

## Ph.D. & Post Doc. - Research Regulations for Medical | Dental | Health Sciences

October 2014

## **BHARATH UNIVERSITY** Bharath Institute of Higher Education and Research

(Declared as Deemed to be University u/s 3 of UGC Act 1956)

## **Directorate of Research**

**Faculty of Medical and Health Sciences** 173, Agharam Road, Selaiyur, Chennai – 600 073. Ph 044 – 22290742/0125

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### A. Ph.D. Regulations for Medical | Dental | Health Sciences

#### 1. Preamble

In exercise of the powers conferred by the Memorandum of Association of Bharath University, Chennai, the Academic Council of Bharath University, Chennai hereby makes the following regulations in the name of "**Doctor of Philosophy (Ph.D.)** in Medical | Dental | Health Sciences at Bharath University, Chennai", which are subject to modifications from time to time as decided by the Academic Council of this University.

The Degree of Doctor of Philosophy (Ph.D.) is awarded to a candidate, who, as per these regulations, has submitted a thesis on the basis of original research work done by him/ her in any particular discipline or more than one discipline (Inter disciplinary), that makes a contribution to the advancement of knowledge in Medical | Dental | Health Sciences or to innovate methods of application of existing knowledge in Medical, Dental and Health Sciences so as to contribute to the betterment of lives of the people and has had the thesis approved by suitably constituted examiners as required.

#### 2. Eligibility

The Ph.D. degree shall be awarded by this University under any one of the recognized faculties of this University. A recognized qualifying Higher Specialty Degree, Post Graduate Degree /Diploma is essential with a minimum of 50% of marks in the qualifying examination . The qualifying degree, registered with the respective Council/Recognized University only, is eligible.

#### 2.1 Full Time Candidates:

#### 2.1.1 Faculty of Medicine:

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

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

#### 2.1.2 Non-Medical Disciplines

Faculty of Medicine, Dentistry, Pharmacy, Nursing, Allied Health Sciences, Biomedical Sciences & Technology and Management Sciences. A candidate who presents himself/herself for registration for the Degree of Doctor of Philosophy (Ph.D.) must possess any one of the following educational qualifications, awarded by this University or of any other recognized University or any other qualification recognized by this University as equivalent thereto:

- Degree of Master of Science in the Faculty of Medicine (M.Sc. Non-Clinical 3 years course);
- Master's Degree in the Faculties including Dentistry/ Pharmacy/ Nursing/ Allied Health Sciences/ Biomedical Sciences & Technology/ Management/ Physiotherapy

#### 2.1.3 Inter-Disciplinary Research

Every candidate who presents himself/herself for registration for the Degree of Doctor of Philosophy (Ph.D.), as an "inter-disciplinary research candidate" must possess any one of the educational qualifications mentioned in regulation (2.1.1) or regulation (2.1.2) or one of the following educational qualifications awarded by this University or any other recognized University or any other qualification recognized by this University as equivalent thereto:

- Master's Degree in Basic Sciences
- Master's Degree or its equivalent in Engineering or Technology
- Master's Degree in Management Sciences

At the time of award of Ph.D. Degree, the candidate's basic postgraduate discipline as well as the research discipline will be indicated in the degree certificate as per the existing and to be introduced faculties in the University. e.g., Inter-disciplinary (Microbiology - Biotechnology)

#### 2.2 Full Time Candidates (Common Provision)

Notwithstanding the above, only candidates who are stipendiary with scholarship/ fellowships/ project positions from funding agencies, industries, governmental and non-governmental agencies would be considered for admission to Ph.D. programme as fulltime research scholars.

#### 2.3 Part Time Candidates (Independent Research)

A Senior Faculty Member who is working in any department of this University with not less than ten years of teaching experience of which five years shall be at the postgraduate level and having a minimum of three research publications either as a principal author or as a co-author in any refereed journal, is eligible to register for the Ph.D. Degree without a guide as a "Part time Independent Research Candidate". However, such candidate shall seek the guidance/ assistance of not less than three experts in the concerned field, who shall be members of faculties not below the rank of Associate Professors and possess the qualifications prescribed by the University for being a guide, even though they need not go through the scrutiny committee.

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

#### 2.4 Part Time Research Candidates (Internal)

A candidate who fulfils the regulations as to the qualifications specified in the regulations (2.1.1, 2.1.2, 2.1.3,) and possesses at least one year continuous experience as permanent teaching faculty or researcher in a Department/Constituent college of this University on the date of provisional registration, may be permitted to register himself/herself as a part time scholar (internal) for Ph.D. Degree under a guide recognized by this University. The guide shall submit certificate of attendance of candidate (with dates) to the Controller of Examinations along with half yearly progress report.

#### 2.5 Part Time Research Candidates (External)

Notwithstanding anything contained in these regulations, candidates possessing any one of the qualifications prescribed under regulations (2.1.1, 2.1.2 & 2.1.3) from this University or from any other university recognized as equivalent thereto and employed as a teacher or scientist in National/state level institutions/ Laboratories/Research and Development (R&D) Centres/ Industries/Universities in India and abroad, who are permitted by the respective organizations for pursuing Research leading to the Ph.D. Degree of this University on a part-time basis while continuing in employment, may be permitted to register for the Ph.D. programme on a part-time basis as external candidates. These candidates are expected to do research in their place of employment and in addition, they should undergo such course work, examination and research work as may be prescribed by the guide/Research Advisory Committee for a minimum of nine months during the research period directly under the guide in this University. In addition to the guide from this University, they shall have a co-guide from the institution where they are employed, provided such experts are recognized as guides for Ph.D. research by this University or by the host University. The Co-guide of the candidate at the place of employment and the Guide at this University shall submit the certificate of attendance (with dates)to the Controller of examinations along with half-yearly progress reports.

#### 3. Research Outside the University

During the course of the Ph.D. Programme, for reasons approved by the Doctoral Committee, a candidate may be permitted by the University to spend upto one year in an Institution or on a project approved for the purpose, outside the University for carrying out research in the areas related to the subject of investigation.

#### 4. Duration of Research Work

#### 4.1 Full Time Candidates:

The candidates registered for the Degree of Doctor of Philosophy (Ph.D.) as full time research scholars shall undergo research work for a minimum period of THREE years from the date of provisional registration. However candidates with D.M. qualification, the period of research work and training would be a minimum of TWO years. He/she shall attend the department for research on all working days, except for periods when he/she is allowed to visit other institutions/laboratories for activities connected with research for a period permitted by the concerned Guide.

#### 4.2 Part Time Candidates:

The candidates registered for the Degree of Doctor of Philosophy (Ph.D.) as part time research scholars shall undergo research work for a minimum period of FOUR years from the date of provisional registration. In the case of Part time candidates with MD/ MS/ DNB/ MDS/ DM/ M.Ch qualifications, the period of research work and training would be a minimum of THREE years.

#### 4.3 Maximum duration:

The maximum period of research shall not exceed FIVE years for full time candidates and SIX years for part time candidates from the date of provisional registration.

Extension of maximum duration may be granted which may be not more than 2 years after the completion of the maximum duration, for deserving candidates.

#### 5. Admission Procedure

- (i) The number of available seats in the various specializations under different disciplines will be notified in the University website/ advertisement.
- (ii) The candidates desirous of pursuing the Ph.D. Degree shall submit the application in the prescribed form (Annexure A.1) through proper channel wherever applicable, before 30th May/30th Nov. each year to the Director (Research). The necessary details are available in the Bharat University website (www.bharathuniv.ac.in)
- (iii) The applications received will be sent to the respective Faculty Directors who will forward the same to the Chairpersons of the Research Coordination Committee (RCC) of the departments. The RCC will consist of all the recognized guides in the department. If the Head of the department is a recognized guide he/she will be the Chairperson. If not, he/she will nominate one of the recognized guides of the department as the Chairperson of RCC. The RCC shall screen the applications and conduct written and oral examinations. The RCC will select the candidates based on their performance in the written and oral examinations. The RCC will also fix the guide for each candidate taking in to account the preference of the guide and the candidate.
- (iv) The respective RCC will forward the list of selected candidates along with the applications of all the candidates to the Director(Research) through the Directors of the respective faculties.
- (v) The Director (Research) will seek the approval of the Vice-Chancellor for the provisional registration of the selected candidates.

#### 6. Guides

- (i) All Ph.D. candidates are required to work under the guidance of a recognized guide from the University.
- (ii) The part time (external) candidates shall be required to have, in addition to a research Guide from the faculty of this University, a recognized Co-guide/Research coordinator from the institution/organization where he/she is employed, who is

responsible to provide all necessary resources and help to complete the research work in a time bound manner. The institution should be recognized as a research centre by the university.

- (iii) When a guide of a candidate happens to be away from the University, for more than 6 months, he/she may continue to guide the candidate, but a guide belonging to the same faculty of Bharath University shall be officially nominated as a co-guide by the RCC of the department after obtaining the necessary approval from the Vice Chancellor.
- (iv) If the guide leaves the University he/she may be considered for continuing as a guide for his/her students depending upon the availability of the individual, subject to the the Vice-Chancellor. Otherwise new guide approval of а belonging same officially nominated by the to the faculty of Bharath University. Research Coordination Committee of the department will be appointed as the guide after obtaining the necessary approval from the Vice Chancellor.

#### 7. Recognition of Guides

- (i) A teacher/scientist desiring to be recognized as a guide, shall apply in the prescribed application form [Annexure A.2(a) / A.2(b)] together with complete curriculum vitae, full list of publications and reprints of research papers/articles published by him/her. This shall be placed before the Ph.D. Admission Committee for making suitable recommendations to the Vice-Chancellor for approval or otherwise as a Ph.D. guide.
- (ii) A guide for Ph.D degree shall have not less than 15 years of teaching and research experience after obtaining his/her Post Graduate qualification and shall also have not less than 10 years of Post Graduate teaching experience as a faculty member with a minimum of two publications in the relevant or allied areas of research in the refereed journals.
- (iii) A non clinical M.Sc. in the Faculty of Medicine with Ph.D. and a minimum of 3 years of experience after Ph.D. in a post graduate teaching department with at least two research publications in the refereed journals.
- (vi) A Ph.D degree not less than 3 years of Post Doctoral experience under the specialty of Pharmacy, Physiotherapy, Occupational Therapy and allied disciplines and two years of Post doctoral experience under the specialties of Nursing in the teaching departments with at least two research publications in refereed journals.

#### 8. Recognition of Research Centers

Various Regional and National Laboratories / Institutions / Organizations / Industrial Establishments are eligible to admit candidates for Ph.D. provided they possess official recognition from the University to be the Research Centers. Institutions desirous of getting recognition must apply in the prescribed form (Annexure A.3) to the University for securing recognition as Centers of Research. The University will get these institutions assessed through a committee before awarding the recognition wherever necessary.

#### 9. Number of Candidates per Guide

A Guide shall guide not more than eight doctoral candidates at any time. However a guide may guide three more candidates as a Co-guide.

#### **10. Doctoral Committee**

The following members shall constitute the Doctoral Committee as approved by the Vice-Chancellor:

- (i) Guide as convenor
- (ii) Two experts selected by the Director of the respective faculty from a panel of six Experts recommended by the Guide from the academia/Industries / R&D organizations.
- (iii) The Co-guide, if any.
- (iv) In case of Part time external candidates, the Co-guide / Research Coordinator from the organization where he/she is employed.
- (v) An expert in the allied areas of research if required.
- (vi) Chairperson of RCC

Note: The Doctoral Committee shall monitor the research work of the Candidate concerned periodically. The functioning of the Doctoral committee are given in Annexure A.4

#### 11. Course Work:

All candidates shall complete three courses (minimum of 9 credits) prescribed by the Doctoral Committee. These courses may be chosen from among those offered as regular P.G. programmes in the University or may be special courses specially designed for the candidates by the Doctoral Committee and approved by the concerned Board of studies. One of the courses shall be Research Methodology. In the case of candidates with M.Phil. degree, the course work on Research Methodology may be exempted. This is applicable to independent research scholars also.

#### Note:

The Ph.D. scholars should take the study courses offered by the concerned Faculty. If some courses proposed by the Doctoral Committee is not available in the PG curriculum, they can be taken as Directed studies. The directed study course is done under the guidance of the Supervisor. A minimum of 5 seminars and 3 tests should be conducted for the Directed study courses with the award of marks as given below:

Seminars	5:	15 Marks
3 Tests	:	15 Marks
Total	:	30 Marks

The syllabus for the seminars and tests of the directed study course should be assigned in such a way that the entire syllabus is covered. The schedule for the course may be prepared by the Supervisor who teaches the course in the format given below and may be submitted to the Controller of Examination well in advance.

#### Course Code & Title Name of the Faculty Members Department

S.No.	Component	Syllabus	Date
1	Seminar 1	Unit 1	
2	Seminar 2	Unit 2	
3	Seminar 3	Unit 3	
4	Seminar 4	Unit 4	
5	Seminar 5	Unit 5	
6	Test - 1	Covering Units 1 & 2	
7	Test - 2	Covering Units 3 & 4	
8	Test - 3	Covering all the units	

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Signature of the Faculty Member/Guide

#### 12. Comprehensive Examination

- (i) A research scholar shall take a comprehensive examination after passing all the course works and after the completion of two semesters of his/her research programme but before the completion of four semesters. The comprehensive examination is mandatory.
- (ii) The comprehensive examination shall be in the form of written and/or oral as recommended by the Doctoral Committee.
- (iii) Comprehensive examination shall be conducted by a panel of examiners which consists of the members of the Doctoral Committee along with one external examiner as recommended by the Doctoral Committee and approved by the Vice Chancellor and the recommendations of the Doctoral Committee will be submitted in the format as in **Annexure A.6**.
- (iv) The Guide shall intimate the research scholar sufficiently in advance, the scope of the examination and other relevant details.
- (v) If the performance of the research scholar in the comprehensive examination is satisfactory as reported in Annexure A.6 his/her provisional registration shall be confirmed. If the performance is unsatisfactory, he/she shall be given one more opportunity to appear for the examination within six months of the first examination. In case, the research scholar fails to successfully complete the comprehensive examination within the prescribed time limit, his/her provisional registration shall be cancelled by the University

#### **13. Semester Enrolment**

All Research scholars whose registration for research degree is in force, are required to enroll in-person with the guide each semester on the stipulated date till their submission of thesis. The enrolment form (Annexure A.7) shall be forwarded to the Director (Research) through the Director of the respective faculty.

#### 14. Monitoring the Progress of Candidates

(i) A research scholar shall appear before the Doctoral Committee once in six months for progress evaluation. He/She is required to make a presentation of the progress of his/her work before the Doctoral Committee for evaluation and further guidance.

The six monthly progress report shall be submitted by the Doctoral Committee to the Controller of Examinations with a copy to the candidate. (Annexure A.5) It shall be accompanied by an attendance certificate from the guide and co-guide, if any. Failure to submit two consecutive six monthly progress reports will cancellation of registration of candidate entail the the by the Vice-Chancellor on a report made by the guide and /or the Controller of Examination in this behalf.

- (ii) Log Book/Progress Report:
  - Every registered candidate shall maintain a log book supplied by this University.
  - The log book has to be supervised and signed by the Guide / Co-guide. The log book should be available at the time of Comprehensive Examination and at all other times as deemed by the Guide or the members of the Doctoral Advisory Committee.
  - The log book shall be maintained till the completion of the research work.
  - Xeroxed and copies signed by the Guide should be submitted along with the thesis at the time of final submission of the thesis.

#### **15.** Cancellation of Registration

- (i) The registration of a research scholar whose progress is not satisfactory or who has not enrolled in person for any one semester is liable to be cancelled by the University.
- (ii) The registration of a research scholar who has not submitted his/her thesis by the end of the prescribed /extended period as provided in the regulations(4.3) will be cancelled by the University.
- (iii) However, Re-Registration is possible with approval of the Vice-Chancellor, provided Doctoral Committee recomands for the same.

#### 16. Submission of the Synopsis of Thesis

- (i) On satisfactory conclusion of the research work, the research scholar shall submit to the Doctoral Committee through the Guide, six copies of the synopsis of the Ph.D. work carried out, prepared in accordance with the prescribed format and specifications (Annexure A.8) and present the same before the Doctoral Committee.
- (ii) Prior to submission of the thesis, the student shall make a pre-Ph.D presentation in the Department that may be open to all faculty members and research students, for getting feedback and comments, which may be suitably incorporated into the draft thesis under the advice of the supervisor.
- (iii) Ph.D candidates shall publish atleast one research paper in a refereed Journal before the submission of the thesis for adjudication and produce evidence for the same in the form of acceptance letter or the reprint.
- (iv) The synopsis of the thesis should include in brief an introduction, aims, objectives, material & methods, observations, inferences, summary and conclusions etc., with a minimum of 20 pages and not exceeding 40 pages as detailed in **Annexure A.8**.

(v) After the approval of the research work reported in the synopsis by the Doctoral Committee, the Guide shall forward 6 copies of the synopsis of the proposed thesis along with a soft copy in PDF format on CD to the Controller of Examinations along with a panel of at least six names (three from India and three from abroad) as examiners for adjudication of the Ph.D thesis and a panel of three Indian examiners for the Viva voice examination.

#### **17. Submission of Thesis**

The research scholar shall, within six months of submission of the synopsis, prepare thesis in accordance with the format and specification prescribed (Annexure A.9). The thesis shall report, in an organized and scholarly fashion, an account of the research work of the candidate. He/She shall submit 6 copies of the thesis along with a soft copy in PDF format on CD to the Controller of Examinations through proper channel and Director (Research). Under no circumstances. the thesis submission can be delayed except under special circumstances, where an extension of three months may be permissible with the recommendation of the Doctoral Committee and approval of the Vice-Chancellor.

The title page of the thesis, cover format, etc., should strictly conform to the format of presentation as prescribed (Annexure A.9) and the thesis (all copies) should carry a declaration by the candidate Annexure A.9(a) and certificate Annexure A.9(b) duly signed and issued by the guide and co-guide, if any. The proforma for the Submission of Thesis is given in Annexure A.9(c).

#### 18. Thesis Adjudication

- (i) The Thesis shall be referred to two examiners (one from India and one from abroad) nominated by the Vice Chancellor from among the panel of examiners recommended by the Guide. The Vice Chancellor, if he deems it necessary, may also nominate examiners from outside the panel.
- (ii) The Controller of Examination shall take such steps as deemed necessary to enable the reports of the examiners to be received as quickly as possible.
- (iii) In the case of undue delay in receiving the report from the examiner, the Controller of examination shall refer the thesis to the second examiner selected by the Vice-Chancellor, after waiting for three months and ensuring that the first examiner is not going to respond within a reasonable period of time.
- (iv) The examiner shall include in his report an overall assessment placing the thesis in one of the categories as in **Annexure A.10**

The examiner shall enclose a report of 200 to 300 words, indicating the standard attained in different categories of assessment

- (v) On receipt of the reports from the examiners, the following procedure shall be adopted:
  - (a) The Examiners who evaluate the thesis shall report to the Controller of Examinations on the merit of the Thesis for Ph.D. Degree as "Highly Commended", "Commended" or "Not Commended" in the format prescribed (Annexure A.10), along with a detailed report. If both the Examiners(Indian & Foreigner) commend the thesis with remarks, such reports of the examiners will be sent to the Guide who will act as Convenor and prepare a consolidated report

which shall include the main points made in the individual reports together with a reference to the critical comments and suggestions, if any, made by the examiners.

- (b) If both the examiners recommend for the award of the degree, the thesis shall be provisionally accepted. Any minor revision, modification, etc., suggested by the examiners shall be carried out before the oral examination.
- (c) If any examiner recommends revision of the thesis, the candidate shall be permitted to revise and resubmit the thesis within 6 months. The revised thesis shall be referred to the same examiner, if the examiner has insisted the University to send the thesis back to him/her after revision for offering his/her final recommendation on the thesis. In such a case the examiner should offer his/her comments for the second time either as recommended for the award or rejected. In case, the examiner did not insist on sending the thesis back to him, then the University may refer the revised thesis to the Guide for acceptance.
- (d) If one examiner recommends the award of the degree while the other recommends rejection, then the thesis shall be referred to a third examiner to be nominated by the Vice Chancellor. If the third examiner recommends the award, the thesis shall be provisionally accepted. Otherwise, the thesis shall be rejected and the registration of the candidate cancelled.
- (e) If both examiners recommend rejection, the thesis shall be rejected and the registration of the candidate cancelled.
- (f) When the commendation of the examiner on the revised thesis is not as stipulated in Clause 18 (v)(b) above, the Vice Chancellor, if he deems it necessary, shall refer the thesis and the comments to a committee constituted by the Vice Chancellor for this purpose.
- (g) Individual cases not covered by the above regulations shall be referred to the Vice Chancellor for his final decision.

#### **19. Oral Examination**

- (i) After the thesis is recommended for the award of the degree by the examiners, oral examination shall be conducted by an Oral examination board to be constituted by the Vice Chancellor.
- (ii) The Oral examination board shall include:
  - (a) The examiner of the thesis from India or if the Indian examiner of the thesis is not available, a member from the panel of Indian examiners already recommended by the Guide.
  - (b) An examiner from the panel of oral examiners, recommended by the Guide of the candidate, appointed by the Vice-Chancellor.

- (iii) The convener of the Doctoral committee will be the Convener of Oral examination board and the oral examination shall be conducted as "Open defence type" examination.
- (iv) If the performance of the candidate in the Oral examination as reported by the Oral examination board to be NOT SATISFACTORY, the candidate may opt to reappear for the Oral examination at a later date (not later than six months from the date of the first Oral Examination). On the second occasion, the Oral examination board shall include one more examiner nominated by the Vice Chancellor.
- (v) If the performance of the candidate in the oral examination on the second occasion also is reported to be NOT SATISFACTORY, the Vice Chancellor, if he deems it necessary, shall refer the remarks of the Oral examination board, along with the thesis and comments of the examiners, to a committee constituted by the Vice Chancellor for this purpose and decide. The decision of the Vice Chancellor shall be final.

#### 20. Award of Ph.D. Degree

If the performance of the research scholar in the Oral examination is satisfactory, he/she will be awarded Ph.D. degree on the recommendation of the Academic council and with the approval of the Board of Management of the University.

#### 21. Publication of Thesis

- (i) After the viva voce examination the candidate shall submit a copy of the thesis in CD ROM duly certified by the guide that all the corrections have been duly carried out as suggested by the examiners, if any, for UNIVERSITY ARCHIVES
- (ii) Papers arising out of the thesis may be published by the candidate. However, the thesis as a whole shall not be published by the candidate without the specific approval of the University.

#### 22. The Act off Plagiarism

In the case of research scholars who have copied, as confirmed by a committee, a research work/ dissertation/thesis of M.Phil. / Ph.D. degrees his/her thesis shall be rejected and his/her research registration shall be terminated and also he/she shall be debarred from registering for any other programme in this University.

#### 23. Change of Regulations

The Academic Council of Bharath University may revise, amend or change the regulations from time to time

## **B.** Regulations Relating to Post Doctoral Fellowship

#### 1. Introduction

The Institute may award Post Doctoral Fellowship (PDF) with a view to providing an opportunity to competent researchers to do independent research work in an appropriate area.

#### 2. Eligibility

- 2.1 Post Doctoral Fellowship is intended for a person below 35 years of age. However a relaxation of 5 yrs for women candidates may be given.
- 2.2 Post Doctoral Fellowship will be awarded to persons who have a Ph.D degree and have published research work /patents to their credit.
- 2.3 Fellowship should be available to Indian as well as Foreign Nationals.

#### 3. Reservation

- 3.1 Government of India notification for reservation of seats for OBC/SC/ST and age relaxation for SC/ST will apply.
- 3.2 Candidates admitted under the reserved quota will necessarily have the minimum qualification stated in para 2 above.

#### 4. Selection

- 4.1 The selection of Post Doctoral Fellowship will be made on the recommendations of a Selection Committee.
- 4.2 The Selection Committee will make its recommendation on the basis of the bio-data, list of publications and recommendation of the referee etc., based on an interview and presentation of the applicants. However foreign candidates are exempted to appear personally before the selection committee but the Skype interview may be conducted.

#### 5. Tenure

- 5.1 The Post Doctoral Fellowship awarded to a research worker shall be, in the first instance, tenable for one year counted from the date of joining.
- 5.2. The tenure can be extended on consideration of the research work carried out in the preceding year by an Assessment Committee. The fellowship tenure will be for a total period of three years renewable on yearly basis.
- 5.3 The Institute may terminate the fellowship of a person at any time on the basis of a report from the Head of the Department/Centre/School. A Fellow may discontinue the fellowship and leave the Institute before the end of the tenure with prior approval of the competent authority.

#### 6. Fellowship

6.1 The Post Doctoral Fellowship shall carry fixed monthly fellowship at a rate, fixed depending upon the experience of the candidate, in any of the rates/groups prescribed by the University

#### 7. Work Assignments

- 7.1 The Fellow will be attached to the Department/Centre/School and devote himself/ herself to full time research & teaching in an area approved by the Department/ centre/School concerned.
- 7.2 He/She shall not accept or otherwise or receive any emoluments, salary, stipend, consultancy etc., from any other sources during the tenure of the fellowship without the consent of the Competent Authority.
- 7.3 The Fellow shall be required to present and submit a comprehensive progress report at the end of each semester.
- 7.4 The Head of the Department/Centre/School will assign to a Fellow academic responsibilities (lectures, tutorial classes, laboratory demonstration work, conduct of seminar, symposia, running and maintenance of equipment, computer etc.,) not exceeding 8 hours per week.

#### 8. Other Facilities

#### 8.1 Accommodation:

- 8.1.1 The Fellow will be provided accommodation in the campus subject to availability and on payment of usual fee fixed by the University.
- 8.1.2 While residing in the Campus / Hostels, the Fellow shall abide by the rules relating to residential conditions as in force, and shall also be liable to pay the institute electricity & water charges and Room establishment charges levied by the Warden / Estate officer, as applicable.
- 8.1.3 HRA as per approved rates will be paid if accommodation is not provided / availed.

#### 8.2 Leave:

- 8.2.1 A Fellow may be granted following kinds of leave with full fellowship during each one year tenure:
  - (i) Causal Leave : 15 days
  - (ii) Medical Leave on the recommendation of the HOD/DIRECTOR (RESEARCH)

Any leave not availed of shall not accumulate. Any unauthorized absence may be treated as leave without fellowship.

8.2.2 The sanctioning authority for the leave shall be the Head of the Department/Centre / School.

- 8.2.2 The sanctioning authority for the leave shall be the Head of the Department / Centre / School.
- 8.2.3 Married Fellows will be entitled to maternity / paternity leave as per rules of the Government of India.
- 8.2.4 In exceptional cases Fellows may be allowed leave without fellowship for a period not exceeding three months during the total tenure (3 years) of the awarded on the recommendation of the Head of the Department / Centre / School.
- 8.2.5 The period of leave sanctioned under the provisions of clause 8.2.4 shall be counted towards the tenure of the Fellowship awarded.

#### 8.3 Library books and journals:

The Fellows shall be entitled to all library facilities

#### 8.4 Medical treatment:

A Fellow will be provided with free medical treatment in the Sree Balaji Medical College and Hospital.

#### 8.5 Traveling Allowance:

- 8.5.1. A Fellow may be permitted on the recommendation of the Head of the Department/ Centre / School to attend a conference / Seminar / Workshop in India once a year for which he/she will be treated on duty and shall be entitled to the payment of:
  - (i) *Traveling Allowance:* Single Second Class A/C rail fare and / or actual bus fare from the Institute each way, by shortest route.
  - (ii) *Dearness Allowance:* At the same rate per day as admissible to Scheme employee with same monthly fellowship of the Fellow.
  - (iii) Registration fee: Actual amount not exceeding Rs.5000
- 8.5.2. A Fellow nay be permitted on the recommendation of the Head of the Department/ Centre / School to attend an international conference abroad once during his / her tenure after completing one year for which he/she will be treated to be on duty and shall be entitled for the payment of
  - (i) Partial travel grant, with a maximum of Rs.40,000
  - (ii) Registration fee, limited to US \$300.
  - (iii) Such cases will be monitored by a committee, headed by the Dean(PGS&R).

#### **8.6 Contingency Grant:**

A Post Doctoral Fellow will be paid Rs.25,000 contingency grant per annum.

#### 9. Award of Post Doctoral Certificate

The Post Doctoral Certificate will be issued based on the assessment made by a Committee on the report submitted by the candidate and by approval of authorities.





**Directorate of Research** 

173, Agaram Road, Selaiyur, Chennai – 600 073. Ph. 044 – 22290742/0125

#### **APPLICATION FORM - Ph.D**

Bank Demand Draft No: for <b>Rs.</b> Name of the Bank:	Dated :	
The Demand draft drawn in favour of <b>Bhara</b> drawn from any Nationalized Bank. DD shot <b>The Director(Research), 173, Agaram Roa</b> <b>Tamil Nadu, India.</b>	Affix latest Passport size photograph	
1. Name	:	
2. Sex :	: Male Female	
3. Address (a) Official with (Designation)	:	
Phone		
(b) Residential	:	
Phone		
4. Email Id	:	
5. Date of Birth	: D D M M	Y Y Y Y Y
Age Completed	:	

6. Nationality	:						
7. Social Status	:	OC	OBC	BC	MBC	SC	ST
					<u> </u>		
8. Ph.D Programme Selected	:	Me	edical	Dent	al	Health S	ciences
9.Category	:	Fu	Ill Time	Part	Time(In	ternal)	
		Part Tin	ne (Extern	nal)	College	e	
					Industr	ial/Rese	arch org
10. Whether Employed	:	Ye	es 🗌 1	No (If	Yes, Spec	ify the f	ollowing)
Name and Address of the Employer	:						

Salary Received / Month

11. Academic Background (Start with latest Degree obtained)

:

S.No	Degree / Diploma	Year of Passing	University	Major Discipline	Percentage

Note: Enclose Copies of Degree/Diploma Certificates

12. Professional Experience (Start from the Present Employer)

Organization	Period		Designation	Total Salary/	Nature of Job
	From	То		Month	

13. Publications, if any (Books / Research Papers):

S.No	Title	Name of the Journal/Conference / Published in	Year
		the case books	

:

14. Major Area of Ph.D Research

- 15. Tentative topic, if identified for research (Attach one-page write up on the topic identified)
- 16. Department in which the candidate proposes to register
- 17. Name, Designation and address of the Research Coordinator(Outside the University) : (For part-time (External) candidates only

*Note* : Part-time (External) candidates shall have a Supervisor at Bharath University and in addition, shall have a Research Coordinator at the Organization in which they are working.

18. Department in Bharath University are known, the choice of preference of the Supervisor\* : (tentative) shall be indicated (\*Supervisor will be fixed by the Research Coordinating Committee)

#### 19. DECLARATION OF THE CANDIDATE :

This is to certify that the particulars given above are true, correct and complete to the best of my knowledge and belief.

Place : Date :

Signature of the Candidate

*Note :* The completed Application form should be submitted to The Director (Research), 173, Agaram Road, Selaiyur, Chennai – 600 073 on or before



## **Directorate of Research**

Application for Recognition as a Guide / Co-Guide for the Ph.D. Programme

(For those with Ph.D. Degree)

1. Name (In capital letter				
2. Designation with Affi				
3. Date of Birth & Age				
4. Contact address with E-mail	phone/mobile			
5. Qualifications (from u degree onwards)	indergraduate			
Name of degree	Specialization (Major)	College and	l University	Month & year of passing class
6. Title of Ph.D thesis w	-			
<ol> <li>No. of research paper accredited / indexed j of publications)</li> </ol>	s published in ournals (Enclose full list	Pre-Ph.D	Post Ph.D	During the last 4 years (enclose re-prints)
8. No. of books published contributed (enclose)				
9. Total experience (incl Research & Technolo	e	Years: Months:		
10. Total Teaching Expe	rience: Before	e Ph.D: After Ph.D:		
11. Total Research Expe	rience: Before	Ph.D: After Ph.D:		
12. Position held				
Name of institution		From		То
13. Subject/discipline in guide for Ph.D.				
14. Whether already reco	any other Ur	niversity if so	give details:	
Total No. of candidates a present under you as gui Universities	Guid	le	Co-Guide	

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



### **Directorate of Research**

Application for Recognition as a Guide / Co-Guide for the Ph.D. Programme (For those with MD/MS/M.Ch/CM/MDS qualification)

1. Name (In capital letters)			
2. Designation with Affiliation			
3. Date of Birth & Age			
4. Contact address with phone/mobile E-mail			
5. Qualifications (from u degree onwards)	indergraduate		
Name of degree	Specialization (Major)	College and University	Month & year of passing class
6. Title of dissertation for dissertation with disc			
<ul> <li>7. No. of research papers published in accredited/indexed journals (enclose full list of publications)</li> </ul>		During the last 4 years (enclose re-prints)	
8. No. of books published/invited chapters contributed (enclose list):			
9. Total experience (including Industry, Research & Technology)		Years:	Months:
10. Total PG Teaching Experience:Years:		Months:	
11. Total Research Experience: Years:		Months	
12. Position held			
Name of institution		From	То
13. Subject/discipline in guide for Ph.D.	which you propose to		1
14. Whether already reco	ognized as Ph.D guide by	any other University if so	give details:
Total No. of candidates registered at present under you as guide/co-guide in other Universities		Guide	Co-Guide

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

# Application for getting recognized as a Research Centre of Bharath University for Guiding/Registering Ph.D. candidates.

The aspiring institution for getting recognized as a research centre of Bharat University for guide/ registering Ph.D candidates should have the following facilities and faculties:

- 1.Minimum two persons with Ph.D qualifications in the area(s) of research by the department/ institution as approved by the University.
- 2. Library facilities with adequate books, journals in the area of research literature retrieval facility through CD-ROM/Internet facilities.(iii) Laboratories with equipments are required for the discipline of Research for which recognition sought.
- 3. Adequate working space for the research students in terms of laboratories, Studyrooms, Seminar room facilities etc.
- 4. Faculty Research Profile of the Department seeking recognition along with the Department / Faculty contributions made in the respective fields.
- 5. Details of existing infrastructure facilities of the Department/institution.

#### **Functions of the Doctoral Committee**

- 1. The Doctoral Committee shall have a meeting at the University convened soon after provisional registration and constitution of the committee to personally interview the candidate.
- 2. To review the research proposal and finalise the topic of research.
- 3. To guide the candidate to develop the study design and methodology of research
- 4.To suggest courseworks to be undertaken by the candidate during the first year of his/her provisional registration. The courses prescribed together with syllabus shall be forwarded to the Controller of Examination to set the question papers for the course work Examination at the end of the first year of provisional registration. On no account this process shall be passed through correspondence/circulation.
- 5. The Doctoral Committee shall monitor the research work of the candidate concerned periodically, record his/her progress bi-annually in the format suggested (ANNEXURE-A.5) and send it to the Controller of Examinations and review the overall research work before final submission of the thesis by the research scholar.
- 6. In the case of research scholars doing inter-disciplinary research, the guide shall nominate a person, who is an expert in the other discipline concerned as well as the co-guide to be the member of the Doctoral Committee.
- 7. Any change in the membership of the Doctoral committee shall be effected only on approval by the Vice Chancellor.
- 8. Doctoral Committee shall ordinarily stand dissolved once the candidate submit the thesis. However, it shall be available till the end of public viva-voce examination for monitoring and advising candidates for whose thesis examiners have recommended modifications, corrections, etc., to be incorporated in the thesis before the public viva-voce examination.
- 9. There shall be atleast two course works to be under taken by all provisionally selected Ph.D candidates to be completed before taking up the part I. Methodology Examination. They shall include (i) Research Ethics and Biostatistics & Research Methodology courses offered by the University and (ii) A course work connected with the topic of research as hands on training/ workshop either within the University or in any other University/institution as recommended by the guide/Doctoral Committee. Relevant documentary evidences of having completed these course work duly certified by Doctoral Committee should be submitted to COE before the conduction of Part-I Methodology Examination.
- 10. The members of the research advisory committee shall be recognized guides or be eligible to be as guide for Ph.D research.
- 11.At the end of the first year after provisional registration and on completion of such course(s) of instruction, there shall be a Research Methodology Examination conducted in the University premises only and every candidate shall be examined by the Doctoral Committee by written and oral tests to assess his/her skills. The guide may grant an extension period not exceeding three months time, from the due date, to the candidate with the approval of the Controller of

Examinations, for appearing for the Research Methodology Examination.Normally the Research Methodology Examination will not be permitted to be carried over beyond a period of three months from the due date. However, application for extension of period to appear for Research Methodology Examination after the expiry of three months may be considered by the Vice-Chancellor on valid grounds and special circumstances, for not exceeding a period of one year.

12. The Doctoral Committee shall prescribe the course work and methodology of research and conduct the Research Methodology Examination. This is applicable to independent research scholars also.

The Part-I Research Methodology Examination sha	ll consist of the following:
---	------------------------------

Paper	Title of Paper	Max. Marks
Ι	Research Methodology including biostatistics (theory only)	100
II	An advanced paper in the subject concerned including the in- volved instrumentation (theory only)	100
III	Background paper relating to design and conduct of his/her Ph.D work	100
	Viva Voce	100
	Total Maraks	400

Passing minimum is 50% of aggregate marks

13. The syllabus for Paper I common for all disciplines will be framed by the standing committee of the Board of Research Studies.

The syllabi for Papers II & III will be prescribed by the Doctoral Committee during its first meeting held for purposes of prescribing the course work, etc for the candidate and should be forwarded to the Controller of Examinations, immediately after the meeting is over.

- 14. The Guide shall be Convenor of the Research Methodology Examination.
- 15. A detailed report on the fitness of the candidate to proceed with the research work for the Degree of Doctor of Philosophy (Ph.D) shall be submitted by the guide/Convenor to the Controller of Examinations not exceeding fifteen days from the date of the Research Methology Examination.
- 16. The detailed report submitted by the Guide/Convenor duly attested by the other members shall contain the details of procedure followed for the written evaluation, experimental models, orals etc., and the percentage of marks secured by the scholar. The research scholar shall secure a minimum of 50% marks in the aggregate to be fit to proceed with the research work.
- 17. If any research scholar fails to qualify in the Research Methodology Examination, the candidate should undergo the course for a further period of six months. At the end of the said period, he/she shall be examined again by the same Advisory Committee and if found fit he/she shall be permitted to proceed with the research work. The minimum period of research prescribed for submission of theses shall be extended by 6 more months in such cases.
- 18. A research scholar who does not qualify even at the second attempt shall not be permitted to continue his/her research work and his/her provisional registration shall be cancelled by the Vice-Chancellor without any further reference to the candidate.

- 19.An independent research scholar shall also appear for the Research Methodology Examination conducted by the Doctoral Committee consisting of three members, approved by the Vice Chancellor.
- 20.If a candidate fails to take the Research Methodology Examination at the end of the first year after provisional registration, without any prior approval/permission as prescribed under regulation (12.1) his/her provisional registration shall be cancelled by the vice-chancellor without any further reference to the candidate.

#### Format for Six monthly Progress Report to be submitted by Candidates (Full time/Part time including independent research candidates)

- (i) The progress reports shall be submitted by the candidate before the Doctoral committee accompanied by a report by the candidate about the work carried out during the period of this report (in about 300 works). The same shall be duly signed by the guide, co-guide (if applicable) and Member(s) of the Doctoral Committee.
- (ii) One copy is to be retained by the guide, one copy by the candidate and one cop to be submitted to the Controller of Examinations once in six months, immediately after placing before the Doctoral Committee constituted for the candidate.

1. Particulars about the candidate:				
(a) Name				
(b) Designation				
(c) Institution where working				
(d) Period of the report	From:			To:
(e) Date of provisional registration with University reference				
2. Registration Details				
(a) Category of registration	D PT	FT	Internal	External
(b) Has the provisional registration been confirmed	Yes	No		
(c) If yes, give University approval ref.				
3. Particulars of the Guide				
(a) Name				
(b) Designation				
(c) Institution where employed				
4. Particulars of the Co-Guide				
5. Whether the candidate's report in quadruplicate is enclosed				
6. Whether papers have been published if yes give the details				
7. Whether seminars/ conferences attended, if yes give the details.				
8. Whether completed the prescribed course work if yes, give details with the grades obtained				
9. Has the Annual Research fee been paid	for the y	ear(s)		

Date:

Place:

Note: Failure to submit two consecutive six monthly progress report will entail the cancellation of registration of the candidate by the Vice – chancellor on a report made by the guide and / or the Controller of Examination in this behalf.

	with Seal
s of the Guide & Co-guide	
, or the Guide & CO-guide	

10. Remarks of the Guide:		
(a) Attendance	Satisfactory	Not Satisfactory
(b) Progress	Satisfactory	Not Satisfactory
(c) Expected time of completion of thesis	Satisfactory	Not Satisfactory

11. Whether the Guide agrees with the scholar's report: (if yes or no please give reasons):

#### 12. Whether the co-guide agrees with the scholar's report (if yes or no please give reasons):

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

Date<sup>.</sup> Place:

I agree with the above remarks of the Guide.

Date: Place.

I agree with the above remarks of the Guide & Co-guide

Date<sup>.</sup> Place:

I agree with the above remarks

Date: Place.

Signature of the Co-guide with Seal

Signature of the Guide

with Seal

Signature of the Expert Member of ICDC

Signature of the Expert Member of the DC with seal



**BHARATH UNIVERSITY** 

173, Agaram Road, Selaiyur, Chennai – 600 073. Ph. 044 – 22290742/0125

#### Minutes of the Doctoral Committee Meeting for Confirmation of Provisional Registration

	Meeting of the Ph.D. Scholar M	
(Reg. No	) was held on	at A.M./P.M. in the Department of
(Reg. No) was held on at A.M./P.M. in the Department of, Bharath University, Chennai - 600 073/ The following members were present:		
1.	(Superv	isor & Convener)
2.	(Joint S	upervisor, if applicable)
3.	(Externa	al Expert)
4.	(Externa	al Expert)
5.	(Chairp	erson of DRCC)
6.	(Expert	in allied areas from the University, if required)
7.	(Resear	ch Co-ordinator, if applicable)
8.	(Externa	al Examiner)

Mr./Ms. \_\_\_\_\_\_ has successfully completed the course works recommended by the Doctoral Committee. He/She has obtained the following grades in the course works.

Course Code	Course Title	Credits	Core Course/ Elective/Special Elective	Grade/Marks
Comprehensive Examination			Pass Fail	

The committee also evaluated the research work carried out by the scholar and satisfied with the performance of the scholar. Hence the Committee recommends the confirmation of Provisional registration of the scholar in the Faculty of and permits the scholar to proceed with his/her research work.

**External Expert** (Signature with Name)

**External Expert** (Signature with Name)

Research Co-ordinator (Signature with Name) (if applicable)

Chairperson of DRCC (Signature with Name)

**Supervisor** (Signature with Name)

Joint Supervisor (Signature with Name) (if applicable)

Expert in allied areas (Signature with Name) (if applicable) **External Examiner** (Signature with Name)

#### Annexure A.7



Ph.D	FT/PT
Reg. No.	

#### **ENROLLMENT FORM**

(i) Name in Block Letters	:		
(ii) Registration No.	:		
(iii) Month & Year of Admission	:		
(iv)Date of Joining	:		
(v) Faculty	:		
(vi)Supervisor's Name	:		
(vii)Department of Supervisor	:		
(viii)Category of Registration	: I	Full Time / Part Time (Externa	l) / Part Time (Internal)
(ix)No. of Courses Completed	:		
(x) No. of Courses Registered in the Semes	ster	:	
(xi) Date of Confirmation	:		
(xii)Date of Payment of Present Sem Fee	:		
(xiii)Fee Details of the Present Semester Fee	ee:	DD. No.	Date:
		Amount:	Bank:

#### DECLARATION

- I, ..... is pursuing Ph.D Programme.
- 1. As a full-time scholar, I state that I am not employed anywhere.
- 2. As a full-time scholar working in a project, I state that I am still employed in the project
- 3. As a part-time scholar, I am working as a ..... at ......
- 4. As a part-time scholar, I am still working in the same college/Industry as mentioned in my application form/Change of working place has been intimated to the office of the Director (Research)

Date:	Signature of the Research Scholar
Signature of HoD	Signature of the Supervisor (Name with Seal)
Signature of Faculty Director	(Ivanie with Seal)

#### Manual For Preparation Of Ph.D. Synopsis (Prescribed Format and Specification)

#### **1. GENERAL:**

The synopsis is to be considered as a detailed summary of the work with important results highlighting the original contributions in the thesis to be submitted. It should give an outline of the thesis. The review of earlier work is to be minimized with just enough to highlight the contributions in the research work to be reported in the thesis. It is expected that at the time of submission of the synopsis no work is yet to be completed except writing the thesis and all other academic requirements such as course work, comprehensive examinations and the suggestions and directions given by members of the Doctoral Committee have been fulfilled.

#### 2. NUMBER OF COPIES TO BE SUBMITTED:

Six hard copies and one soft copy (pdf file) in a properly labeled CD are to be submitted to the University.

#### **3. SIZE OF SYNOPSIS:**

The size of synopsis should be 30-40 pages of 1  $\frac{1}{2}$  spacing on A4 size good quality white paper preferably not lower than 80 gsm.

#### 4. ARRANGEMENT OF CONTENTS OF THE SYNOPSIS:

The sequence in which the thesis material should be arranged and bound as follows:

- 1. Cover Page & Title page
- 2. Declaration
- 3. Bonafide Certificate
- 4. Acknowledgement
- 5. Abstract
- 6. Table of Contents
- 7. List of Tables
- 8. List of Figures
- 9. List of Symbols and Abbreviations
- 10. Chapters
- 11. References
- 12. Appendices
- 13. List of Publications
- 14. Vitae

The Tables and Figures shall be introduced in the appropriate places.

#### 5. PAGE DIMENSIONS AND MARGIN:

The dimensions of the final bound copies of the thesis report should be 297mm×210mm (Standard A4 size).

The synopsis should have the following page margins Top edge : 25 to 30 mm Bottom edge : 25 to 30 mm Left side : 35 to 40 mm Right side : 20 to 25 mm The synopsis should be prepared on good quality white paper preferably not lower than 80 gsm. Tables and figures should conform to the margin specifications. Large size figures should be photographically or otherwise reduced to the appropriate size before insertion.

#### 6. SYNOPSIS PREPARATION:

The Scholar shall submit a typed copy of the manuscript to the supervisor for the purpose of approval. In the preparation of the manuscript, care should be taken to ensure that all textual matter is typewritten to the extent possible in the same format as may be required for the final thesis. Upon approval of the manuscript by the supervisor, the final synopsis should be prepared according to the specification outlined in this section as well as in the following sections

6.1 General Typing Instructions:

- Corrections, interlineations and crossing out of letters or words will not be permitted in any of the copies of the thesis intended for submission. Erasures, if made, should be neatly carried out in all copies.
- A sub-heading at the bottom of a page must have at least two full lines below it or else it should be carried over to the next page.
- The last word of any page should not be split using a hyphen.
- One and a half spacing should be used for typing the general text.
- The general text shall be typed in Font Style "Times New Roman" and Font Size 12.
- Single spacing should be used for typing:
  - (i) Long Tables
  - (ii) Long quotations
  - (iii)Foot notes
  - (iv)Multiline captions
  - (v) References
- All quotations exceeding one line should be typed in an indented space the indentation being 15mm from either margin.

#### 7. TYPING INSTRUCTIONS:

The synopsis should have the following page margins:

Top edge : 25 to 30 mmBottom edge : 25 to 30 mmLeft side : 35 to 40 mmRight side : 20 to 25 mm

- Tables and figures should conform to the margin specifications. Large size figures should be photographically or otherwise reduced to the appropriate size before insertion.
- The general text shall be typed in Font Style "Times New Roman" and Font Size 12.
- The page numbering for all items 1 to 3 should be done using lower case Roman numerals and the pages thereafter should be numbered using Arabic numerals.
- General formatting can be similar to that of the thesis (see format for Ph. D thesis). However, figures and equations are to number using running numbers. References can be numbered as 1, 2, 3 etc in the order in which they are referred to in the body of the synopsis. Only those, which are cited in the synopsis, only need be given in the list of references.
- Cover Page & Title Page: A specimen copy of the Cover page & Title page for synopsis is given in Annexure A.7(1).
- **Declaration:** A specimen copy of the Declaration by the candidate is given in Annexure A.8(a) and by the Guide/Co-Guide in Annexure A.8(b)
- **Table of Contents:** The table of contents should list all material following it (divisions and subdivisions of body of the synopsis) and the formatting is similar to that of the thesis (see format for Ph. D thesis)

#### **8. BINDING SPECIFICATIONS:**

Each of the 6 copies of the synopsis should be sewn and bound using flexible cover of thick white art paper. The cover should be printed in black letters and the text for printing should be identical to what has been prescribed for the title page.

#### 9. SUBMISSION OF SYNOPSIS:

Six softbound copies of the synopsis are to be submitted along with a soft copy of the synopsis (pdf file) on a CD with proper labeling.

The candidate has to submit the Thesis within six months from the date of submission of the synopsis.



**BHARATH UNIVERSITY** 

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#### Check List While Submitting Ph.D. Synopsis

1. Proforma for submission of Synopsis (download from the website)YES/NO2. 6 copies of the Synopsis as per the norms of Bharath University RegulationsYES/NO
2. 6 copies of the Synopsis as per the norms of Bharath University Regulations YES/NO
3. Soft copy of the Synopsis in CD (1 Nos.) YES/NO
4. Original Minutes of the Doctoral Committee signed by all the members, HoD
and Research Co-orinator (if any) YES/NG
5. Panel of Examiners (both Indian and Foreign) with complete and correct postal
address including Phone No, Mobile No, Fax No and correct E-mail ID
(typed only) in a closed cover YES/NO
6. The University communication (in ORIGINAL) confirming the Provisional
registration YES/NO
7. The panel of Foreign Examiners should not be of Indian origin YES/NO
8. Provisional Registration Confirmation order(Original) issued by the University YES/NO
9. PG / Qualifying Degree Certificate in Original YES/NO
10. Thesis evaluation fee of 17,500/- in the form of a DD (any nationalized bank)
drawn in favour of "BHARATH UNIVERSITY" with filled Challan YES/NO
11. Xerox copy of the journal Publications of the Scholar with proof for the
impact factor of the journal YES/NO
12. Copy of the fee challan and Progress report for all the semesters till the
submission of Synopsis YES/NG
13. Whether Synopsis submitted within the maximum duration YES/NG
14. If No, Extension of time obtained. YES/NO
15. Copy of the Extension order enclosed, if applicable YES/NO
16. Contact Phone No, Mobile No and E-mail ID of the Supervisor YES/NO
17. Covering letter duly signed by the Supervisor and forwarded through the HoD YES/NO
18. Minutes of pre-Ph.D. presentation in the department YES/NO
19. No dues certificate YES/NO

Checked and found correct

Signature of the Supervisor



# **BHARATH UNIVERSITY**

173, Agaram Road, Selaiyur, Chennai – 600 073. Ph. 044 – 22290742/0125

# OFFICE OF THE CONTROLLER OF EXAMINATIONS

Date:

#### Proforma for Submitting the Synopsis

01. Name ( as in the Degree Certificate) in Block Letters	
02. Register Number	
03. Father's Name	
04. Age, Place and Date of Birth	
05. Address ( in Block Letters) to which all communications are to be sent	
06. Particulars of PG or other qualifying Degree to the Ph.D Programme	Degree : Date of Passing : Register No. : University:
07. Date of Convocation at which the above Degree was taken	
08. If the qualifying degree is from an University outside Tamilnadu, give the reference number and date of the Communication of this University recognising the Degree	
09. Provide information regarding Provisional registration	Date of Provisional: Registration: Date of Confirmation: University Ref.No :
10. Faculty and Department in which the Research was undertaken by the candidate	
11. a. Category at the time of Registration :	
11. b. Change of category, if any	
12. Date of Completion of maximum period	
13. Extension of period approved ( date to be mentioned	
14. Date of DC meeting for approval of Synopsis	
15. Date of Submission of Synopsis	

16. Semeste	er Fees Detai	ls			
Month and Year					
Amount Paid					
Month and Year					
Amount Paid					

17. Course work details

Course code	Course Title	credits	Core Course / Elective / Special Elective	Grade / Marks		
CGPA						
	Comprehensive Examination					

18. Progress	report sub	mitted							
Period	Jan-Jun	Jul-Dec	Jan-Jun	Ju	l-Dec	Jan-Jun	Jul-dec	Jan-Jun	Jul-dec
Date of submission									
Date of submission									
19. Title of Thesis (in Block Letters)									
20 Name Designation and full address of				Name					

20. Name, Designation and full address of	Name :
Research Supervisor	Designation:
	Address :
	Email:
	Phone:
	Fax:

21. Name, Designation and full address of the Joint Supervisor ( if applicable)		Name : Designation: Address : Email: Phone: Fax:	
22. Publication Details (Photo copy of the papers and proof for impact factor should be enclosed).		National: International:	
23. Synopsis fees Paid details			
Date DD.No. & Date		Name of the Bank with Address	Amount
24. Whether Synopsis submitted within the maximum duration (if NO, copy of the extension order should be enclosed.)		Yes No	

Certified that the information furnished above are true and correct to the best of my knowledge.

Signature of the Candidate

Signature of Joint Supervisor (if applicable) (With Name, Date & Seal)

Signature of the Dean (Research) / Dean, Medical Research

Signature of the Research Supervisor (With Name, Date & Seal)

Signature of the Head of the Department (With Name, Date & Seal)

Signature of the Head of the Institution (With Name, Date & Seal)

For Office Use only

Checked and accepted

COE

# Title of the Synopsis <Font Size 18> <1.5 line spacing>

# SYNOPSIS OF THE THESIS <Font size 14>

A Synopsis submitted In Partial Fulfillment of the Requirements For the Degree of

<Font Size 14> <Italic>

Submitted by

<Font Size 16>

to the

Department of Faculty of Engineering and Technology Bharath University, 173, Agaram Road Selaiyur, Chennai – 600 073 <Font Size 16><1.5 line spacing>

> Month, Year <Font Size 14>

# **GUIDELINES FOR THESIS PREPARATION** Bharath University, Chennai

#### **1. INTRODUCTION**

#### 1.1 Purpose

This document, herein after referred to as 'Thesis Guide', lists the general and specific requirements governing thesis preparation, including guidelines for structuring the contents.

#### Thesis Submission

Besides various requirements for thesis submission such as submission of a list of examiners, additional copies of synopsis / abstract, and payment of thesis examination fees (for Ph.D. only), the students and their thesis supervisors should ensure that the guidelines are adhered to. While submitting the thesis.

#### 2. SPECIFICATIONS FOR THESIS FORMAT

#### 2.1 Preparation of Manuscript and Copies

- 2.1.1 The thesis needs to be prepared using a standard text processing software and must be printed in black text (color for images, if necessary) using a laser printer or letter quality printer in standard typeface (Times New Roman or Sans Serif font).
- 2.1.2 The thesis must be printed or photocopied on both sides of white paper. All copies of thesis pages must be clear, sharp and even, with uniform size and uniformly spaced characters, lines and margins on every page of good quality white paper of 75 gsm or more.
- 2.1.3 Thesis should be free from typographical errors.

#### 2.2 Size and Margins

- 2.2.1 A4 is the recommended thesis size.
- 2.2.2 The top, bottom and right side margins should be 25mm, whereas the left side margin should be 35 mm for both textual and non-textual (e.g., figures, tables) pages.
- 2.2.3 Content should not extend beyond the bottom margin except for completing a footnote, last line of chapter/subdivision, or figure/table caption.
- 2.2.4 A sub-head at the bottom of the page should have at least two full lines of content below it. If the sub-head is too short to allow this, it should begin on the next page.
- 2.2.5 All tables and figures should conform to the same requirements as text. Color may be used for figures. If tables and figures are large, they may be reduced to the standard size (provided the reduced area is not less than 50% of the original) and /or folded just once to flush with the thesis margin (if the page size does not exceed 250x360 mm).
- 2.2.6 Students may choose to submit printed thesis copies either in the standard size (as in 2.2.1) or in a book format that is roughly half of A4. If the book format is dopted for submission, it should be ensured that all textual and illustrative material is distinct and legible. Students should also submit the thesis in soft form (PDF) for storage and archival.

#### 2.3 Page Numbering

- 2.3.1 Beginning with the first page of the text in the thesis (chapter 1), all pages should be numbered consecutively and consistently in Arabic numerals through the appendices.
- 2.3.2 Page numbers prior to Chapter 1 should be in lower case Roman numerals. The title page is considered to be page (i) but the number is not printed.
- 2.3.3 All page numbers should be placed without punctuation in the upper right hand corner, 12 mm from the top edge and with the last digit even with the right hand margin.

#### 2.4 Multi-Volume Thesis

A thesis may be in two or more volumes, if required. The volume separation should come at the end(s) of major division(s). The preliminary pages prior to Chapter 1 are contained only in Volume I, except the title page.

#### 2.5 Line Spacing

The general text of the manuscript should be in double spacing (3 lines per inch). Long tables, quotations, footnotes, multi-line captions and bibliographic entries (references) should be in single spacing (6 lines per inch), with text size in 12 points (Times New Roman).

#### 2.6 Tables, Figures and Equations

- 2.6.1 All tables (tabulated data) and figures (charts, graphs, maps, images, diagrams, etc.) should be prepared, wherever possible, on the same paper used to type the text and conform to the specifications outlined earlier. They should be inserted as close to the textual reference as possible.
- 2.6.2 Tables, figures and equations should be numbered sequentially either throughout the thesis or chapter-wise using Arabic numerals. They are referred to in the body of the text capitalizing the first letter of the word and number, as for instance, Table 17, Figure 24, Equation (33), or Table 5.3, Figure 3.11, Equation (4.16), etc.
- 2.6.3 If tables and figures are of only half a page or less, they may appear on the same page as text but separated above and below by triple line spacing. Font size for text should be the same as for the general text.
- 2.6.4 Good quality Line Drawings/figures must be drawn using standard software that provides vector rather than bit-map graphics. Figures must be scalable.
- 2.6.5 Images, Photographs, etc. must be scanned in resolution exceeding 200dpi with 256 grayscales for the monochrome images and 24 bit per pixel for the color images.

#### 2.7 Binding

The student should submit the copies of the thesis in fully bound form (soft cover) for Ph.D. and a partially bound form (coiled wire binding, clamping, or filing) for M.Tech, respectively. Once the thesis is accepted, it is the student's responsibility to get it properly bound before depositing the required number of copies with the P.K. Kelkar Library and the Department concerned. The front cover of the bound copy should be the same as the title page of the thesis. The front cover should have printing on the side to include the author's name, abbreviated thesis title (optional), degree, department, and the year.

#### **3. GUIDELINES FOR STRUCTURING CONTENTS**

#### Sequence of Contents

The following sequence for the thesis organization should be followed:

- (i) Preliminaries
  - (a) Title Page as per the format given at the end of the Regulation
  - (b) Certificate by the guide at the end of the Thesis
  - (c) Declaration by the candidate
  - (d) Acknowledgement and/ or Dedication
  - (e) Table of Contents

List of Figures, Tables, Illustrations, Symbols, etc (wherever applicable)

Symbols, etc (wherever applicat

(ii) Text of Thesis

Introduction

The body of the thesis, summary and conclusions

- (iii) Reference Material List of References, Bibliography (where included)
- (iv) Appendices (if included)
- (v) Index (if included)

All the headings are centered (without punctuation)25mm down the top edge of the page. The subsequent type-setting begins four spaces below the heading.

#### Preliminaries

#### 3.2.1 Synopsis/Abstract

- (i) A Ph.D. thesis should contain an abstract/synopsis not exceeding 1000 words (about four pages) in double spacing.
- (ii) Synopsis/abstract shall be printed in double space with the heading "SYNOPSIS/ABSTRACT" in uppercase followed by certain preliminary information and the text.
- (iii) Synopsis/Abstract should be self-complete and contain no citations for which the thesis has to be referred.

#### 3.2.2 Table of contents

- (i) The table of contents lists all material that follows it. No preceding material is listed. Chapter titles, sections, first and second order sub-divisions, etc must be listed in it.
- (ii) Tables, figures, nomenclature, if used in the thesis, are listed under separate headings.

#### 3.3 The Text of the Thesis

#### 3.3.1 Introduction :

Introduction may be the first chapter or its first major division. In either case, it should contain a brief statement of the problem investigated. It should outline the scope, aim, general character of the re search and the reasons for the student's interest in the problem.

*3.3.2* The body of Thesis This is the substance of the dissertation inclusive of all divisions sub-divisions, tables, figures, etc.

#### 3.3.3 Summary and conclusions

If required, these are given as the last major division (chapter) of the text. A further and final sub-division titled "Scope for Further Work" may follow.

#### 3.3.4 Reference material

The list of references should appear as a consolidated list with references listed either alphabetically or sequentially as they appear in the text of the thesis. If pertinent works have been consulted but not specifically cited, they should be listed as Bibliography or General References. Spacing and font size should be consistent inside a single reference, and there should be double spacing between two different references (see Section 2.5).

#### **Reference Format**

For referencing an article in a scientific journal the suggested format should contain the following information: authors, title, name of journal, volume number, page numbers and year.

For referencing an article published in a book, the suggested format should contain, authors, the title of the book, editors, publisher, year, page number of the article in the book being referred to.

For referencing a thesis the suggested format should contain, author, the title of thesis, where thesis was submitted or awarded, year.

A few examples of formats of references are given below and the student should be consistent in following the style.

#### Journals

- M.Ponnavaikko and K.S. Prakasa Rao, "Optimal Distribution System Planning", IEEE Trans. (PAS), June 1981, Vol. 100, PP. 2669 2977.
- K.R.Santhi, M.Ponnavaikko, and N.Gangatharan, "A comparative Study of Stability Testing of 2-D Recursive Digital Filters," Journal of Computer Science, 2008, ISSN 1549-3636, Vol. 4(12), pp 976-981.

#### **Conference Proceedings**

- T.Thiagarajan, J.Shanmugham and M.Ponnavaikko,"Artifical Neural Network based on Fuzzification models for air heat systems", proceedings of the International conference on Trends in Industrial Measurements and Automation, TIMA 99, MIT, Chennai(India), Jan. 7 11, 1999, Paper No:48, PP 34 354.
- C.Lakshmi & Dr.M.Ponnavaikko, "Improved kernel Discriminative common vector method for face recognition", Proceeding of the IEEE International Advances Computing Conference, March 6-7, Tappar University, Patiala, India, published in IEEE Xplore, pp: 239-244.

#### Books

• 'Computer Science - Tools', Text Book authored by Dr.M. Ponnavaikko, for Higher Secondary - Second year. 2006, TamilNadu Text Book Corporation.

#### Thesis

• Mrs. Jayam Shakthi, "Security Issues in E-Commerce", Ph.D. Thesis, BITS, Pilani, Rajasthan, 2008.

#### **Technical Reports**

- Dr.M.Ponnavaikko, Dr.K.Parthasarathy, "Distribution network planning for the Delhi Metropolitan City upto 1980" A Report on the Project sponsored by the Delhi Development Authority. I.I.Sc., Bangalore, 1976,.
- Patents
- Dr.M.Ponnavaikko, Principal Investigator, Dr.G.P.Dubey, et.al, Inter Disciplinary School of Indian System of Medicine (ISISM), SRM University, "Herbal formulation for the prevention and management of Type-2 diabetes mellitus and vascular complications associated with diabetes", US Patent No. US 8,337,911B2, 2012.

#### 3.3.5 Appendix or Appendices

- (i) Supplementary illustrative material, original data, and quotations too lengthy for inclusion in the text or which is not immediately essential to an understanding of the subject can be presented in Appendix or Appendices (as Appendix A, Appendix B, etc.)
- (ii) Each appendix with its title should be listed separately in the table of contents. Likewise, tables and figures contained in the Appendices are to be included in the lists of tables and figures, respectively.

#### 4. CONCLUDING REMARKS

This Thesis Guide lists only the basic requirements for preparing the thesis. Over and above the aforementioned points, a thesis should be reader-friendly in both its appearance and presentation. Several aspects of thesis preparation, particularly style of writing and presentation, have not been discussed in great detail. The student should follow appropriate ideas from standard literature of his/ her area of research, and adopt a uniform style and format throughout the thesis, such as in the structural divisions/subdivisions of the thesis, in the mode of citing references and footnotes in the text, in using dimensions, units and notations, and in preparing tables and figures, etc.

# TITLE OF THE THESIS

.....

.....

A Thesis submitted

In Fulfillment of Requirements

for the Degree of

## **DOCTOR OF PHILOSOPHY**

by

Name of the Student

To the

DEPARTMENT OF .....



## NAME OF THE INSTITUTE

# **BHARATH UNIVERSITY, CHENNAI**

Month, Year

# Format of declaration certificate by the candidate to be included in the Thesis (in all copies)

# DECLARATION

I declare that the thesis entitled
Submitted by me for the degree of Doctor of Philosophy (Ph.D) is the record of research work carried
out by me during the period from
under the guidance of and the co-guidance of
(wherever applicable)and has not formed the basis for the award of
any degree, diploma, associateship, fellowship, or other similar titles in this or any other University
or other similar institution of higher learning.

Date: Place Signature of the candidate (Name)

#### Annexure A.9(b)

### CERTIFICATE

#### Format of the certificate to be given by the Guide/Co-guide (in all copies)

Date: Place: Signature of the Guide With Seal

Date: Place: Signature of the Co-guide With Seal



# **BHARATH UNIVERSITY**

173, Agaram Road, Selaiyur, Chennai – 600 073. Ph. 044 – 22290742/0125

Ph.D	FT/PT
Reg.No	

#### **PROFORMA FOR SUBMISSION OF THESIS**

#### **REGISTRATION DETAILS**

I. Registration Details:			
Name of the Scholar :		Register No:	
Address :		Contact No. & Email ID:	
Supervisor's Name :		Joint Supervisor's Name: (if applicable)	
Address :		Address:	
Contact No. & Email ID	):	Contact No. & Email ID:	
Title of the thesis :		1	
Category at the time of Registration	PT(Int.)/PT(Ext.)/FT	Change of category if any	
Month and Year of Registration		Period of break of study granted if any	
Date of confirmation		Date of completion of minimumperiod	
Date of completion of maximum period		Extension of period approved (mention date)	upto:
Date of DC meeting for approval of synopsis		Date of submission of thesis	

II. Extension of time for Thesis submission beyond 6 months after the submission of synopsis (if any):

Late fee details ::

Amount (Rs.)	DD No.	DD Date	Bank Name	Branch

Signature of the Candidate

Signature of the Research Supervisor (With Name, Date & Seal)

Signature of Joint Supervisor (if applicable) (With Name, Date & Seal) Signature of the Dean (Research) / Signature of the Head of the Department (With Name, Date & Seal)

Dean, Medical Research (With Name, Date & Seal) Signature of the Head of the Institution (With Name, Date & Seal)

Signature of the Director (Research) (With Name, Date & Seal) Signature of the Director of Faculty (With Name, Date & Seal)

(For Office use only)

Checked and Accepted

Controller of Examinations Superintendent

#### Format for report on adjudication of Ph.D Thesis by examiners

1. Name of the candidate	
2. Title of the thesis	
3. Discipline and subject	
4. Name and address of the Examiner	
5. Recommendation of the Examiner please strike out whichever are not applicable)	

:

(a) Thesis is highly commended

or

(b)Thesis is commended

or

(c) Thesis is commended and the Degree may be awarded subject to the candidate's furnishing satisfactory clarification to my queries during the public viva-voce examination.

or

(d) Thesis is commenced and the Degree may be awarded subject to the condition that the corrections/ modifications, suggested by me are carried out in the thesis and duly certified by the Guide-Con venor before the public viva-voce examination.

or

- (e) Thesis needs to be resubmitted after revision for evaluation.
- (f) Thesis is not commended and the Degree may not be awarded.

6. Detailed report on the thesis (to be enclosed applicable)	
7. List of questions to be asked at the public viva-voce : examination (to be enclosed)	

Date: Place: Signature of the Examiner With Designation

Address: