

# Ph.D. ORDINANCES

*ORDINANCES FOR ENROLLMENT, REGISTRATION AND AWARD OF THE  
DEGREE OF DOCTOR OF PHILOSOPHY IN VARIOUS FACULTIES OF  
PUNJABI UNIVERSITY, PATIALA*



**PUNJABI UNIVERSITY, PATIALA**  
(Established Under Punjab Act No. 35 of 1961)

*(Effective from Session 2022)*

**ORDINANCES FOR ENROLLMENT, REGISTRATION AND AWARD  
OF THE DEGREE OF DOCTOR OF PHILOSOPHY IN VARIOUS  
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**The Ph.D. Programme**

Nothing in these Ordinances shall be deemed to debar the University from amending the Ordinances and the amended Ordinances, if any, shall apply to all enrolled students w.e.f. Session 2022-23.

**1. CANDIDATES**

Three types of candidates shall be admitted into this programme

- (i) Full time with scholarship/fellowship
- (ii) Full time but without any financial support
- (iii) Part time

**2. ELIGIBILITY FOR PH.D. PROGRAMME IN RESPECTIVE SUBJECTS**

- i) First Class Master Degree in Pharmacy (M. Pharm.)/Engineering and Technology (M.Tech.)
- ii) For all other Subjects: Masters Degree\* in the concerned/allied subject (as determined by the Departmental Research Board) with 55% marks at Masters Degree (without rounding off) or its equivalent Grade 'B' in the UGC 7-point scale (or an equivalent Grade in a point scale wherever grading system is followed).  
  
(A relaxation of 5% of marks or an equivalent relaxation of Grade, is allowed for those belonging to SC/ST/OBC(non-creamy layer)/Differently-Abled (provided they have 40% physical disability)  
  
**or**
- iii) M.Phil./M.Litt. Degree with B+ or equivalent.\*\*  
  
**or**
- iv) In case of Defense Personnel who have obtained Masters Degree on the basis of Staff-College, admission will be allowed if the candidate has obtained at least 60% marks in the Master's Degree.  
  
**or**
- v) Candidates who have passed C.A./I.C.W.A./Company Secretary Examinations are eligible for getting admission to Ph.D. Degree.

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\*For doing Ph.D. in the Science Departments the candidate should have passed regular M. Sc. Degree from U.G.C. recognised University. Candidates with M.Sc. through Distance Education will not be eligible for admission to Ph.D. Degree in the Science Departments.

\*\*Equivalence is established as:

If a candidate is awarded percentage of marks instead of Grade in M.Phil., then 55% or more marks will be treated equivalent to B+ Grade.

OR

If a candidate is awarded Grade in M.Phil. but the grading pattern of the M.Phil. awarding University is different from that applicable in Punjabi University, then the CGPA of the candidate will be converted into percentage of marks. If the percentage so obtained is 55% or more, then the candidate's grade will be considered as B+ Grade for the purpose of admission to Ph.D. programme.

### 3. ADMISSION PROCEDURE

#### ***I) Direct Admission***

Every candidate interested in taking admission to Ph.D. Programme has to appear and qualify the Entrance Test to be held by Punjabi University, Patiala.

The following category of candidates may be exempted from taking Entrance Test for Ph.D. programme.

- i) Candidates who have qualified UGC-CSIR NET (JRF)/ NET/SLET (Punjab State)/GATE/GPAT examinations.
- ii) The Holders of teacher fellowships.
- iii) Direct Awardees of Fellowships from Government Agencies like DBT/DST/ICMR/ ICAR/INSPIRE/NFSC/MANF.  
(Students appointed in the project sponsored by above agencies are not exempted from Entrance Test)
- iv) Foreign students sponsored by Government of India agencies like ICCR, Ministry of HRD, etc. and foreign students sponsored by their respective Governments/Embassies under UNDP.
- v) Other Foreign students residing outside India (Foreign Pass Port Holders) who wish to seek admission directly (without any sponsorship) to Ph.D. Programme.

#### ***II) Through M. Phil.***

For candidates seeking admission to Ph.D. programme after M.Phil. Course following will be applicable:

- i) Candidates who have obtained M.Phil. Degree with minimum B+ Grade or equivalent from Punjabi University, Patiala or from Autonomous Colleges affiliated to Punjabi University, Patiala, as a regular student and whose admission to M.Phil. Course has been through an Entrance Test are exempted from the Entrance Test for Ph.D. Programme. However, candidates who have completed M.Phil. Degree from Autonomous Colleges affiliated to Punjabi University, Patiala shall have to produce the following documents to avail exemption from Entrance Test:
  - Copy of Advertisement of Entrance Test
  - Gazette Notification of Entrance Test result
  - Copy of Pool (Eligible Candidates)
- ii) Candidates who have passed M.Phil. (with minimum B+ Grade or equivalent) from another University as regular student or through Distance Education will have to appear in the Entrance Test.
- iii) Candidates who have passed M.Phil. with minimum B+ Grade or equivalent from Punjabi University (regular as well as Distance Education) whose admissions were made without the Entrance Test will have to appear in the Entrance Test conducted by the University.

*The candidates who qualify the Entrance Test and also attended the interview will be included in the pool of candidates for Ph.D. Their candidature will remain valid for one year. If a candidate having passed Ph.D. Entrance Test is unable to take admission to Ph.D. Course Work because of non-availability of Supervisor but finds a Supervisor after the last date of admission to Ph.D. Course Work, he/she is allowed to enroll in Ph.D. Programme. However, he/she will have to take admission to Ph.D. Course Work in the next year.*

*The Entrance Test for Ph.D. Programme is an eligibility test for short-listing the applicant for purpose of consideration by the Department. Merely qualifying the Ph.D. Eligibility Test will not entitle the student secure admission to Ph.D. Programme.*

A Merit List shall be prepared by each Department after the Ph.D. Entrance Test in the following manner:

Sr. No.	Criteria	Weightage
1	Marks obtained in Entrance Test	70%
2	Interview	15%
3	Writing Skill Test (Ph.D. Proposal/ Summary/ Extempore Assignment.)	15%

Supervisor will be allotted on the basis of merit of the candidate obtained above and preference of the candidate for the Supervisor subject to availability of seat(s) with the Supervisor of his/her specialization.

**Foreign Students:**

- (i) Foreign students sponsored by the Government of India agencies like ICCR, Ministry of HRD, etc., and foreign students sponsored by their respective Governments/Embassies, are exempted from Entrance Test.
- (ii) Self-financing foreign students shall be exempted from the Entrance Test for admission to Ph.D. Programme.
- (iii) Foreign students shall have to pass Punjabi test (Elementary Course in Punjabi -2) as prescribed by the University before their Ph.D. Viva-Voce examination.

Foreign students will have to fulfill all requirements regarding eligibility and pay the requisite fees as applicable from time to time. It will be their responsibility to select a Supervisor from the University and take written approval of the Supervisor on the enrollment/admission form for doing Ph.D. Course Work.

**4. COURSE WORK FOR Ph.D. PROGRAMME**

The candidate qualifying the Entrance Test or those who are exempted from Entrance Test will have to pass Ph.D. Course Work during the initial one or two semesters before their Registration in the Ph.D. Programme of the University. However, they will have to choose Supervisor from Punjabi University Patiala/Colleges affiliated to Punjabi University Patiala/Regional Centers/Neighbourhood Campuses/Constituent Colleges of Punjabi University Patiala, on their own before taking admission to Ph.D. Course Work or before enrollment to the Ph.D. programme.

- (A) In case of M.Phil./Ph.D. Course Work pass candidates, with minimum B+ Grade or equivalent in M.Phil. and with minimum B Grade or Equivalent in Ph.D. Course Work, following conditions will be applicable for Ph.D. Course Work :
  - (i) Candidates who have passed M.Phil./Ph.D. Course Work as regular student or through Distance Education from Punjabi University, Patiala and have studied paper on Research Methodology and Publication Ethics are exempted from doing Ph.D. Course Work for getting registered to Ph.D. Programme.
  - (ii) A candidate who has done M.Phil./Ph.D. Course Work from State/Central or from National Institutes as regular student and has studied the subject of Research Methodology and Publication Ethics is also exempted from doing Ph.D. Course Work.

- (iii) The candidates who have done M.Phil./Ph.D. Course Work as regular students but have not studied and passed the paper of Research Methodology and Publication Ethics are required to pass the paper of Research Methodology and Publication Ethics after taking admission to Ph.D. Course Work. They have to pay fee and other charges as applicable to other students taking admission to Ph.D. Course Work.
- (iv) The candidates who have obtained M.Phil. Degree/Ph.D. Course Work through Distance Education from another University are required to pass the Course Work for Ph.D. programme.
- (v) Candidates who have completed/obtained M.Phil./Ph.D. Course Work from Autonomous Colleges affiliated to Punjabi University, Patiala and other Autonomous Colleges/Deemed/Private Universities and Colleges and passed the subject of Research Methodology and Publication Ethics can seek exemption from Ph.D. Course Work subject to the condition that they produce a certificate:
  - a) That they have done the respective Course after Entrance Test and have been full time students of M.Phil./Ph.D. Course Work.
  - b) Proof of having successfully passed the examination of Research Methodology and Publication Ethics or as prescribed by UGC, New Delhi from time to time.
- (B) A candidate who has passed first semester of M.Phil. programme of Punjabi University with minimum B+ Grade and studied and passed four papers including the paper on Research Methodology and Publication Ethics and whose admission to M.Phil. programme was done through joint Entrance Test, provided the marks secured by the candidate in M.Phil./Ph.D. Entrance Test were not less than the minimum qualifying marks fixed by the University for taking admission to Ph.D. programme of that year in which the candidate had taken admission to the M.Phil. programme, is exempted from Ph.D. Entrance Test for Enrollment and Ph.D. Course Work.
- (C) Officer of Army War College, Mhow who have passed one year Executive Post Graduate Programme in Security & Strategic Studies from Department of Defense & Strategic Studies, Punjabi University, Patiala will be exempted from Ph.D. Course Work.

## **5. ENROLLMENT TO Ph.D. PROGRAMME**

### **5.1 Procedure for enrollment:**

An eligible candidate seeking admission to Ph.D. programme shall be required to attend an interview conducted by the Department in order to assess and discuss his/her competence for the research and area of interest.

An eligible candidate seeking admission to Ph.D. programme will select a Supervisor for himself/herself from the Punjabi University Patiala/Colleges affiliated to Punjabi University Patiala/Regional Centers/Neighbourhood Campuses/Constituent Colleges of Punjabi University, Patiala and take the written approval of the Supervisor before enrollment to Ph.D. programme.

The eligible candidates can enroll themselves for Ph.D. Degree by filling up the Enrollment-cum-Admission Form. The candidate who are required to take admission in the Ph.D. Course Work as per rules will fill up the forms by the stipulated date in order to join the Course Work. The candidates who are exempted from doing the Ph.D. Course Work as per rules can enroll themselves for Ph.D. Degree throughout the year by filling up the Enrollment-cum-Admission Form. The candidates who are UGC-CSIR(JRF)/NET/SLET/SET/GATE/GPAT/Teacher Fellowship holders can also enroll themselves for Ph.D. Degree throughout the year

but they will have to join the Ph.D. Course Work if the deadline for admission is not yet over. Otherwise, they will have to take admission to the Ph.D. Course Work within a year from the date of enrollment. If such candidates fail to take admission to Ph.D. Course Work within a year, then their Enrollment will be cancelled.

Applications for enrollment along with an enrollment fee (as well as an eligibility certificate issued from the Registration Branch of Punjabi University, Patiala, will also accompany the application for enrollment), shall be entertained by the Head of the Department. The Head of the Department after verifying the eligibility conditions shall forward the same to the office of Dean Research within a week. The Dean Research will accord the permission for enrollment on the recommendations of the Head of the Department. Head of the Department will issue Enrollment Letter to the candidate on the basis of intimation issued by Academic Research Branch (**Annexure-I**).

The verification of the eligibility of candidates for Ph.D. Course Work will be done at two stages. At the first stage, the eligibility of a Ph.D. candidate, seeking admission to Course Work, will be done by the Admission Committee of the Department after the interview. Once a candidate is found eligible by the Department he/she will have to get eligibility certificate from the Registration Branch of the University before being enrolled for Ph.D.

## **5.2 Enrollment duration, Re-Enrollment and Cancellation:**

- Student admitted to Ph.D. Course Work will have to fulfill the conditions to get registered for Ph.D. within a period of 12 months (1 year) from the date of Enrollment in the Ph.D. Course Work. In case of those, who are exempted from Course Work shall have to fulfill the conditions to get registered for Ph.D. from the date of joining the Department. If any student fails to submit Synopsis to the Academic Research Branch for Registration for Ph.D. Degree due to any reason within this period he/she will have to seek Re-Enrollment by paying an amount of Rs. 5000/- (Total period of Enrollment + Re-Enrollment is 18 months (1½ year).
- On expiry of Re-Enrollment period, the student can apply for "Condoning the Delay" (to get extension for 3 months) by paying an amount of Rs. 5000/-. The candidate can apply for this extension twice. After the end of "Extension of Enrollment" period, if the candidate fails to submit the Synopsis, his/her Enrollment will be cancelled automatically. He/she can apply for fresh Enrollment after a gap of one year. In this case the application will be considered according to new rules existing at the time of fresh Enrollment.
- During Re-Enrollment period students shall not be provided hostel facilities. If a student was residing in the hostel during Enrollment period then the hostel has to be vacated during Re-Enrollment period.

## **5.3 Structure and Duration of Ph.D. Course Work:**

This is a Pre-Registration Course Work required for the Registration to Ph.D. programme of the University. The Ph.D. Course Work is compulsory for all candidates who have passed Ph.D. Entrance Test or are holders of UGC-CSIR (JRF)/NET/SLET/SET/GATE/GPAT/Teacher Fellowship or have done M.Phil. with at least B+ Grade but without Course Work of at least one semester duration. In service or working candidates are also required to do Ph.D. Course Work and produce a No Objection Certificate from their present employer for this purpose.

The Ph.D. Course Work comprises of four papers of one semester duration. There will be at least three compulsory papers including the paper of "Research Methodology and Publication Ethics". The structure and contents of the Ph.D. Course Work will be prepared by Departmental Ph.D. Course Committee.

Passing of Ph.D. Course Work is only an essential requirement for the Registration to Ph.D. Programme of the University. Hence, no Degree will be awarded to successful candidates in Ph.D. Course Work, only detailed mark sheet will be issued. The Course Work should be of minimum 8 Credits and must include the subject of Research Methodology and Publication Ethics (or otherwise as suggested by UGC, New Delhi from time to time).

#### **5.4 Attendance:**

A candidate admitted to Ph.D. Course Work must fulfill the following requirements:

- (i) Has been on the rolls of the Department throughout the semester preceding the examination.
- (ii) Every candidate has attended a minimum of 75% of the delivered number of lectures in each paper.
- (iii) The shortage in the attendance of lectures by the candidate will be condoned as per rules made by the University from time to time.

#### **5.5 Curriculum:**

There will be four papers. Three papers will be core papers and are compulsory to all candidates. The fourth paper will be elective. Every student will have to take one elective paper out of a list of elective papers being offered by the Department. The elective papers will normally be offered to students by the Department depending on the areas of interest of the candidates. The composition of the Course is given as under:

- One paper on "Research Methodology and Publication Ethics" (Compulsory to all candidates) (4 Credits)
- Two papers on core Courses (Compulsory to all candidates) (4x2=8 Credits)
- One elective paper (4 Credits)
- Total Credits = 4 x 4 = 16

The minimum number of lectures will be 50 per paper. Each lecture will be of one hour duration. Each paper will carry 4 Credits.

#### **5.6 Medium of Research and Thesis Writing:**

In general, the medium of research and thesis writing shall be Punjabi or English. For language subjects, the medium of research and thesis writing shall be the language concerned only.

In case a candidate wants to write and submit his/her research work in other than the concerned language, permission of the Vice-Chancellor shall be mandatory.

In addition to this, candidates of all the subjects will have to submit 'Summary of Thesis' in Punjabi of minimum 10 pages.

### 5.7 Approval of Syllabus:

Outline of tests, syllabi and Courses of reading shall be prepared and finalized by the concerned Departmental Ph.D. Course Committee. It will be approved by Dean Academic Affairs.

### 5.8 Continuous Assessment and Final University Examination:

In each paper 50% weightage will be given to continuous assessment or Sessional Work which will consist of two house tests (30%), one assignment (10%), and one seminar (10%). Out of two house tests, the one best will be considered. A weightage of 50% in each paper will be given to final University examination.

### 5.9 Eligibility to Appear in University Examination:

Candidates appearing in the University examination should satisfy the following requirements:

- (a) Have been on the rolls of Department concerned throughout the semester preceding the examination.
- (b) Have their names submitted to the Dean Academic Affairs by the Head of the Department along with certificate to be signed by the Head of the Department of having attended not less than 75% of the total lectures delivered in each paper (theory/practical/tutorials/seminars), separately.

### 5.10 Compilation of Results:

The result of Course Work shall be compiled in letter Grades obtained in Internal assessment, External examination as well as their combination.

- (i) **Point Value of Grades:** The letter grades shall have the following pointvalues:

Letter Grade	Point Value
O (Outstanding)	10.0
A+ (Excellent)	9.4
A (Very Good)	8.4
B+ (Good)	7.4
B (Satisfactory)	6.4
C (Poor)	5.4
D (Fail)	4.4

- (ii) **Conversion of Marks into Grades:** The following relationship shall be used to convert marks (m%) into grades obtained by a student in a paper:

Percentage of marks (m)	Grade
m greater or equal to 95	O
m greater or equal to 85 and less than 95	A+
m greater or equal to 75 and less than 85	A
m greater or equal to 65 and less than 75	B+
m greater or equal to 55 and less than 65	B
m greater or equal to 45 and less than 55	C
m less than 45	D



- (iii) **Computation of Grade Point Average (GPA):** The grades obtained by candidates in different examinations including internal assessment (Sessional Work), final University examination, practical, etc. will be shown as cumulative grade or as Grade Point Average (GPA). The grades in various units or papers can be combined to compute GPA as:

$$\text{GPA} = \frac{C_1G_1+C_2G_2+C_3G_3+\dots}{C_1+C_2+C_3+\dots}$$

Where  $C_1, C_2, C_3$  etc. are credit points of the papers and  $G_1, G_2, G_3$  etc. are the respective grade points obtained by the students.

The GPA will be converted into overall grade obtained by a student for passing Ph.D. Course Work, using the following table:

Value of GPA	Overall Grade
greater than 9.4	O
greater than 8.4 but less than or equal to 9.4	A+
greater than 7.4 but less than or equal to 8.4	A
greater than 6.4 but less than or equal to 7.4	B+
greater than 5.4 but less than or equal to 6.4	B
greater than 4.4 but less than or equal to 5.4	C
less than or equal to 4.4	D

- (iv) **Conversion of GPA into Percentage of Marks:** The GPA shall be converted into percentage of marks by multiplying the GPA by 10. For example, if a candidate gets GPA of 7.245, then the percentage of marks shall be 72.45%.

#### Minimum Requirement to Pass Ph.D Course Work

- (v) The Ph.D. Student has to earn atleast 'C' Grade in each paper separately for Internal Assessment (Internal) and final University Examination (External) as well as atleast 'B' Grade in each paper after combining the marks of Internal and External to pass the paper(s).
- If he/she gets 'D' Grade in One or Two Papers separately for Internal and External then he/she will get reappear in that paper(s). For this he/she will be provided only one chance in the subsequent examination.
  - In case the Ph.D. Student gets 'D' Grade in more than two Papers separately for Internal and External he/she will be declared 'failed'.
  - If he/she gets overall (combined Internal+External) 'C' Grade in any number of Paper(s) or 'D' Grade in one or two paper(s) then he/she will get reappear in that paper(s). To improve the grade he/she has to appear in Internal or External or both examinations where ever he/she has got 'C' or lower grade. For this he/she will be provided only one chance in the subsequent examination.

vi) The result and DMC of the Course Work will be Prepared according to the following pattern:

**NOMENCLATURE - WISE DETAIL OF GRADES**

Nomenclature	SCORE		Minimum Required Grade	(External +Internal) Grade	Minimum Required Grade	Credits
	EXT. GRADE	INT.GRADE				
1			C		B	4
2			C		B	4
3			C		B	4
4			C		B	4
GRADE POINT AVERAGE						16
OVER ALL GRADE						

#### 5.11 Declaration of Result:

The Controller of Examinations shall publish a list of candidates who have passed the Ph.D. Course Work examination and issue detailed marks certificate indicating the grades and grade point average (GPA) obtained by the candidate separately in internal assessment, External examination and their combination. No Degree will be awarded for passing Ph.D. Course Work.

#### 5.12 Constitution, Powers and Functions of Departmental Ph.D. Course Committee

The term of the Departmental Ph.D. Course Committee shall be two years and shall consist of the following:

1. The Head of the University Teaching Department - as Chairman (ex-officio); The Head should possess Ph.D. Degree. If the Head is non-Ph.D. then senior most teacher possessing Ph.D. Degree will be the Chairman.
2. Professors from the University Teaching Departments or Professors in the subject concerned from the Centre for Distance & Online Education (only those teachers will be the members who possess Ph.D. Degree and are associated with Post-Graduate Teaching & Research).
3. Two from amongst the Associate Professors from the University Teaching Departments and two Associate Professors in the subject concerned from the Centre for Distance & Online Education (only those teachers will be the members who possess Ph.D. Degree and are associated with Post-Graduate Teaching and Research) by rotation according to seniority provided that at least one Associate Professor shall be from the University Teaching Department.
4. Two from amongst the Assistant Professors from the University Teaching Department and two Associate Professors in the subject concerned from the Centre for Distance & Online Education (only those teachers will be the members who possess Ph.D. Degree and are associated with Post-Graduate Teaching & Research) by rotation according to seniority provided that at least one Assistant Professor shall be from the University Teaching Department.
5. If the strength of the faculty members is less and there are no Professors in the Department, then, two Professors will be nominated by the Dean Academic Affairs from the allied subjects.

6. In the case of Ordinances of Ph.D. Course Work, the proceedings of Departmental Ph.D. Course Committee will be placed before the Academic Council through Dean, Academic Affairs for consideration and approval. The outlines of tests, Syllabi and Courses prepared by the Departmental Ph.D. Course Committee will be approved by Dean, Academic Affairs.

## 6. REGISTRATION

### Submission and Presentation of Synopsis for Ph.D. Registration

- (a) The candidate will submit his application for Registration on the prescribed form. The process of presentation of Synopsis for Ph.D. Registration can be done during the period of Ph.D. Course Work. The Department will forward the case for the Registration of the student to the office of Dean Research, only after the student passes the Ph.D. Course Work. In this case the date of Registration for Ph.D. Degree will be the date of passing of Ph.D. Course Work. The Title for Ph.D. and Synopsis shall be approved in Registration Seminar.

Copies of the Synopsis for Registration for Ph.D. Degree will be provided to the members of Departmental Research Board at least one week in advance from the date of presentation of Seminar. It is understood that all the deficiencies/improvements to be made in the Synopsis will be settled in the meeting of Departmental Research Board.

The candidate shall also submit along with the application for Registration a fee of Rs.2000/- and seven copies of the Synopsis giving brief outlines indicating the purpose/objective of the research, review of literature, general approach and/or research methodology to be used, tentative plan of work/chapter scheme, bibliography, etc. to the Academic Research Branch. The Ph.D. Registration Synopsis should be signed by the candidate, supervisor and co-supervisor (if any) and countersigned by Head of the Department.

The date of Registration for Ph.D. Degree will be either the date of presenting the Synopsis before the DRB or the date of passing of Ph.D. Course Work, whichever is later.

- (b) (i) The candidate shall be required to present a Synopsis pertaining to Registration on the topic of his/her study in the presence of Departmental Research Board to which other members of the Department or Faculty may also be invited.
- (ii) Those candidates who are exempted from Ph.D. Course Work are deemed to be registered for Ph.D. Degree from the date of presentation of Seminar before the Departmental Research Board.
- (c) The Departmental Research Board while recommending Registration of the candidate for consideration of BPSAR shall send a detailed note about the suitability of the topic as also the methodology proposed by the candidate.

The note shall include the names of the members of faculty present at the meeting, the duration of the discussion and its final outcome. The Research Supervisor would be required to give specific comments on the Synopsis submitted by the candidate. In case the Departmental Research Board does not

approve the topic, the case will be referred to BPSAR giving detailed report with reasons thereof for its final decision. After the date of BPSAR is fixed and a cut-off date is circulated by the Dean Research to the Heads of the Departments, no cases of Registration will be entertained in the scheduled meeting of BPSAR.

- (d) Each Supervisor is required to submit one PPT with Three Slides as detailed below:
- Title Page
  - Objectives
  - Research Methodology
- (e) Application for Registration would be processed in the concerned Department in all respects within a period of 45 days from the date of submission of application on the prescribed Proforma. In case of any delay, the candidate can request Dean Research for necessary action, who shall ensure that necessary formalities with regard to the processing of the application in the Department viz., holding of Seminar and Departmental Research Board meeting are completed at the earliest.

All the formalities for Ph.D. Registration including the presentation of Registration Seminar of the enrolled candidates should be completed by the Departmental Research Board and communicated to the Academic Research Branch for processing the case for Registration within a maximum period of 24 months (one year Enrollment plus six months re-enrollment plus three months extension of re-enrollment period plus another three months extension of re-enrollment period).

## **7. APPOINTMENT OF SUPERVISOR/ CO-SUPERVISOR\***

- (a) On the recommendations of the Departmental Research Board, the Supervisor of the candidate shall be appointed either from Punjabi University, Patiala or Colleges affiliated to Punjabi University Patiala/Regional Centers/Neighbourhood Campuses/Constituent Colleges of Punjabi University Patiala. The Supervisor/Co-Supervisor must be a regular teacher possessing Ph.D. Degree. Professor should have at least five research publications in refereed journals while Associate/Assistant Professor should have at least two research publications in refereed journals. The regular teachers from affiliated Colleges must be University approved teachers.

A teacher of College affiliated to Punjabi University, Patiala can become Ph.D Supervisor/Co-Supervisor if he/she satisfies the requirements mentioned above provided the college is offering Post Graduate Programme in the concerned Subject.

No retired teacher is allowed to enroll any student for Ph.D. programme as Supervisor. In addition, in-service teachers are allowed to enroll fresh Ph.D. students till the age of 57 years if the retirement age is 60 years and till the age of 55 years if the retirement age is 58 years. Further, appointment of Co-Supervisor (having at least 5 years of service left) from within Punjabi University, Patiala will be essential if a teacher wishes to enroll Ph.D. student after attaining the age of 57 years. It shall be mandatory for the Supervisor to get a Co-Supervisor appointed if the Ph.D. Thesis of the candidate is not submitted till the age of his retirement.

If the Teachers who have obtained Ph.D. Degree from Private/Deemed Universities wish to become Supervisor or Co-Supervisor of Ph.D. candidates in

Punjabi University, Patiala they shall have to produce the following documents:

- i) Certificate of NAAC with minimum 'A' Grade.
- ii) Certificate 2 (f) and 12 (b) awarded by UGC to his/her Ph.D. Awarding University.
- iii) Recommendation of Departmental Research Board (DRB) of the respective Department.

Final decision for such request shall be taken by Dean Research.

If necessary, Co-Supervisor may be appointed not later than two years of Registration of the candidate from the same department or from a different department of the University or from outside the University. However, a written justification for requesting the appointment of a Co-Supervisor should accompany the application duly recommended by the Departmental Research Board. No Objection Certificate from the concerned University/Institute is to be submitted by the Co-Supervisor if he/she is from outside Punjabi University, Patiala.

The doctors working in Medical Universities/Colleges approved by MCI, DCI, Central Council of Indian System of Medicine, etc. and having the Degree of MS/MD/MDS/DM or equivalent of the rank not below Assistant Professor or equivalent can also become Co-Supervisors, if needed. As per the prevalent practice other medical doctors can also be appointed as Co-Supervisor under special circumstances. In case the Co-Supervisor is from Punjabi University, Patiala or Colleges affiliated to Punjabi University, Patiala/Regional Centers/Neighbourhood Campuses/Constituent Colleges of Punjabi University, Patiala and Supervisor leaves the University service or shows his/her inability to supervise the scholar, Co-Supervisor will automatically become the Supervisor of the candidate.

The University signs Memorandum of Understanding (MOU) with reputed educational institutions and research institutions. The Ph.D. candidates working in such institutions are allowed to enroll for Ph.D. Programme/Ph.D. Course Work at Punjabi University, Patiala. The research scientists not below the level of Assistant Professor holding Ph.D. Degree and having requisite research publications in refereed journals are allowed to become Supervisor. In such a case, the Co-Supervisor shall be from the relevant Department of the University.

If there is a collaborative research work being carried out by any Department of the University and an outside Institution and if the major work of the collaborative research work is being done in the outside Institution, then the Supervisor shall be from that Institution and the Co-Supervisor shall be from the relevant Department of the University. Similarly, if the major work is being done in a Department of the University, then the Supervisor shall be from the concerned Department of the University and the Co-Supervisor shall be from the concerned institution.

The following is the upper limit regarding the number of candidates who can be registered for Ph.D. Degree with a Supervisor/Co-Supervisor:

Assistant Professor	-	4
Associate Professor	-	6
Professor	-	8

In case of joint Registration, the Supervisor and Co-Supervisor will each share half seat for the Ph.D. candidate being supervised/jointly-supervised.

Additional slots over and above the quota fixed for the candidates enrolled or registered under the NFSC Fellowship for SC/ST candidates, MANF for minority students as per the guidelines of the UGC, foreign students sponsored by Government of India Agencies like ICCR, Ministry of HRD etc. and foreign students sponsored by their respective Governments/Embassies under UNDP will be permitted to all the eligible teachers working in different Departments of Punjabi University or Colleges affiliated to Punjabi University, Patiala/Regional Centers/Neighbourhood Campuses/Constituent Colleges of Punjabi University, Patiala.

At the time of Registration of the candidate, the Heads of the Departments shall ensure that they recommend candidates within the upper limit as above for approval by the Board of Post-Graduate Studies and Research. It is understood that the upper limit includes all such candidates who are whole time and part-time research scholars put together with a Supervisor or Co-Supervisor. A certificate in this regard shall be given by the Supervisor/Co-Supervisor.

- (b) Anyone who is registered for Ph.D. Degree shall not be eligible for appointment as Supervisor/ Co-Supervisor.
- (c) No relative of the candidate such as wife, husband, son, daughter, sister, brother, wife's or husband's brother and sister, brother's son and daughter, sister's son and daughter, first cousin, nephew, grand-son, grand-daughter, or such other person as might be deemed a close relation by the Vice-Chancellor, shall not be appointed as Supervisor/Co-Supervisor. A certificate to this effect will be given by the Supervisor/Co-Supervisor along with the application for enrollment.
- (d) Normally, request of the candidate regarding the choice of Supervisor or a Co-Supervisor will be accepted. However, in case the Departmental Research Board does not agree with the request of the candidate then the Board's report along with the reasons and the issue regarding the appointment of Supervisor/Co-Supervisor shall be communicated to the Dean Research. The case will be finally decided by the Vice-Chancellor.
- (e) Request for change of the Supervisor could be entertained through Departmental Research Board only:
  - (i) In case the Supervisor has left the service of the University or by mutual consent of both the Supervisor and the candidate.
  - (ii) In case of extreme hardship where it becomes almost impossible for a candidate to work with the existing Supervisor and the Vice-Chancellor has satisfied himself, then the matter may be placed before the BPSAR for approval.
  - (iii) (a) The change of Supervisor shall be allowed within two years of Registration on the recommendation of the DRB. Normally, no change will be allowed after this period, except in exigency. If a candidate wishes to change the Supervisor after two years from the date of Ph.D. Registration due to unavoidable circumstances, he/she would submit an application to the Head of the Department giving reason thereof for such a change. This will be examined by DRB of the concerned Department. Final approval will be given by Vice-Chancellor on the basis of DRB recommendations in anticipation of BPSAR.

- (b) If a teacher proceeds on long leave of three or more than three years, he/she may not be allowed to act as Supervisor. However, Ph.D. scholars who are already registered prior to his/her proceeding on long leave may be allowed to continue provided a Co-Supervisor is also appointed to supervise the work of the candidate.
- (c) In case of relocation of an Ph.D. woman scholar due to marriage or otherwise, the research data shall be allowed to be transferred to the University to which the scholar intends to relocate provided all the other conditions as per UGC Regulations-2016 are followed in letter and spirit and the research work does not pertain to the project secured by the parent Institution/Supervisor from any Funding Agency. The scholar will however give due credit to the parent Supervisor and the institution for the part of research already done.

## **8. TOPIC MODIFICATION**

A candidate may within one year of his/her Registration modify the scheme of his/her Ph.D. work after obtaining recommendations of DRB followed by the approval of BPSAR. Provided that the BPSAR may allow modification to be made in the title of subject even after one year if in the considered opinion of the board, the modification proposed did not involve any drastic change in the original scheme and scope of the subject.

## **9. REQUIREMENTS DURING REGISTRATION**

- (a) The candidate registered for Ph.D. Degree shall be required to pass the subject of Punjabi of matriculation or an equivalent examination, any time before the Viva-Voce examination, except those who have already passed examination in Punjabi of that level. Foreign candidates shall have to pass the 'Elementary Course in Punjabi'. Those candidates who want to submit their Ph.D. Thesis in Punjabi Language shall have to produce certificate of having attended Seven Days Workshop organized by Punjabi Computer Help Centre/Department of Punjabi, Punjabi University, Patiala.
- (b) A candidate registered for Ph.D. Degree shall be required to appear before the DRB once in a span of 12 months to present Annual Seminar and show the progress of his/her research work for evaluation and further guidance. In addition, Annual progress report of the candidate shall be submitted office of the Dean Research through the Head of the Department each year for the work done during the year or fraction of the year. The report will include all the teaching engagements, surveys, tours, publications, research work etc. The Supervisor of the candidate will give an assessment about the progress of the candidate. All reports should be signed by Supervisor and Co-Supervisor (If any).
- (c) If any shortcomings are pointed out in the Annual Seminars the DRB shall record the reasons for the same and suggest corrective measures. If the research scholar fails to implement these corrective measures, the DRB may send the case to the Dean Research with specific modifications, reasons and the matter shall be placed before BPSAR for appropriate action.
- (d) Students registered between 1st January to 30th June shall present their Annual Report between 15th April and beginning of summer vacations.

Students registered between 1st July to 31st December shall present their Annual Report between 15th November and beginning of winter break.

- (e) The candidate has to pay annual fee and laboratory fee regularly within financial year ending 31st March every year, failing which requisite fine etc. shall be charged.
- (f) If a candidate wants to submit his/her Thesis, he/she will give a Pre-Submission Seminar before submission of Thesis.
- (g) The Pre-Submission Seminar shall be organized by the Head of the Department. To these presentations members of the Departmental Research Board, the Supervisor of the candidate, other research students of the Department and the teachers of the Department/Faculty shall be invited. In Departments where the Faculty strength is inadequate, the Dean Research will nominate two or more Faculty members from the same or allied Faculty to complete the required quorum. A report of the presentation along with the write-up shall be sent to the Dean Research. In case presentation is not held, the matter shall be reported to BPSAR through the Dean Research.
- (h) A Ph.D. candidate residing in a foreign country shall have to be physically present before the Departmental Research Board for presenting the Synopsis for his/her Registration to Ph.D. Degree. For all other purposes such as presentation of Annual Seminar, Viva-Voce examination etc., the candidate may face the respective boards through video-conferencing for which the candidate will have to pay the required fees.



## 10. FEE

### (A) Indian Students

All candidates will have to pay fees as prescribed by the University for various purposes for as detailed below:

	Enrollment/Enrollment-cum-Admission Form Fee	Rs. 2000/- Rs. 1400/- (for SC/ST)
	Candidates who have done M.Phil./Ph.D. Course Work from Private/Deemed/Punjabi University Autonomous Colleges desiring exemption from Ph.D. Course Work.	Rs. 5000/- + Rs. 2000/- Enrollment Fee
	Registration Fee	Rs. 2000/- + Rs. 100/- Registration Form Fees if downloaded
	Annual Fee (Annual Fee from Registration date to 31 March)	Rs. 3000/- (Per Annum)
	Laboratory Fee: For Science Students, Mechanical, Electronics & Communication Engineering and Civil Engineering students (for three years)	Rs. 5000/- (Per Annum)
	Computer Lab Fee (Annual) (for three years) For students of Computer Science, Computer Engineering, Geography, Psychology, Statistics, Management, Commerce or for other students wherever applicable	Rs. 3000/- (Per Annum)
	Topic Modification Fee	Rs. 5000/-
	Late Fees	
	Late Fees for paying Annual Fee	Rs. 50/- (per month)
	Late presentation of Annual Seminar and Annual Report	Rs. 1000/- for the first month Rs. 500/- (for subsequent months)
	Thesis submission Fee if submitted late after Pre- Submission Seminar	Rs. 1000/- per month
	7th Year Extension	Rs. 1,00,000/-
	8th Year Extension	Rs. 3,00,000/-
	9th Year Extension	Rs. 5,00,000/-
	Late Fee for applying for Extension	Rs. 500/- per month
	Thesis Evaluation Fees	Rs. 6000/-
	*Video-Conferencing	US \$ 300 or equivalent in Indian Rupees
	*Video-Conferencing for Viva-Voce	US \$ 400 or equivalent in Indian Rupees
* GST as applicable will be charged extra.		

(B) Fees for International Students and NRI (Foreign Passport Holders) other than those sponsored under ICCR/MHRD etc.

1.	Non-SAARC Countries	US \$ 3500.00 Per Annum
	SAARC Countries (Afghanistan, Bangladesh, Bhutan, Maldives, Nepal, Pakistan and Sri Lanka)	US \$ 1250.00 Per Annum US \$ 100 One Time Eligibility Fees. US \$ 100 One Time Thesis Submission Fees.
The Annual Fees will include all charges other than hostel charges, mess charges and medical charges. Note: Fee for International Students will be updated by Directorate of International Affairs from time to time as directed by respective Funding Agencies like ICCR/MHRD etc.		

\*The Ph.D. Candidates who have gone to foreign countries or residing in foreign countries can avail the facility of video-conferencing for presenting Annual Seminar/Ph.D. Viva-Voce Examination. For each Seminar/Examination requisite Fees shall be charged. This facility shall also be available to Indian Students for justified reason who cannot present themselves physically. Approval of Vice-Chancellor shall be necessary for such Indian Students.

The fine for late presentation of Seminar and Annual Report shall become applicable one month after the date of issue of Registration Letter by the Research Branch Office.

The Annual Fees will include all charges other than hostel charges, mess charges, medical charges if treatment is done from outside University Health Centre. The Hostel accommodation will be provided on the basis of availability of hostel accommodation.

The contingency amount charged from the student will be transferred to the "Contingency" of the concerned Department.

## 11. SUBMISSION OF THESIS

A Thesis to be presented by the candidate must be a piece of original research work characterized either by the discovery of new facts or by fresh interpretation of facts or theories or should consist of applied work such as developing and fabricating special instruments or apparatus and should show the candidate's capacity for critical examination and judgment and for lucid presentation.

It is the responsibility of the student to ensure that the Dissertation/Thesis is free of plagiarism which means that no part of the Thesis has been copied from other sources and all sources used for Thesis/Dissertation have been properly cited (**Annexure II**).

All students are required to check their Thesis through plagiarism detection software. The supervisors are required to sit with their students and run the Thesis through plagiarism detection software available in the University Computer Centre for this purpose. The Plagiarism Report of the Ph.D. Thesis should bear the signatures of the student, Supervisor, Co-Supervisor (if any) and should be counter signed by the Head of the Department. Ph.D. Thesis should comply with Plagiarism Rules & Plagiarism Compliance Certificate should be appended at the end of the thesis. The Plagiarism Report should be generated for the entire text of the thesis. Tables, figures, spectral data, references may be excluded for the purpose, if justified.

The candidate will not be permitted to submit his Thesis for the Degree unless his Supervisor is satisfied that the Thesis presented is worthy enough to be evaluated by the examiners for award of the Ph.D. Degree. In case of an adverse report of the Supervisor, the candidate may make a representation to the Vice-Chancellor.

- (a) A candidate is required to apply in writing to the Head of the Department that he/she is in a position to submit his/her Thesis and deliver a Pre-Submission Seminar. The Head of the Department will conduct such a Seminar at the earliest but not later than 30 days from the request of the candidate. In case, the presentation is not organized within 30 days from the date of application, the candidate may approach Dean Research who will ensure that needful is done without any further delay.
- (b) The Head of the Department will ensure that panel of examiners suggested by Examiner Panel Committee (EPC) along with one copy of summary of the Thesis and soft copy (E-mail) of the summary is submitted to Thesis Cell within TEN working days of the Pre-Submission Seminar. The office of Dean Research would then process the applications and take steps for seeking acceptance from the concerned Examiners.

- (c) A candidate shall submit the Ph.D. Thesis not later than three months from the date of presentation of Pre-Submission Seminar.
- (d) In case of non-submission of Thesis within the stipulated period, the candidate can seek extension of time from the Dean Research by depositing a late fee of Rs. 1000/- per month.
- (e) The candidate may incorporate in his/her Thesis the contents of any work which he/she may have published on the subject and shall give due reference to the work in the Thesis. However, he/she shall not submit his/her Thesis on any work for which a Degree has already been conferred on him/her by this or any other University. The candidate may, however, incorporate in his/her Ph.D. Thesis any work from his/her M.Phil./M.Litt. Dissertation with due reference to the Thesis and acknowledgement to the Supervisor, provided the work has been carried out at this University.  
In case the work was done through collaboration, a certificate duly signed by all collaborators and countersigned by the concerned Supervisor to the effect that none of the collaborators has made or will make use of the joint work (published/unpublished) incorporated in this Thesis for the award of any Degree/Diploma of any University/Institution, shall be furnished along with the Thesis.
- (f) For more details, candidates are also advised to consult Ph.D. Thesis Format **Annexure III** for reference.

(g) **Abstract of the Thesis :**

Along with the Thesis each candidate is required to submit an Abstract of Thesis in Punjabi (250-300 words in 12 pt Unicode Font in single space). Abstract should have title of Thesis, name of student, name of Supervisor, name of Co-Supervisor (if any), Department, Faculty and Registration No., etc. English Version of the Abstract shall also be submitted. If the thesis is in Hindi/Urdu Language, Abstract should be submitted in the respective language also.

- (h) At the time of submission of Ph.D. Thesis by the candidate, a certificate should be submitted by the candidate that the Thesis is a bonafide work of the candidate (See Ph.D. Thesis Format **Annexure - III**).
- (i) In case of a complaint by the External Examiner or by any one of plagiarism or copying of certain portions in the Ph.D. Thesis or Project Reports, they will be examined by a committee consisting of :
  - (i) Dean Academic Affairs (Chairperson)
  - (ii) Dean Research
  - (iii) Dean of the Faculty
  - (iv) Concerned Head of the Department
  - (v) Controller/Additional Controller, Examination
  - (vi) Two Professors from the same or allied Faculty to be nominated by the Vice-Chancellor

If any one of the above is a Supervisor or Co-Supervisor, he/she will not be a member of the above committee.

If plagiarism or copying is established, the quantum of punishment to be recommended by the committee will be in accordance with UGC Guidelines, issued from time to time regarding plagiarism.

(j) **Number of Copies :**

- (i) The candidate shall submit two copies of the Thesis in Spiral Bound Form and one soft copy of the Thesis in single pdf. file (E-Mail) to the Thesis Evaluation Cell.
- (ii) The candidate shall submit the third copy of Thesis in Hard Bound Form meant for Library (Library Copy) along with the Viva-Voce examination report.
- (iii) Library Copy of the Thesis must be complete in all respects and must incorporate the suggestions of the examiners regarding typographical/ grammatical errors, if any.

**12. Duration of Ph.D. Programme and requirements for submission of Thesis**

- (a) Ph.D. Programme shall be for a minimum duration of 3 years including Course Work (6 months for Course Work and 30 months to be counted from the date of Registration) and a maximum of 6 years. The women candidates and persons with disability (more than 40% disability) may be allowed a relaxation of two years for Ph.D. in the maximum duration. For International Ph.D. Students the maximum time to submit Ph.D. Thesis shall be three years from the date of Enrollment. Further extension will have to be approved by Directorate of International Affairs, Punjabi University, Patiala on the basis of guidelines issued by the respective Funding Agency from time to time.
- (b) At the time of submission of Ph.D. Thesis by the candidate, he will have to produce evidence of having at least one research paper published or accepted for publication in Refereed Journals and having presented two papers in Conferences/Seminars related to his/her topic on which he has been registered for Ph.D. Degree and out of academic work included in the Thesis. Evidence for the same has to be provided at the time of thesis submission.
- (c) The Registration of candidates who fail to submit their Thesis within the stipulated period as above or who fail to apply for grant of extension would be processed according to prevailing University Rules.
- (d) Heads of the Departments while forwarding a Ph.D. Thesis to the office of the Dean Research for evaluation will ensure that the candidate submits a copy of "No Dues Certificate" complete in all respects including that of Department, Library and Hostel/Dean Students Welfare and Directorate of Sports. A Ph.D. Thesis not followed by the "No Dues Certificate" will not be accepted in the Thesis section (except for teachers and employees who are on the pay-rolls of Punjabi University).

**Extension in Period**

At least three months before the expiry of six years, a candidate can seek extension for the seventh year by submitting a Comprehensive Progress Report of the work done by him/her after paying a fee of Rs.1,00,000/-. He/she will have to appear before the Comprehensive Report Review Committee (CRRC) chaired by the Dean of the Faculty. The CRRC will review the Comprehensive Progress Report and will recommend/reject extension for a period of one year. It is mandatory for the students to present himself/herself before the committee. These cases will be forwarded to Vice-Chancellor for approval. Same procedure will be followed for seeking the extension of eighth year with fee of Rs.3,00,000/- and extension of ninth year with Fee of Rs.5,00,000/-.

In addition to the above extension fee for respective years, a candidate shall have to pay Rs.500/- per month as late fees. Further extension shall be at the discretion of the Vice-Chancellor.

### **13. REGISTRATION WITH THE UNIVERSITY**

No candidate is allowed to appear in two major examinations of this University simultaneously or to get himself enrolled simultaneously in two Universities. Candidates are advised in their own interest, to observe this rule strictly and not to appear in any other major examination till their result for Ph.D. Degree is declared. A copy of the Registration Letter to be issued to the candidate will also be sent to the Registration Branch stating the Registration number, if any, with which the candidate is already registered with Punjabi University, Patiala. It will be the duty of the Registration Branch to guard against violation of this rule.

### **14. PUBLICATION**

The Thesis approved shall only be published with the permission of Vice-Chancellor and on the recommendation of the Thesis Publication Committee provided that a request is made by the candidate within three years from the award of Ph.D. Degree. Applications received after three years will not be entertained.

### **15. PANEL OF EXAMINERS**

The Ph.D. Thesis submitted by a research scholar shall be evaluated by at least two external examiners who are not employed in Punjabi University, Patiala. An Examiners Panel Committee (EPC) would submit a panel of minimum of ten examiners at least 50% of whom will be from within the region i.e., Punjab, Haryana, Himachal Pradesh, Jammu & Kashmir, Chandigarh and Delhi, while 50% examiners should be from outside the region including foreign countries, full particulars of all the examiners including their name, specialization, designation, official address, phone numbers, email Id, etc. should be provided. The Vice-Chancellor will appoint two examiners from the panel and at least one of them would be from outside the region except in the case of the Thesis submitted in Punjabi medium.

The persons recommended as examiners for evaluation of the Thesis should not be below the rank of Associate Professor or its equivalent. The research profile of Associate Professor recommended as examiners should also be attached with the panel. The EPC should be extremely cautious while proposing the examiners. It should be ensured that the proposed examiners are active researchers of high repute as evident from their latest publications/research contributions.

For the subject of Law, Judges of High Court/Supreme Court could also be appointed.

In case the panel of examiners is not received from the Head of the Department within one month from the date of request, the Dean Research may convene a meeting of the (EPC) and submit the panel.

In case of retired persons, their last designation should be indicated without which the panel would be considered incomplete.

If the Thesis is written in Punjabi medium and Punjabi knowing examiners of Associate Professor/Professor rank are not available from outside the region, all the examiners could be taken from within the region.

The Examiners Panel Committee (EPC) will record a certificate to this effect, that sufficient Punjabi knowing examiners of Associate Professor/Professor rank are not available from outside the region.

The examiner will be free to seek clarification on any matter from candidate's Supervisor or the Co-Supervisor through the Dean Research. The Dean Research will ensure the secrecy of examiner's identity.

The examiner will state in his/her report:

- (a) Whether he/she recommends the award of the Degree to the candidate after holding Viva-Voce examination.
- (b) Whether he/she recommends resubmission of the Thesis after revision. In case an examiner recommends revision of the Thesis he/she will also indicate the required nature of changes.
- (c) Whether he/she recommends rejection of Thesis.
- (d) A list of questions that he/she would like the candidate to answer in the Viva-Voce examination be supplied in a separate cover.
- (e) Whether he/she recommends that the Thesis is fit for publication or not. If fit for publication, then with or without changes.

In the event of an examiner making recommendations for revision/modification of the Thesis, the candidate shall be free to defend his/her point of view through the Dean Research, if he/she so desires. However, if the examiner is not satisfied with the candidate's defense, the candidate shall be required to carry out necessary revision/modification for Viva-Voce Examination as finally suggested by the examiner before his/her case is processed further. It may be added that one Examiner can recommend revision of Thesis only once. If a second revision is recommended by the same External Examiner, then it will be treated as rejection of Thesis.

The candidate who is required to resubmit the Thesis, must do so within one year with requisite evaluation fees, from the date of supply of comments of the examiner to him/her by the University irrespective of his/her submission of defense unless extension is specially given by the Vice-Chancellor. A resubmitted Thesis will be examined by the examiner who has recommended re-submission unless he/she himself/herself is unable to do so or declines to do so.

In the event of one of the examiners recommending the award of the Degree and the second examiner recommending rejection of the Thesis; on the recommendation of the Vice-Chancellor, the Thesis shall be referred to a third examiner to be appointed by the Vice-Chancellor from the original panel of examiners. The third examiner shall not be informed of the recommendations of the two examiners. The recommendations of those two examiners who submit similar recommendations shall be final. This procedure shall also be followed if the examiner who had suggested modification, rejects the revised Thesis.

Each examiner shall be given one month's time for the evaluation of Thesis. In case report from him/her is not received, he/she may be reminded telephonically.

After the expiry of a period of three months if no report is received, the next examiner may be appointed. The first examiner will be requested to send the Thesis back. If in due Course, the report is received from the first examiner, the report will not be considered.

#### **16. GIST OF REPORTS**

- The reports of examiners (excluding the questions suggested for the viva- voce) will be opened by the Screening Committee meeting. The Screening Committee will prepare a gist of the reports of the examiners and the Dean of the Faculty will send the gist of reports within two weeks to Dean, Research. These will be placed before the Dean, Academic Affairs for decision regarding the conduct of Viva-Voce examination and the appointment of one of the examiners will be made by Vice-Chancellor in case of reports of both examiners being positive.
- The Screening Committee will point out the strengths and weaknesses, if any, in the reports. A copy of the report of Screening Committee without disclosing the names of the examiners will be provided to the candidate for carrying out necessary modifications including those of typing, references and factual errors etc. before the Viva-Voce examination.
- Corrections/Shortcomings suggested by the external examiners (if any), should be incorporated by the candidate in his/her Thesis. A certificate regarding compliance of the suggested modifications should be submitted by the candidate duly signed by him/her, Supervisor, Co-Supervisor (if any) and Head of the department. This certificate should be counter-signed by Dean of the respective faculty.
- The procedure for conducting Viva-Voce examination of the candidate shall be initiated only after submission of corrected Thesis (Hard-Bound) by the candidate to the Head of the Department.

#### **17. VIVA-VOCE EXAMINATION**

The Viva-Voce examination will be of at least of 45 minutes' duration and will be compulsory for all the candidates. This will be normally conducted at Patiala by one of the two external examiners who have evaluated the Thesis. The Head of the Department and the Supervisor of the candidate will be associated with the conduct of the Viva-Voce to be arranged by the Head of the Department within one month of receipt of intimation. There will be a presentation by the candidate for 20 minutes before a committee consisting of Dean of the Faculty, Head of the Department and Supervisor of the candidate. Two senior Professors will be nominated by the Dean Research to the above committee from the same Faculty or allied Faculty. The entire Department/Faculty would be invited to the Viva-Voce. The quorum for holding the Viva-Voce examination will be minimum of three members. In special cases, Dean Academic Affairs and Dean Research may be invited to the Viva-Voce examination of the candidate.

After the presentation by the candidate, questions will be asked to the candidate by the Examiner. In case of delay in the conduct of Viva-Voce, the candidate or Supervisor can approach the Dean Research for the needful.

In case an External Examiner is unable to conduct the Viva-Voce examination, a set of questions will be obtained by the Dean Research and the Viva- Voce examination will be conducted by an Examiner appointed by the Vice-Chancellor. A copy of the Thesis will be sent to this Examiner.

In case report(s) of the Thesis sent by of the Examiner(s) are not favorable the viva-voce examination of the candidate shall not be conducted.

The report about the performance of the candidate in the Viva-Voce examination shall be recorded by the External Examiner(s) only.

### **Depository with the University and UGC**

All Ph.D. candidates shall have to submit two soft copies of their Ph.D. Thesis in two separate CDs to the office of Dean Research after the conduct of Viva-Voce examination through their Supervisors and Head of the Departments. If during Viva-Voce examination any changes are suggested by the Examiners which are to be incorporated by the candidate in his/her Thesis, then the same will be incorporated and two soft copies of the final Thesis in the form of CDs will be submitted again. The candidate through his/her Supervisor and Head of the Department will give an undertaking that all changes as suggested by the Examiner(s) have been incorporated in the Thesis and CDs. The Thesis Evaluation Cell will send one CD to the University Library and another CD for uploading the Ph.D. Thesis to UGC Website, after the meeting of Research Award Committee (RAC) and notification of the Ph.D. Degree.

After Viva-Voce examination each candidate shall submit the following to the Thesis evaluation cell:

1. Library Copy of the Thesis. (Hard-Bound Form)
2. Two CDs of the Thesis

Each CD should have following folders/files:

- |            |  |
|------------|--|
| Folder (1) | Thesis   |
| Folder (2) | Abstract in English (PDF)                            |
| Folder (3) | Abstract in Punjabi (PDF & Unicode)                  |
| Folder (4) | Abstract in Hindi/Urdu PDF (If thesis in Hindi/Urdu) |

Thesis Folder should have following files :

- 1 Title page (Scanned Copy) .pdf
- 2 Certificate (Scanned Copy) .pdf (Signed with Date)
- 3 Preliminary pages (Includes the following)  
(Declaration (Scanned Copy) .pdf (Signed), Acknowledgements  
Scanned Copy) .pdf (Signed), Contents .pdf, List of Tables .pdf, List  
of Figures .pdf. Abbreviations .pdf)
- 4 Chapter 1 .pdf
- 5 Chapter 2 .pdf
- 6 Chapter 3 .pdf
- 7 Chapter 4 .pdf upto last chapter make separate file of each chapter
- 8 Conclusion & Summary .pdf
- 9 References/Bibliography .pdf
- 10 Appendix/Annexure/Research Papers .pdf
- 11 List of publication (word file)
- 12 Cover page of each publications (pdf)
- 13 Plagiarism report pdf file.

NOTE : Number of chapter and their titles may vary depending upon the subject requirement.



## **18. AWARD OF DEGREES**

- (a) If the two Examiners of the Thesis have recommended the award of the Degree and the Viva-Voce Examiner having satisfied himself on the basis of performance of the candidate in the oral examination, that the candidate has written the Thesis himself, he/she may recommend the Award of the Degree to the Research Award Committee (RAC).  
The RAC would consider the gist of reports prepared by the Screening Committee as well as the report of the examiner who conducted the Viva-Voce examination for arriving at a decision with regard to the Award of the Degree.
- (b) In case the Examiner, who conducts Viva-Voce examination, does not recommend the Award of Ph.D. Degree, the Thesis shall be rejected and the Registration of the candidate will be cancelled.
- (c) Each Supervisor is required to submit one PPT slide with title of the Thesis highlighting the main achievements/novelty of the Thesis before fixation of RAC date to the Thesis Evaluation Cell (racppt@pbi.ac.in).
- (d) The result of Ph.D. Degree of a candidate be deemed to have been declared on the date of meeting of RAC where he is declared eligible for the Award of Degree. The Registrar/Controller of Examination shall publish the result.

## **19. SUPPLY OF REPORTS**

The reports of the examiners may be supplied to the candidate and the Supervisor after declaration of the result.

## **20. GENERAL CONTROL**

The Department shall exercise disciplinary and general control over the research students and their work.

## **21. COMMITTEES & BOARDS**

The composition of the committees and Board at the Department/Faculty level shall be as given below:

### **(I) DEPARTMENTAL RESEARCH BOARD (DRB)**

- (a) Head of the Department (Chairperson)
- (b) (i) All Professors in the subject, employed in Punjabi University, Patiala  
(ii) Associate Professors and Assistant Professors who hold Ph.D. Degree.
- (c) One/two teachers from allied/supporting Departments to be nominated by the Dean, Academic Affairs.

**(II) BOARD OF POST-GRADUATE STUDIES AND RESEARCH (BPSAR)**

- (a) Vice-Chancellor (Chairperson)
- (b) The Dean, Academic Affairs
- (c) The Dean Research
- (d) Associate Dean Research
- (e) The Dean of Faculty
- (f) All Professors and the Heads of University Teaching Departments in the Faculty  
Provided further that Professors/Heads from only such Departments as are engaged in imparting instructions and doing research work shall be eligible for appointment as member.
- (g) Two experts from outside the University to be nominated by the Vice-Chancellor for two years.

**(III) COMPREHENSIVE REPORT REVIEW COMMITTEE (CRRC)**

- (a) Dean of the Faculty concerned (Chairperson)
- (b) Head of the Department
- (c) Supervisor and Co-Supervisor (if any)
- (d) Two senior most teachers (other than Head and Supervisor). In multi-faculty Department/Centers two senior most teachers of the subject (other than Head and Supervisor)  
Where the quorum (three members) is incomplete, Dean Research may nominate two professors from allied Department/Faculty.

**(IV) EXAMINERS PANEL COMMITTEE (EPC)**

- (a) The Head of the Department (Chairperson)
- (b) All Professors in the Department
- (c) If there is no Professor other than Head of the Department or the Head of the Department is a Associate Professor, a Professor from an allied Subject/Department to be nominated by Dean, Academic Affairs.
- (d) Supervisor of the Candidate
- (e) Where the quorum is incomplete, Vice-Chancellor may nominate one or two Professors from allied Subject/Department.

**(V) THESIS EVALUATION REPORT SCREENING COMMITTEE**

- (a) The Dean of the Faculty (Chairperson)
- (b) The Head of the Department
- (c) The Supervisor of the Candidate
- (d) One or Two Professors from within the Faculty to be nominated by the Vice-Chancellor
- (e) Where quorum is incomplete, the Vice-Chancellor may nominate one or two Professors from relevant/allied subjects

**(VI) RESEARCH AWARD COMMITTEE (RAC)**

1. Vice-Chancellor (Chairperson)
2. Dean, Academic Affairs
3. Dean Research
4. Associate Dean Research
5. Dean of the Faculty
6. All Heads of the Departments in the Faculty and one Professor from each Department in the Faculty by rotation according to seniority for a term of two years.
7. Concerned Supervisor of the candidate.

**(VII) THESIS PUBLICATION COMMITTEE**

1. Dean of the Faculty (Chairperson)
  2. Head of the Department
  3. Supervisor
- Where the Dean of the Faculty or Head of the Department is the Supervisor, the Vice-Chancellor would nominate one expert on the committee. In case the Dean of the Faculty, Head of the Department and Supervisor are the same, Vice-Chancellor would nominate two experts on the committee. Two members would form the quorum.

**(VIII) QUORUM**

The quorum for all the committees and the Board provided herein shall be one third of the total strength with at least three persons including Chairman/Convener. In such cases where Supervisor/Head of the Department/Dean of Faculty is the same person, one or two persons may be nominated by the Vice-Chancellor, depending upon the case.

**Annexure - I**

**Name of the Department**  
**Punjabi University, Patiala**  
**(1961 ਦੇ ਪੰਜਾਬ ਐਕਟ ਨੰ: 35 ਤਹਿਤ ਸਥਾਪਿਤ)**

No.  
Date:

Candidate Name:

Address:

This is to certify that your application for enrollment to Ph.D.  
Course has been approved on ..... by Dean Research,  
Punjabi University, Patiala.

Head of Department,  
(Name & Designation)

## **PUNJABI UNIVERSITY, PATIALA**

### **Policy on Plagiarism**

#### **Context**

Punjabi University, Patiala aims to foster and maintain an ethos of honesty and academic integrity. All staff and students have an obligation to act in an ethical manner, consistent with the requirements of academic integrity. Punjabi University, Patiala has a well defined policy on plagiarism in place in order to avoid acts of academic dishonesty.

Plagiarism is a serious academic offence that may be easy to commit unintentionally, it is defined by the act not the intention. It is the responsibility of all students to familiarize themselves with the University's policy on plagiarism. The students are advised to seek guidance from their teachers/ staff member.

#### **Purpose**

The aim of the policy document is to provide a definition of plagiarism and the procedures adopted by the University for detection of plagiarism.

#### **Scope**

This policy applies to the final draft copy of the Ph.D Thesis Intended to be submitted to the University for Evaluation by research scholars registered with Punjabi University, Patiala.

### **DEFINITION OF PLAGIARISM**

Plagiarism is defined as the passing off of one's own work or another person's work as if it were one's own, by claiming credit for something that was actually done by someone else.

Plagiarism is an act of fraud committed knowingly or unknowingly by stealing someone else's work, idea (both scientific and literary work) and/or published materials. The act of plagiarism can be manifested in the form of publishing someone else's work, audio and video broadcasting, or circulation of copied words and images, ideas and opinions, discoveries, artwork and music, recordings or computer generated work (like circuitry, software or computer programs, websites-internet content).

Plagiarism takes many forms. Some common types of plagiarism include:

- Copying and Pasting (copying and pasting portions of text from online journal articles or websites without proper citation)
- Downloading or buying research papers (Downloading a free paper from a web site or paying to download a paper and submitting it as your own work).
- Paraphrasing of another's work by simply changing a few words or altering the order of presentation without clear identification, appropriate reference and acknowledgement.

- Copying or submitting someone else's written or creative work (in the form of words, images, ideas, opinions, graphics, formula, discoveries, invention, artwork, design, music, recordings, choreography, photographs, software, computer programs).
- Submitting a work/document that had been submitted previously by same one.
- Submitting a work that had been prepared by falsification/fabrication of data.
- Submitting a collaborative work without obtaining Proper consent from the concerned collaborator.
- Submitting a cross language content translation and use without reference to original work.
- Using work of a third party (for a fee/free) and represented by a student as his or her own work (Ghost writing).
- Indulging in acts of collusion and purloining–
  - Collusion-Different students submit work that is so alike in content that similarity goes beyond coincidence. This is contrary to the declaration given by the student that the given work is their own and has not previously been submitted for assessment for award of any Degree.
  - Under purloining form of plagiarism, a student takes information/text/data without the consent or knowledge of another student and submits it as his or her own.
- There are instances that the sources are cited but it is still considered plagiarized. For example:
  - The writer mentions an author's name for a source, but neglects to include specific information on the location of the material referenced (*forgotten footnote*).
  - The writer provides inaccurate information regarding the sources, making it impossible to find them.
  - The writer properly cites a source, but neglects to put in quotation marks, text that has been copied word-for-word, or closes to it.
  - The writer properly cites all sources, paraphrasing and using quotations appropriately. The catch? The document contains almost no original work!

Accordingly, plagiarism is not only limited to copying someone else's work completely, or in part, but also tweaking of a portion or portions from several sources so as to make it read as original work. In some instances, copying from one's own work can be an act of plagiarism, if the published material is copyright protected and was previously transferred to a publication house.

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### HOW TO DETECT PLAGIARISM?

It is the prime responsibility of faculty members and students to distinguish between original content and plagiarized work. The detection of plagiarism is a judgment to be made by a person who understands the subject and who is also aware of the definition of plagiarism.

Common methods of detection of plagiarism are

- i. A portion of work or whole of it is found belonging to another author and a formal complaint is received about it.
- ii. A sudden change is found in the style of writing of a text inconsistent with the style used in the entire text-reported by examiner/evaluator.
- iii. Under Software based detection a soft copy of the work is uploaded in plagiarism detection software. The common material content is found in submitted work and the original work in the database.

The present document chiefly focus on the procedure adopted by the Punjabi University, Patiala for Plagiarism detection using software.

### General Guidelines

*These guidelines are provided to assist the student and the faculty in ensuring a plagiarism free dissertation.*

#### Important:

It is the responsibility of the student to ensure that the Ph.D Thesis being submitted for Evaluation is free of plagiarism which means that no part of the dissertation has been copied from other sources and all sources used for the dissertation have been properly cited.

#### Requirement:

All students are required to check their Final draft copy of Theses intended to be submitted for evaluation through plagiarism detection software. The Supervisors are required to sit with their students and run the Thesis through plagiarism detection software in order to provide guidance on any revisions that may be required as a result of this process.

#### Compliance Statements:

All students are required to submit a signed statement that they are aware of the plagiarism policy of the University and no part of the Ph.D Thesis being submitted for evaluation has been copied in any form and it is their own creation.

Candidate shall submit the report generated on the plagiarism checking software of his draft Thesis being submitted for evaluation along with a soft copy of the draft Thesis for the consideration of Departmental Research Board/Committee.

Supervisors must sign the relevant forms indicating that the student has indeed run their work through a plagiarism detection software.

### **Software Settings**

While performing the plagiarism check using a software the following optional settings may invariably be set to reduce the percentage of matching.

- Exclude Quotations, methodology, legal quotes, bibliography, phrases.
- Exclude Small Matches up to 10 word counts. (This is to exclude the matching of common phrases and established facts related to the topic which may come across the documents)
- Exclude Small similarity less than 1%.
- Exclude Mathematical, statistical and scientific Formula
- Exclude the title of the paper, name of the institute, Department, author name etc. from screening to reduce the percentage of matching.
- Exclude one's own published work

### **Practical Orientation**

Practical orientation on the use of the software will be provided by the Computer Centre of the University. The interested staff/students may contact Director, Computer Centre for Plagiarism Detection Service.

### **Materials to be screened**

It is mandatory to screen the final draft of Ph.D Thesis intended to be submitted for evaluation using plagiarism detection software.

### **Originality Report Guidelines-**

The report generated by the software upon submission of a Thesis for screening, only displays what percentage of submitted text is similar to or matching with the information sources included in the database. This is done through the Similarity Index, which is a percentage of words in the paper that match all the primary sources to all words in the document.

- As a general rule, a submitted text having an overall similarity index of more than the prescribed limit will be considered to be plagiarised. *(The prescribed permissible limit: The substantial common material shall be taken as any common material exceeding 20% in area of sciences basic as well as Applied and Technology and 30% in Humanities and Social Sciences, Law, Management and Education).*



- The overall similarity index excluding bibliography/references must be around permissible limit or less with not more than 5% similarity from within one particular source.
- A high matching percentage does not automatically mean that plagiarism has occurred and a low percentage does not mean that it has not occurred. In other words, the software generated report cannot be taken for granted and human judgment is needed to determine whether the matching text is plagiarized. This can be done only by cross checking the individual matching portions of the submitted Thesis with the corresponding sources by the committee consisting of Dean faculty, Head of the Department, Supervisor and a Professor from faculty to be nominated by Dean Research.
  - A Thesis with an overall similarity index of more than permissible limit may also be accepted provided it is formed by cumulating more number of unintentional individual matches constituted of common phrases and professional jargons/terminology of not more than two lines of continuous text.
  - Similarly, a submission with an overall similarity index of less than permissible limit may also be considered as plagiarized and hence liable to be rejected if there are instances of continuous blocks of matching text of two or more lines not constituted of common phrases and professional jargons/terminology.
  - Also, if matching with a particular source, even though small, occurs across the length of a submitted Thesis it could be an attempt to hide plagiarism and hence will not be allowed.

## **GUIDELINES AND EXPLANATIONS**

### **Examples of Fabrication:**

- In the social sciences, a researcher/interviewer completing a questionnaire for a fictitious subject that was never interviewed.
- In the biological sciences, the creation of a data set for an experiment that was never actually conducted. The practice of adding fictitious data to a real data set collected during an actual experiment for the purpose of providing additional statistical validity.
- In clinical research the insertion of a clinical note into the research record to indicate compliance with an element of the protocol.

### **Examples of Falsification**

- Falsification is manipulating research materials, equipment, or processes, or changing or omitting/suppressing data or results such that the research is not accurately represented in the research record.

- Examples of Falsification : Alteration of data, falsification of dates and experimental procedures, misrepresenting the results from statistical analysis, The addition of false or misleading statements, misrepresenting the methods of an experiment and falsification of research accomplishments by publishing the same research results in multiple papers (self plagiarism)

**Guidelines on Do's:**

- Only one's original work to be submitted,
- Precise and accurate citation of others' work,
- Any downloaded information from internet to be appropriately created/referenced,
- Submitted material should not contain any artwork, pictures, and graphics from someone else's work and such materials should be authentic with no use of others' electronic storage media.

**Guidelines on Don'ts:**

The following must be avoided unless source of material/information is credited appropriately:

- Direct or indirect copying,
- Any act of translation without proper accreditation ,
- Paraphrasing others' work,
- Tweaking and piecing together work of others,
- Resubmission of one's own or someone else's work,
- Claim of a collaborative work without consent from the concerned collaborator(s) (includes unauthorized collaboration and claiming a collaborative work as an independent one or vice versa),
- Ghost writing – i.e. writing a document(s) on someone's behalf.

## **Ph.D. THESIS FORMAT**

A Ph.D. Degree is awarded mainly for making an original contribution to the knowledge in a research field. Every student enrolled for Ph.D. has to write a research proposal (Synopsis) to justify the research idea and prove to be a suitable candidate for Ph.D. studies. The Synopsis should describe the research problem you plan to address (question/s or hypo Thesis), state why it is important and outline the research methods you plan to use and why they are appropriate and feasible. An extensive initial exercise should help in designing a sound research project, which is likely to add to the existing knowledge and make a significant contribution in successful completion of Ph.D.

### **The Layout of the Ph.D. Synopsis**

- Title Page
- Introduction
- Review of Literature
- Justification of proposal
- Aims and objectives
- Methodology
- Plan of work
- Chapter scheme
- Work already done
- References / Bibliography / Literature Cited

### **THE LAYOUT OF THE Ph.D THESIS**

The Ph.D Thesis should comply with the following specifications


- Title Page
- Declaration
- Certificate
- Acknowledgements
- Abbreviations if any
- Contents
- List of Tables (where applicable)
- List of Figures (where applicable)
- Text of Thesis (Chapter scheme may vary depending upon the subject matter/requirements)
  - Introduction
  - Review of Literature
  - Material and Methods
  - Results
  - Discussion (including Conclusion/s, Recommendation/s where applicable)
  - Summary
  - References / Bibliography / Literature Cited
  - Appendices (where applicable)
  - Any other (Reprint of published papers)
  - Plagiarism report

The Researcher would be required to adhere to the following standards for submission of Ph.D. Thesis:

**Paper:** A4-size paper

**Printing:** A high-quality laser printer should be used, preferably on both sides.

**Title and Inner first pages :** Sample given below

ASSESSMENT OF MORPHOGENETIC DIVERSITY AND PHYTOREMEDIATION POTENTIALS OF PLANTS GROWING IN ARSENIC RICH SOILS OF PUNJAB	18 pt Bold, CAP
A THESIS Presented to the Faculty of Life Sciences of the Punjabi University, Patiala in Fulfilment of the Requirements for the Degree of	14 pt
DOCTOR OF PHILOSOPHY IN BOTANY	14 pt Bold CAP
by KIRANDEEP KAUR DHIR	14 pt
 (Established Under Punjab Act No. 35 of 1961)	14pt Bold CAP
DEPARTMENT OF BOTANY PUNJABI UNIVERSITY, PATIALA JULY, 2010	14 pt CAP

Various Specifications are

- Thesis title (18pt Bold, all CAP)
- A THESIS presented to the Faculty of Life Sciences of the Punjabi University, Patiala in Fulfilment of the Requirements for the Degree of (14 pt)
- DOCTOR OF PHILOSOPHY (14pt Bold)
- IN (14pt Bold)
- NAME OF SUBJECT (14pt Bold)
- by (12pt)
- NAME OF THE SCHOLAR (14pt Bold, all CAP)
- University Emblem
- NAME OF THE UNIVERSITY (14 pt CAP)
- ADDRESS (14 pt CAP)
- MONTH ..... YEAR..... (14pt CAP)

**Thesis text:** 12 pt, For Gurmukhi: Unicode, for English: Times New Roman / Arial; line 1.5 spacing

**Headings:**

- Chapter title: 18 – 24 pt size, bold
- Main Section Headings: 14 pt size, bold.
- Second Headings: 12 pt size, bold, cap
- Sub headings: 12 pt size, bold, sentence case.

**Foot note:** The footnote (if any) shall be typed 1.5 spaced with Font Size 10

**Margins: Odd page:** Left- 4 cm; top, bottom and right- 2.5 cm.

**Even page:** Right- 4 cm; top, bottom and left-2.5 cm. These are necessary to allow for binding and trimming.

**Page Numbering:** All pages of the Thesis shall be on the **right bottom** of the page in format (Page 1 of 100) except the preliminary pages which shall be numbered in lower case Roman Numerical (ii, iii, iv ....).

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### Supervisor's CERTIFICATE

This is to certify that this Thesis entitled " .....Title of Thesis....." Embodied the work carries out by --  
 ---Name of student.....himself/herself under my supervision and that is  
 worthy of consideration for the award of the Ph.D Degree.

Co-Supervisor's signature,  
 (Name & Designation)

Supervisor's signature,  
 (Name & Designation)

### CANDIDATE'S DECLARATION

I, ....., certify that the work embodied in this Ph. D. Thesis is my own bonafide work carried out by me under the supervision of ..... and the Co-supervision of ..... from ..... to ..... at Department of ....., Punjabi University, Patiala and Department of .....(if applicable). The matter embodied in this Ph. D. Thesis has not been submitted for the award of any other Degree/diploma.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and the body of the Thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, results, etc. reported in the journals, books, magazines, reports, dissertations, theses, etc., or available at web-sites and included them in this Ph. D. Thesis and cited as my own work. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the University.

Date: .....

Signature of the candidate

Place : Patiala

(Name of the candidate)

This is to certify that the above statement made by the candidate is correct to the best of my/our knowledge.

Co-Supervisor's signature,  
(Name & Designation)

Supervisor's signature,  
(Name & Designation)