Director will submit the evaluations of **Graduate Evaluation Committee** to ASRB for final approval.
- (5) In case the 1<sup>st</sup> Progressive Seminar is not approved by the ASRB, the student will be asked to deliver another seminar by incorporating suggestions and observations of the ASRB members and **Graduate** Evaluation Committee.

# 19. Conduct of 2nd Progressive Seminar:

- (1) A student will be eligible to deliver 2nd Progressive Seminar if his / her Progress  $-1^{st}$  seminar is approved by the ASRB and he / she has completed work on at least 50% of research objectives.
- (2) The date of the conduct of the Progress  $-2^{nd}$  seminar will be announced by the Director.
- (3) The student will deliver presentation of 15-20 minutes duration before the **Graduate Evaluation Committee**, in presence of his/her Supervisor and co-supervisor.
- (4) Presentation prepared under the guidance of his / her supervisor / co-supervisor(s) will discuss the progress that he / she achieved after his / her 1<sup>st</sup> Progressive Seminar.
- (5) The student will prepare a presentation of 15-20 minutes duration under the guidance of his / her supervisor / co-supervisor(s) and discuss.
- (6) The Director will submit the evaluations of **Graduate Evaluation Committee** to ASRB for final approval.
- (7) In case the Progress  $-2^{nd}$  Seminar is not approved by the ASRB, the student will be asked to deliver another seminar by incorporating the suggestions and observations of the ASRB members and **Graduate Evaluation Committee**.

#### 20. Conduct of Final Seminar/ Open defense:

- (1) A student will be eligible to deliver final seminar when:
  - i. He / She has Completed all Courses work (including deficiency courses) with CGPA 3.0.
  - ii. Successfully passed pass comprehensive examination.
  - iii. At least two progress seminars have already been approved by the ASRB.
  - iv. His / her final version of thesis book (loose bound) has submitted for evaluation.
  - v. He / she has published at least one research paper based on the PhD research in ISI Master List journals (only "W" category journals).
  - vi. He / She has completed residency requirement for a period of at least two years. He/ She has Pursued full-time research work for at least twenty-four months at the University.
  - vii. Fulfilled all other regulatory requirements prescribed by the University.
- (2) The student will inform the Director in writing through his / her supervisor / co-supervisor(s) that he / she is ready for the final seminar.
- (3) The Director will announce the date for the conduct of the Final Seminar/ Open defense after taking the approval from Vice Chancellor.
- (4) The student will deliver presentation of 30-45 minutes duration before the **Graduate Evaluation Committee**, in presence of his/her supervisor and co-supervisor.
- (5) Presentation prepared under the guidance of his / her supervisor / co-supervisor(s) will discuss the progress that he / she achieved after his / her 2<sup>nd</sup> Progressive Seminar.
- (6) The Director will submit the evaluations to ASRB for final approval.
- (7) If ASRB does not approve the final seminar, the student will be asked, to deliver another final seminar by incorporating suggestions and observations of the ASRB members and experts.
- (8) The final seminar of PhD should be an open defense.

# 21. Graduate Evaluation Committee:

#### The Graduate Evaluation Committee shall consist of:

- (a) Pro Vice Chancellor (Convenor)
- (b) Dean of concerned faculty.
- (c) Chairperson of concerned department/program
- (d) All members of ASRB (Presence of At least two members of ASRB other than Pro Vice Chancellor and Dean of concerned faculty is mandatory).
- (e) One internal expert in relevant field appointed by the Vice Chancellor.
- (f) One external expert in relevant field appointed by the Vice Chancellor.
- (g) Director (member/secretory).

# 22. Research Publication:

For award of PhD degree, a PhD researcher shall be required to publish research articles meeting the following criteria:

- (a) At least: a. One research article in W category journal.
- (b) The PhD researcher shall be the first author of these publications.
- (c) The research article shall be relevant to the PhD research work of the PhD researcher.
- (d) The article shall be published after approval of the research synopsis.
- (e) The article shall be published in a relevant research journal.

#### 23. <u>Doctoral Dissertation</u>

Each PhD researcher shall write a doctoral dissertation reflecting relevance, credibility, effectiveness, and legitimacy of the research. The dissertation must be an original and innovative contribution to knowledge that contributes to solving socio-economic problems. To improve quality of a doctoral dissertation, the following guidelines are provided to aid the PhD researchers:

#### 23.1. Selection of Research Area

The research area of the PhD researcher must:

- (1) Corresponds to the community needs at regional and local levels and comply with the priority national research agenda.
- (2) Reflects the basic and pure research.
- (3) Signifies emerging areas of research that coincide with sustainable development goals (SGDs)

# 23.2. Quality in Reporting

The quality of presentation and reporting in dissertation shall reflect following characteristics:

- (1) The document is well written.
- (2) The contents are balanced, well organized, appropriately styled; clearly structured, and well cohered; and
- (3) The document is free from grammatical and spelling errors and flawed terminology.
- (4) Minor shortcomings such as inaccurate use of acronyms and clumsy looking sentence structure has been cared for.
- (5) Quantitative research proposals are required to include a valid statistical design for analysis of data.
- (6) The formatting shall be compatible to international standards.

#### 23.3. Methodological Quality

To produce PhD researchers capable of conducting research independently, ensuring technical soundness of their PhD dissertation is integral. Following guidelines shall be useful to make the PhD research methodologically sound:

- **A.** Guidelines ensuring the quality of Qualitative Research: A PhD research dissertation, based on the Qualitative Research methods should satisfy, at least, the following questions:
- a. "Does the research, as reported, illuminate the subjective meaning, actions and contexts of those being researched?"
- b. "Is there evidence of the adaption and responsiveness of the research design to the circumstances and issues of real-life social settings met during the course of the study?"
- c. "Does the sample produce the type of knowledge necessary to understand the structures and processes within which the individuals or situations are located?"
- d. "Is the description provided detailed enough to allow the researcher or reader to interpret the meaning and context of what is being researched?"
- e. "How are the different sources of knowledge about the same issue compared and contrasted?"
- f. "Are subjective perceptions and experiences treated as knowledge in their own right?"
- g. "How does the research move from a description of the data through quotation or examples, to an analysis and interpretation of the meaning and significance of it?"
- B. **Guidelines ensuring the quality of Quantitative Research**: A PhD dissertation with Quantitative Research methods should satisfy, at least, the following questions
- a. Reliability are the results repeatable?
- b. Validity does it measure what it says it does?
- c. Internal validity do the research results mean what they appear to?
- d. External validity can the results be generalized to other settings (ecological validity) and to other populations (population validity?
- e. Replicability are the results of the study reproducible?

# 23.4. Appropriateness of the Methods to the Aims of the Study

To achieve research objectives, alignment of research approach-methods is necessary. Therefore, a PhD dissertation at least:

- (1) Reflect a fair proportion of latest knowledge of contemporary techniques and methods in relation to study objectives.
- (2) Contain detailed and easily comprehensible discussions regarding the applied methods and techniques.
- (3) justify the use of methods and techniques to achieve study objectives.
- (4) Show evaluation of obtained results in relation with study objectives.

And:

- (5) The methods and techniques used should justify the results obtained.
- (6) The obtained results should support the study objectives.

#### 23.5. Relevance to the Policy and Practice

The research should have significantly answered the questions related to policy and practice in that area establishing its usefulness and usability. Accordingly, a PhD dissertation at least:

- (1) Reflect judicious evaluation of study results in relation with policy related aims and goals undertaken while starting the research.
- (2) by Discuss the practical implications of the study results in association with the developing practices in that area.
- (3) Establish usefulness of the study results for devising policy as stated in the beginning.
- (4) Discuss that how would the resulting policy be useful for organization/society.

#### And:

- (5) The study output should be significant enough to be published or to be patented.
- (6) The assessment of the results performed by the author must not be superficial and lacks substance.

# 24. Submission of Thesis Book and Scanning for finding authenticity:

- (1) The student will submit one hard copy (loose bound) and one soft copy of the thesis book to the Director along with the processing fees of the thesis evaluation through his / her supervisor.
- (2) Student will also submit the fees for anti-plagiarism services.
- (3) The Director will send the softcopy of the thesis to the focal person of the Anti-Plagiarism Cell of the University to scan it for finding authenticity of the thesis through HEC approved software for plagiarism.
- (4) If the scanning report has similarity index less than or equal to 19% and no single source has a similarity index greater than or equal to 5% the thesis will be accepted for viva voce examination. In case of failure, it will be returned to the student. This procedure will be repeated until minimum similarity index as defined above is fulfilled.
- (5) The student will submit required number of hard copies (loose bound) along with softcopy of the thesis to the Director through his / her supervisor for expert evaluators.

# 25. Thesis Evaluation by Experts:

- (1) The thesis will be sent to same least two experts who initially evaluated the research proposal.
- (2) At least one external expert qualifying any one of the conditions (mentioned at 'Section 17' of this policy) if the PhD candidate publishes dissertation research in a peer-reviewed journal that is classified by the HEC in category W for Sciences.
- (3) If any of the evaluators is not available, the ASRB shall appoint a new evaluator. The name of any new evaluator will be again proposed by the supervisor in consultation with the Chairperson of the Department and then shall be forwarded to Director PGS who shall then prepare the summary and present to the Vice Chancellor for approval, while maintaining all the criteria and guidelines mentioned in **Section 17** of this policy.
- (4) The evaluation procedure and the approval of the dissertation by the external examiners shall be on the lines of PhD Thesis. The dissertation shall not carry any marks. It shall be either "approved" or "not approved". The dissertation should have been approved before the candidate can appear in the examination.

# 26. Conduct of Viva-Voce Examination:

- (1) Once satisfactory report is received from the approved evaluators, the student will be allowed by the ASRB to appear in the viva voce examination to defend his / her thesis.
- (2) However, if the research work is not considered satisfactory by the evaluators, the student will incorporate suggestions given by evaluators and resubmit the modified thesis through his / her supervisor.

- (3) The student will submit two hard copies (loose bound) of the thesis book to the Director through his / her supervisor for viva voce.
- (4) The Chairperson of concerned program shall propose a panel of external and internal experts for the conduct of the viva voce examination. Chairperson of concerned program shall forward this panel of experts to the Vice Chancellor through the Director PGS for approval of one External and one Internal Examiner.
- (5) The Director will send the names of the approved examiners to the Controller of examinations along with two hard copies of the thesis book and the scanning report of the thesis.
- (6) The Controller of Examinations will send copies of the thesis to the approved examiners for their evaluation and conduct of final viva voce examinations.
- (7) The final viva voce examination will be conducted by the external and internal examiners in presence of the Director, Supervisor / Co-Supervisor(s) and Chairperson.
- (8) If the examiners recommend that the student is successful at the viva-voce examination, he / she may be declared to have passed the Doctor of Philosophy Degree examination.
- (9) In case there is divergence of opinion between the two viva-voce examiners, the candidate shall then be asked to appear in the second viva-voce examination.
- (10) No student shall be permitted a third examination of viva voce, instead he/she shall be awarded MS Degree.
- (11) In case the Supervisor is not available, the Vice Chancellor shall appoint any other suitable faculty member of University as the Supervisor, nominated by the Chairperson concerned and on the recommendation by ASRB.

#### 27. Announcement of the result:

- (1) Successful student shall submit six hard-bound copies prepared on guidelines and approved by University Authorities and evaluation report of the examiners duly signed by all concerned will be submitted to the Controller of Examination for announcement of the result.
- (2) The hard and softcopy of the thesis will be submitted to the HEC for PhD country directory.
- (3) A duly signed 'No Dues' certificate shall be required to be submitted along with the Thesis.
- (4) The hard and softcopy of the thesis for submission to HEC for PhD country directory must fulfill Following HEC standardized minimum requirements [HEC Specimen is attached as Annexure B].
  - (a) PhD thesis Author's declaration
  - (b) Plagiarism undertaking by the PhD Scholar.
  - (c) Certificate of approval of PhD thesis by Examination Committee

#### 28. Award of PhD Degree:

- (1) The reports of the examiners (including those of the viva-voce) shall be placed before the Vice Chancellor through ASRB for approval. The decision of the Vice Chancellor shall be reported to the syndicate for ratification/ approval.
- (2) The Thesis shall be the property of the University.
- (3) Prior to the actual award of the degree, the successful candidate, following the approval of the Vice Chancellor, will be issued a Provisional Certificate to the effect that the degree of the PhD has been awarded in accordance with the provisions of University Regulations.

# 29. Cancellation of Admission:

- (1) Admission of any candidate enrolled in the PhD program may be cancelled under the following circumstances:
  - i. If the candidate is not regular in attending the University.
  - ii. If the candidate is involved in any serious disciplinary action.
  - iii. If the candidate fails to pass comprehensive examination after two attempts (as defined in section 7 of this policy).
  - iv. If the candidate fails to successfully defend the research proposal after two attempts.
  - v. If the candidate fails to demonstrate satisfactory progress.

# 30. Reporting to HEC for inclusion of successful candidate in HEC PhD Country Directory (PCD):

- (1) On the successful completion of all requirements for the award of PhD Degree, the Office of Controller of Examination shall issue such notification (templet is attached as **Annexure II**).
- Office of the controller of Examination shall also forward PCD proforma, signed by the Principal Supervisor, Controller of Examination, and the Vice Chancellor, of those who has successfully completed his/her PhD studies to HEC for entry in PhD Country Director (PCD) (Template is attached as **Annexure III**) along with following documents:
  - (i) A duly filled completion form of the university notifying that the PhD scholar has completed all the requirements for the award of the PhD degree.
  - (ii) A copy of PhD Dissertation for including in PhD Country Directory and for attestation of the PhD degree by the HEC.

# 31. Supervisory Process

To guide the supervisory process of doctoral dissertation towards desired goals, the university shall: i) Devise a supervision manual and ensure its implementation and, ii) Constitute a Supervisory Committee for each individual doctoral student.

- (1) The research supervision manual shall elaborate the following areas to guide the supervisory process:
  - (i). Description of roles of supervisor & supervisee
  - (ii). Prescription of supervision timespan
  - (iii). Guidance about preparation for best supervision
  - (iv). Guidance to discuss questions and problems with constructive comments observing the element of mutual respect.
  - (v). Guidance about setting reasonable amount of work and receiving constructive feedback.
  - (vi). Directions for supervision per the social norms.
  - (vii). Provision of tentative timetable and schedule of meetings
  - (viii). Provision of proformas/registers showing meetings and research records etc.
    - (ix). Provision of grievances policy.
- (2) There shall be a Supervisory Committee, for each doctoral researcher, to supervise doctoral research:
  - (i). Supervisor (Convener)
  - (ii). Co-supervisor (if any) (Member)
  - (iii). Minimum 2 PhD faculty members, of whom one faculty member shall be from the other department of the same university. (Member)

#### 32. PhD Review Committee:

- (1) The Directorate of Postgraduate shall have a review committee comprising the following:
  - (a) Pro Vice Chancellor (Convener)
  - (b) All Deans
  - (c) Three University Teachers appointed by the Vice Chancellor.
  - (d) Director (Member/ Secretary)
- (2) The Committee shall be responsible to assess and monitor the progress of the students during the semester and the results of courses work.
- (3) In case of any discrepancy in the result, during scanning process, committee shall seek approval of the Vice Chancellor for re-totaling the scripts by committee.
- (4) The PhD Review Committee shall regularly monitor the progress of the research scholar and submit progress report to ASRB.

# 33. Equivalence Committee of the University:

- (1) Equivalence Committee of the University shall consist of:
  - i. Pro Vice Chancellor (convener).
  - ii. All Deans
  - iii. Chairperson of the concerned Program
  - iv. Director, Postgraduate studies
  - v. Controller of Examination

(2) Equivalence Committee shall consider applications of course exemption/transfer of credit hour(s) on a case to case and course to course basis with reference to program specific study schemes and course outlines.

# 34. Transfer of Credits:

- (1) Transfer of credits earned in other HEC recognized institutions of Higher Education may be approved in individual cases up to a maximum determined by the Equivalence Committee of the University.
- (2) The transfer of credits is permissible for credits earned by the candidate before admission in University from HEC recognized institute of Higher Education.
- (3) The maximum number of credits that may be transferred shall be determined by the Equivalence Committee.

#### 35. Academic dishonesty:

- (1) Falsification of data, misrepresentation of another's work as one's own (such as cheating on examinations, reports or quizzes, purchasing material from the web), plagiarism from the work of others, or the presentation of substantially similar work for different courses (unless authorized to do so), is academic dishonesty and is a serious offense. Knowingly helping other students cheat or plagiarize will also be considered academic dishonesty.
- When an act of plagiarism, is found to have occurred, depending upon the seriousness of the proven offence, will advise the Competent Authority, shall take disciplinary action(s) against the teacher, researcher and / or staff found guilty of the offence in accordance with Plagiarism Policy of the University.

#### **36.** Compliance to Policies of the University:

All other regulations/policies for University students such as plagiarism policy of University, Policy on protection against sexual harassment, payment/refund of various fees, approval/change of topic of PhD thesis, completion of course work, passing of comprehensive examination, delivery of seminar, submission of progress report, leave of absence, no objection certificate/study leave from employer, preparation and evaluation of thesis, publication of research paper, conduct of thesis examination, declaration of result, award of degree etc. shall also apply to PhD degree program.

# 37. Grievance Management Cell

To handle the grievances of the postgraduate students, a "Grievance Management Cell" shall be established at the Directorate of Postgraduate Studies. The functions of the "Grievance Management Cell" shall be as follows:

- (1) <u>Aims of the policy and nature of the grievances:</u> In general, all grievances of academic nature include, but not limited to, issues related to student progress, assessment, curriculum, and awards during study.
- (2) The structure of the Grievance Management Cell: The structure shall be hierarchal, starting from lowest authority like Head/Chair of the Department, then the concerned Dean of Faculty and Director Postgraduate Studies shall finally be presented to the Academic Board/Committee constituted to hear grievances in case the grievance/complaint is not settled at each level. However, the intent of the system should be to resolve the grievance/complaint at lowest level with minimal impact.

#### 38. Conflict Resolution:

In case of a conflict in the interpretation of PhD Regulations at any stage, the matter may be resolved by ASRB.

#### 39. Amendment to Regulations:

These Regulations may be amended from time to time as deemed fit by the authorities of University.