THE WEST BENGAL UNIVERSITY OF HEALTH SCIENCES
DD–36, Sector-I, Salt Lake, Kolkata 700 064

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

Regulations for Award of Ph.D. Degrees, The West Bengal University of Health Sciences, 2023

Rules for Award of Ph.D. Degree in Health Sciences under The West Bengal University of Health Sciences, 2023 are framed in supersession of the UGC (Minimum Standards and Procedure for Awards of MPhil /Ph.D. Degree)Regulation 2009 notified in The Gazette of India [No.28, Part III-Section 4] for the week July 11-July 17, 2009;

And

in accordance with the UGC(Minimum Standards and Procedure for Awards of MPhil /PhD Degree)Regulations 2016 notified in The Gazette of India [No. 278, Part III Section 4] Extra Ordinary on July 5th 2016 vide No.F.1-2/2009(EC/PS)V(I) Vol.II-in exercise of the powers conferred by clauses (f) and (g) of sub-section(1) of Section 26 of the University Grants Commission Act, 1956 (3 of 1956)and Minimum Standards and Procedure for Award of MPhil/PhD Degrees) (1st amendment) & (2nd amendment) Regulations 2018.

And

UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations 2018.

And

University Grants Commission (Minimum Standards and Procedure for Award of Ph.D. Degree) Regulations. 2022 notified in The Gazette of India [No. 544, Part III Section 4] Extra Ordinary on July 7th 2022.

This PhD Rules shall supersede all the corresponding earlier rules for the PhD program of the University.
Any disputes arising out of these rules shall be limited to the exclusive jurisdiction of Calcutta Courts only.

PhD Committee: Under general guidance of Academic Council, PhD program shall be monitored by the relevant faculties of the University with the help of **PhD Committee** constituted for this purpose by the Vice- Chancellor. Each PhD Committee shall consist of Ex-Officio members of the University along with at least six to eight experts from Broad Specialties, Super Specialties, Allied Health Sciences and scholars from relevant field of Research Methodology, Statistics, Ethics etc. **The Vice-Chancellor shall act as Chairman and nominate Convener of the PhD committee.** The committee shall remain valid for two years and reconstituted after expiry of the validity period.

1. Short title, Application and Commencement

These Regulations are titled as The Regulations for Award of PhD Degrees, The West Bengal University of Health Sciences 2023.

1.2. This PhD Rules shall supersede all the corresponding earlier rules for the PhD program of the University.

Award of degrees to candidates registered/waiting for orders of registration, during the period from 11th July 2009 to 4th July 2016, shall be governed by the provisions of the UGC (Minimum Standards and procedure for Awards of MPhil/PhD Degree) Regulations 2009.

Award of degrees to candidates registered/waiting for orders of registration from 5thJuly 2016 onwards shall be governed by the provisions of the UGC (Minimum Standards and procedure for Awards of MPhil/PhD Degree) Regulations 2016

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

2. Eligibility criteria for admission to PhD program (ELIGIBILITY AND RELAXTION OF MARKS)

CONDITIONS OF ELIGIBILITY: Candidates for admission to the PhD program should have Master's Degree or a Professional Degree recognized as equivalent to the-

a)Candidates who have obtained Master's degree or equivalent Post Graduate degree recognized by corresponding regulatory bodies in various disciplines of Basic sciences, Medical sciences, Dental sciences, Homeopathy, Ayurveda, Unani, Nursing, Paramedical and Allied Health sciences, Technology associated with health sciences, Interdisciplinary topics related to health sciences and all other courses of WBUHS.

RELAXATION OF MARKS: A relaxation of 5% of marks, from 55% to 50% or an equivalent relaxation of grade shall be granted to those belonging to SC/ST/OBC (Non-creamy layer)/differently able categories of candidates as per the decision of the University/State Government from time to time. Economically Weaker Section (EWS) and other categories of candidates as per the decision of the Commission from time to time.

b)A 1-year/2-semester Master's Degree programme after a 4-year/8-semester bachelor's degree or a 2-year/4-semester master's degree programme after a 3-year bachelor's degree programme or qualifications declared equivalent to the master's degree by the corresponding statutory regulatory body, with at least 55% marks in aggregate or its equivalent Grade 'B' in the UGC 7-point scale or CGPA of 7.5% (or an equivalent grade in a point scale wherever grading system is followed)

c)Provided that a candidate seeking admission after a 4-year/8-semester bachelor's degree programme should have a minimum of 75% marks in aggregate or its equivalent grade on point scale.

RELAXATION OF MARKS: A relaxation of 5% of marks, from 75% to 70% or an equivalent relaxation of grade shall be granted to those belonging to SC/ST/OBC (Non-creamy layer)/differently able categories of candidates as per the decision of the University/State Government from time to time. Economically Weaker Section (EWS) and other categories of candidates as per the decision of the Commission from time to time.

d)M. Phil Degree by research and thesis recognized by UGC (Before 7th November,2022 as per the UGC notification): Candidates who have completed the M. Phil Program with a minimum of Grade 'B' in the UGC 7-point scale (or an equivalent grade in a point scale wherever grading system is followed) with at least 55% marks in aggregate or its equivalent.

RELAXATION OF MARKS: A relaxation of 5% of marks, from 55% to 50% or an equivalent relaxation of grade shall be granted to those belonging to SC/ST/OBC (Non-creamy layer)/differently able categories of candidates as per the decision of the University/State Government from time to time. Economically Weaker Section (EWS) and other categories of candidates as per the decision of the Commission from time to time.

3. Procedure for granting Registration

Candidates for Ph.D. program shall be granted registration through an entrance test (RAT) conducted by the University.

EXEMPTION FROM RESEARCH APTITUDE TEST: Candidates for PhD program shall be granted registration through an Entrance test conducted by the University. The following categories are exempted from qualifying in Research Aptitude Test (RAT) conducted by the University.

1) Those students who qualify UGC/CSIR (JRF) /NET/SET/SLET/GATE/ Research Fellowships of Central or State Government Departments/Agencies as approved by the regulatory bodies.

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

2) Candidates with DST-INSPIRE fellowship.

3) Candidates with DBT/JRF.

Note:

The validity period of any of such Fellowships are counted for granting exemption of written test of Research Aptitude Test (RAT).

The number of PhD scholars, to be admitted to each subject of study at the University affiliated Departments/Centers and duly approved research centers, shall be decided based on number of available

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

research supervisors and other academic as well as physical facilities available, in accordance with the norms regarding the scholar-teacher ratio (as stipulated by UGC), laboratory, library and such other facilities.

The University shall notify in each academic year in the website and through advertisement (in at least two national newspapers, of which at least one shall be in the regional language) criteria for admission, procedure for admission, examination Centre and date (s) of entrance test (s) and other relevant information for the benefit of candidates.

Admission shall be based on the criteria notified by the University, keeping in view the guidelines/norms in this regard issued by the UGC and other statutory bodies concerned, and taking into account the reservation policy of the State Government/University, applicable to SC/ST/OBC (non-creamy layer)/differently-abled categories of candidates, as decided by the State Government/University from time to time.

Candidates eligible for registration to PhD shall be decided by a two-stage process – a) Entrance Test, b) synopsis confirmation seminar & interview.

Entrance test shall be conducted at the Centre(s) on the dates notified in advance and changes of centers/dates, if any, shall be notified sufficiently earlier.

Qualifying criteria in Entrance Test

Entrance Test: Entrance Examination will be comprising of - 100 MCQ (50% on Research Methodology & 50% on Specific Domain).

Duration of entrance test will be 1 hour 30 minutes with no negative marking.

Criteria for passing the examination is minimum 50% marks for General Category and 45% each for SC/ST/OBC (Non-Creamy layers)/Differently-able students and Economically Weaker Section(EWS). The successful candidates will have to appear for synopsis confirmation seminar.

Synopsis confirmation seminar will be the deciding factor for final selection of candidates. The number of he attempts will be decided by the experts panel and PhD committee members and in all cases the number of attempts will not exceed three times.

Research proposal / Synopsis confirmation seminar and approval by PhD committee: A candidates have to present research proposal in front of PhD committee of WBUHS to finalize the title of thesis and approval of synopsis. Maximum numbers of attempts are three. If the synopsis is not approved by the Experts of the Research advisory committee and PhD committee in third attempt his/her candidature will be cancelled.
It is mandatory to complete coursework requirement and submit duly approved synopsis to the Dean of Faculty concerned through proper channel within first year of PhD program. The research proposal must be endorsed by the concerned and Head of the Department / Institution where proposed research will be conducted.

After confirmation of title of thesis student need to work in association with research supervisor under supervision of research advisory committee on university approved research project.

The University shall maintain the list of all PhD scholars, granted registration for research on its website on annual basis with the details, such as the name of researcher, topic of research, name of supervisor/co- supervisor, and date of enrolment/registration.

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

4. Duration of the Program

a) PhD program shall be for a minimum duration of 3 years for full time and part time candidates including course work and a maximum of 6 years.

b) Women candidates and candidates with disability of more than 40 per cent may be allowed a relaxation of two years for PhD in the maximum duration.

c) Women candidates may be provided Maternity Leave/Child Care Leave once in the entire duration of PhD for a period up to 240 days.

Registration for research granted shall be automatically canceled on the date of expiry of the maximum period specified in Para 4a , 4b and 4c in these Regulations.

Extension of Period: However, a candidate may extend the duration of work up to two more years from the date of expiry of registration subject to the concurrence of the Ph.D. committee and submission of requisite re-registration fees.

However that the total period for completion of a PhD program in such cases should not exceed ten(10) years from the date of registration.

Procedure of Registration, Confirmation of Research Proposal, Candidacy & Intake Capacity:

University shall decide on an annual basis through the academic bodies a manageable number of PhD. scholars to be admitted depending on the number of available Research Supervisors and other academic and physical facilities available, keeping in mind the norms regarding the scholar- teacher ratio (as prescribed), laboratory, library and such other facilities. University offers research programs leading to the award of PhD degree in all the Faculties, namely -
Faculty of Medicine
Faculty of Ayurveda
Faculty of Homeopathy
Faculty of Nursing
Faculty of Dental Sciences
Faculty of Allied and Paramedical Education
Misc.
(Annex-II)

Categories of PhD candidates:
1) Full time
2) Part time

Part time: Candidates who hold a fulltime job in educational institutes / research organizations may be permitted to pursue PhD research under supervision of PhD guide from affiliated institutes of WBUHS. They will complete mandatory requirements as laid down for PhD coursework and meet the universities requirements for monitoring the progress of their research work. They have to follow all rules and processes of PhD program in letter and spirit. Such candidates must submit a NOC from the appointing authority with details showing designation and period of permanent service with the organization and the employer must expressly undertake to relieve the candidate to enable him /her to complete coursework & research project.

Subject to fulfillment of all prescribed eligibility criteria relating to qualification of the candidate, supervisors as well as proposed place of research work, the university will initiate the procedure of Registration. The provisional registration application form should be routed through the Head of the Department, the Head of the Institution and other officiating administrative authorities while applying to the University for PhD.

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

Registration, the service candidates must submit their PhD. registration applications along with NOC issued by competent authorities.
Candidates should obtain and furnish the Ethical Committee clearance certificate for the proposed Research study in the recognized Research centre.

PROCEDURE OF ADMISSION (RAT):

1. Written test MCQ format. **(Annexure –I)**
2. Candidate qualifying written test shall appear in the synopsis confirmation seminar.
3. Candidate will be provisionally eligible for PhD registration under WBUHS after qualifying written test and synopsis confirmation seminar.

The Essential requisites for Registration are shown in the table below:

1. Eligible Qualifications	For all candidates
2.Recognised Department / Institution	For all candidates
3. Recognized Guide	For all candidates
4. Approved Co-Guide	For all candidates
5. Approved Second Co-Guide	For candidates in Interdisciplinary areas of research
6. Ethical Committee Clearance	For all candidates
7. NOC	Wherever applicable

It is the prerogative of the candidate to choose a suitable recognized Guide in relation to his/her Research Topic. The selected person should be a recognized Guide of this University

1. Application for registration with due fees along with research proposal (preliminary synopsis) approved by Research Advisory Committee shall be considered by the PhD committee which may recommend suitable changes if necessary.

2. Registration in PhD programme is confirmed on successful completion of course work and approval of research proposal by the PhD committee.

3. Coursework and research proposal approval must be completed within first year of PhD programme. Approval of research proposal must be completed within the 1st year of PhD programme; otherwise the registration shall be cancelled.

4. Registered candidates shall submit a detailed research proposal through Supervisor and Head of the Department / Institute duly recommended by Research Advisory Committee and Institutional Ethics Committee during the time of registration. Registration / Candidacy for PhD programme will be confirmed on successful completion of coursework and approval of research proposal by the PhD committee of respective faculty.
5. Research scholar shall submit Soft copies of research proposal (duly authenticated and in non-editable format) forwarded by Research Advisory committee to the Dean of University.)

Memo No: WBUHS/Dean/2022-23/0362Dated: 17/11/2022

Validity of registration:

a) PhD program shall be for a minimum duration of 3 years for full time and part time candidates including course work and a maximum of 6 years.

b) Women candidates and candidates with disability of more than 40 per cent may be allowed a relaxation of two years for PhD in the maximum duration.

Cancellation of registration:

a) If the candidate fails to complete the coursework within the specified time limit (within first year) the registration will stand cancelled.

b) If the candidate fails to gain approval for the submitted research proposal within 1 year of admission, registration will be automatically cancelled.

c) In case the research scholar fails to submit 2 consecutive half-yearly progress reports or if 2 progress reports are unsatisfactory, then the registration may be cancelled on the ground of non-compliance. However, the candidate may appeal to the Vice-Chancellor through the research guide and the decision of the Vice- Chancellor shall be final.

d) If the candidate fails to complete a thesis and submit within the maximum stipulated period and fails to apply for an extension, registration will be automatically cancelled.

5a. Allocation of Research Supervisor

i. Any regular Professor affiliated to the University with at least five original *research* publications* in peer-reviewed indexed journals as approved by the UGC/ concerned regulatory authorities as applicable.

ii. Any regular Associate/ Assistant Professor with PhD affiliated to the University with at least three original research publications* in peer-reviewed indexed journals as approved by the UGC/ concerned regulatory authorities as applicable.

5b. Allocation of Co-Supervisor

i. As mentioned above in 5a)

ii. Scientists on regular employment in State/Central Research Institutes (Scientist in Grade-D, E ,F & G) in the regular service in research laboratories of Central/State Government, located in the state of West Bengal with minimum of five publications* in peer-reviewed indexed journals as approved by the UGC/ concerned regulatory authorities as applicable.

* *Original Research Article; Publication as first, second, Corresponding author*

Faculty members with less than three years of service before superannuation shall not be allowed to take new research scholars under their supervision. However, such faculty members can continue to supervise PhD scholars who are already registered until superannuation and as a co-supervisor after superannuation but not after attaining the age of 70 years.

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

A Professor as Research Supervisor/Co-supervisor, at any given point of time, shall guide not more than eight PhD scholars. An Associate Professor as Research Supervisor shall guide up to a maximum of six PhD scholars and an Assistant Professor as Research Supervisor shall guide up to a maximum of four PhD scholars.

The Department, in case of topics which are of inter-disciplinary nature and where the expertise in the Department has to be supplemented from outside, may nominate a Supervisor from the Department itself as the Research Supervisor, and a Co-supervisor from outside the Department/ Faculty/College/or other Institution on such terms and conditions as may be specified and agreed upon by the consenting Institutions/Colleges and duly approved by the University.

Teachers/scientists who have retired from the service of the University/ affiliated colleges/approved research institutions, adjunct faculty visiting faculty, technical staff, library staff, administrative staff, teachers serving outside the West Bengal and teachers appointed on contract basis shall not be recognized as Research Supervisors under the provisions of these regulations.

Allocation of research supervisor for a selected research scholar shall be decided depending on the number of scholars per research supervisor, available specialization among the research supervisors and research interests of the scholars as indicated by them at the time of interview and willingness of the research supervisor.

Provision of co-supervisor: The co-supervisor should satisfy qualification requirements of supervisors. The principal supervisor may recommend additional co-supervisors from additional disciplines /faculties for valid academic reasons in conducting PhD research in inter-disciplinary areas. Co-supervisor may be allowed in interdisciplinary areas from other departments of the same institute or other related institute with approval of the competent Authority of University. PhD guide from one discipline may be permitted to take candidate from other disciplines, provided co-guide of student belongs to faculty / subject related to research topic. Also, if a guide feels that a co-guide from a related discipline will be of helpful to the candidate; he/she may be permitted to include a co-guide accordingly. Supervising guide shall sign all the papers, declarations, certificates, authentications, logbooks and related documents pertaining to registrations, submission of synopsis and thesis of registered candidate.

Research guide must give consent to the Dean of the University for officiating as a supervising guide for the candidate registered.

PhD being the highest academic degree, the scholars require constant attention of their respective supervisors. Every scholar registered for PhD program, shall work under continuous supervision of a recognized supervisor during course of research at the institution where supervisor is present and research is being conducted.

Request for change of research supervisor shall be entertained only in following cases with approval from the university through proper channel:

1. Research guide left service from the affiliated Institution of the University

2. By mutual consent of both the previous and proposed research guide, the University may allow change of guide, if necessary, with approval of the Hon'ble Vice-Chancellor. The proposed research guide must apply to the University through proper channel with consent of Head of the department and Head of the institution where he/she will supervise candidate for PhD program.

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

3. Death / Superannuation of the Supervisor.

It should be the responsibility of PhD guide & college/recognized PhD research centre to inform the university in writing, after attaining maximum age limit / resignation / absence from working of the supervisor due to any other reason. It shall also be duty of the college / institution concerned to inform regarding transfer / retirement / resignation of any PhD guide to the university.

Whenever Research supervisor of a candidate leaves service or retires from service, PhD scholar already admitted under such guide may be allowed to continue work under him / her provided the guide communicates to the university in writing stating his willingness to continue with the said PhD scholar. The decision regarding this has to be approved by the vice-chancellor.

6. PhD Research Centre's:

Candidates may be permitted to pursue research for PhD degree in any of the following institutes recognized by the University for the purpose.

Post-graduate Colleges offering 4-year Undergraduate Program and/or Post-graduate Program, may offer PhD program may offer PhD program provided they satisfy the availability of eligible Research Supervisors, required infrastructure and supporting administrative and research facilities as per these regulations.

All Academic Institutions/Colleges affiliated to the WBUHS conducting Post Graduate courses recognized by concerned regulatory bodies.

Institutes conducting DNB courses in various disciplines under National Board of Examination.

National research institutes, all Government of India/West Bengal research institutes of importance.

Academic, administrative and infrastructure requirement to be fulfilled by colleges for getting recognition for offering PhD program:

Colleges may be considered eligible to offer PhD program only if they satisfy the availability of eligible Research Supervisor, required infrastructure and supporting administrative and research promotion facilities as per regulations.

Post-Graduate Departments of colleges, Research laboratories of Govt. of India/State Govt. with at least two PhD qualified teachers/scientists/other academic staff in the department concerned alongwith required infrastructure, and supporting administrative and research promotion facilities as per regulations shall be considered eligible to offer PhD program. Colleges should additionally have the necessary recognition by the University under which they operate to offer PhD program.

In case of science and technology disciplines, exclusive research laboratories with sophisticated equipment as specified by the University concerned with provision for adequate space per research scholar along with computer facilities.

Earmarked library resources including latest books, Indian and International journals,

E-journals, extended working hours for all disciplines.

THE WEST BENGAL UNIVERSITY OF HEALTH SCIENCES
DD–36, Sector-I, Salt Lake, Kolkata 700 064

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

There shall be a research advisory committee or equivalent body constituted in each PhD research centre to conduct and review progress of research of concerned PhD candidates.

(Minimum standards and procedures for award of PhD degree in health Sciences)

PhD Registration and Academic supervision of PhD scholars:

7. General guidelines:

a) PhD Registration will remain valid for six years for both **full time** and **part time** candidate, with effect from the date of registration.

b) PhD program will be conducted in conformity to the extant guidelines/regulations issued by the UGC and WBUHS from time to time in this regard.

c) Academic monitoring and evaluation of progress of PhD research will be done by **PhD committee** of the University and **Research Advisory Committee** of PhD Research Centre constituted for this purpose.

d) Either supervisor or co-supervisor must have their permanent attachment in the proposed place of work that must be affiliated to WBUHS.

e) Every **scholar** registered under PhD program shall work under continuous supervision of recognized Supervisor/Co-supervisor during the course of Research at the institute where research is being conducted.

f) Ph.D. work and the data collection should preferably be done from the Institutions affiliated to the University/approved by the University for conducting of PhD course.

g) The **course** work is a **pre-requisite** for PhD program and all admitted candidates shall be required to complete the course work prescribed by the concerned Department within the first year of PhD program.

h) **The candidate must have to submit half-yearly progress report duly signed by supervisor, co-supervisor, Head of the Department & Head of the Institution. The candidate must have to present their work annually in front of the PhD committee**.

i) Attendance record of PhD scholar must be maintained with the research Supervisor in the office of the concerned Department and to be sent to the **Office of Dean of Faculty** along with **half yearly progress report** for University record till submission of the **Final Thesis.**

Research guide shall officiate as supervising guide; sign/send all related documents pertaining to registration, submission of synopsis and thesis thereafter through Head of Dept. & Head of the institution to the **office of Dean**, WBUHS.

After the confirmation of Synopsis/Research Proposal by PhD committee, no prayer for change of title of Research Proposal and supervisor will be granted by the University.

The University will not have any liability, financial or otherwise, save and except the academic monitoring and evaluation.

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

If the **PhD Committee, Research Advisory Committee** is not satisfied in respect to the progress of research and conduct of student, it may recommend to the University with specific reasons not to process the thesis for further evaluation or **cancellation of Registration** of the candidate as the case may be, including **withdrawal of PhD award**.

8. Course Work

As per UGC Minimum Standards and Procedure for Award of PhD Degree Regulations 2016, a PhD scholar shall be required to undertake course work for a minimum period of one semester which is compulsory pre-requisite for both full time and part time candidates. It shall consist of one or more courses on Research Methodology which shall cover areas such as quantitative methods, computer applications, research ethics and review of published research in the relevant field, training, and field work and other areas found relevant to the discipline concerned. Other courses shall be advanced level areas in the subjects concerned for enabling the students to acquire deep knowledge in the preparation for PhD degree. All the candidates admitted to the PhD program shall be required to complete the PhD course work prescribed by the University & respective Department during the initial / first semester. Research Supervisor along with Research Advisory Committee shall prescribe the courses and recruit faculty to teach candidates prescribed courses. The concerned Department must be involved in teaching of Course Work, especially related to selection of Title and preparation of Synopsis. A candidate will complete his Course Work of six months through intensive classes, assignments, review of literature, short studies under the recognized Supervisor & Research Advisory Committee. After the completion of Course Work, examination will be conducted by Examination section of the University. In case candidate fails or drops in examination, one more chance will be given for the compulsory Course Work Examination. However, if the student is not in a position to complete the course work in the prescribed time limit as above, due to genuine reasons, may file an appeal and on the recommendation of the Research Advisory Committee, the Dean may grant extension up to additional one semester. Failing to complete the course work within the extended period (within first year of admission) may lead to cancellation of candidature. Scholars admitted to the PhD program shall be required to complete the course work prescribed by the respective departments during the initial one year from the date of registration, failing which the registration shall be automatically cancelled.

SYLLABUS FOR COURSEWORK:

Objective: To identify and apply appropriate research methodology in order to plan, conduct and evaluate basic research. The Course will enable scholars to develop the foundation for research skills at appropriate levels.

I. **Basics of Research:** Definition of research - Objective of research - Scientific research - Ethics in research, Plagiarism, how to write research proposal.

II. **Types and Methods of Research:** Classification of Research- Descriptive Research - Diagnostic Research/Study - Evaluation Research/Studies - Experimental Research - Analytical Study of Statistical Method - Surveys - Case Study - Field Studies & others.

III. **Review of Literature:** Need for Reviewing Literature - What to Review and for What Purpose - Literature Search - Procedure - Sources of Literature.

IV. **The Planning Process of Research:** Selection of a Problem for Research – Formulation of the Selected Problems - Hypothesis Formation - Measurement - Research Design/Plan, Research process.

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

V. **Sampling:** Sampling Techniques or Methods - Choice of Sampling Techniques - Sample Size - Sampling and Non-Sampling Errors.

VI. **Methods of Data Collection:** Meaning and Importance of Data - Sources of Data - Use of Secondary Data - Methods of Collecting Primary Data.

VII. **Quantitative and Qualitative Data:** Observation Method - Experimentation - Simulation - Interviewing - Panel Method - Mail Survey.

VIII. **Tools for Data Collection:** Types of Data - Construction of Schedules and Questionnaires - Measurement of Scales and Indices - Pilot Studies and Pre-tests.

IX. **Field Work:** The Nature of Field Work - Selection and Training of Investigators - Sampling Frame and Sample Selection.

X. **Processing & Statistical Analysis of Data:** Editing - Classification and Coding - Transcription - Tabulation - Introduction to Statistical Software: SPSS - Graphical Representation.

XI. Statistical Analysis - Measures of Central Tendency - Measures of Dispersion - Measures of Association/Relationship - Regression and Correlation Analysis - Hypothesis Testing (For Proportion and Means) - Test of Significance.

XII. **Computer Application in Research:** Introduction to MS Excel, Using Formulas and Functions, Hand on to SPSS, Features for Statistical Data Analysis, Generating Charts/Graphs, Introduction to MS Word, Features and Functions, Writing Report in MS Word, Introduction to Open Office or Latex, Creating Presentation in MS Power Point, Introduction to Internet Based Search, Use of Advanced Research Techniques.

XIII. **Report Writing:** Types of Reports - Planning of Report Writing - Research Report Format - Principles of Writing - Documentation - Data and Data Analysis in Thesis - Writing of Report - Typing of Report - Briefing - Preparation of Manuscript for Publication of Research Paper - Pictures and Graphs, Citation styles, writing a Review of Paper, Bibliography, Writing Synopsis & Thesis.

XIV. **Ethics in Research:**

XV. **Course Outline:** This course explores techniques for recognizing, analyzing, and resolving ethical dilemmas facing healthcare professionals and biomedical researchers in today's highly regulated environment. Use of humans and animals in research, data acquisition and management, protection of human subjects / animals involved in research programs.

XVI. **Responsibility to conduct of research & Publication Ethics:**

Course Outline: Promotion of academic integrity & prevention of misconduct including Plagiarism, using Plagiarism detection software tools, reference management tools, proper attribution, copyright & intellectual property right policies etc. It includes elements of responsible conduct of research, publication ethics, use of plagiarism detection tools and reference management tools as a compulsory course work for Research Scholars.

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

Sl. No	Name of course	Remarks
1	Research Methodology	As mentioned above

Course work examination & qualifying marks criteria:

a) A PhD. scholar has to obtain a minimum of 55% of marks or its equivalent grade in the UGC 7- point scale in the course work in order to be eligible to continue in the program and submit the dissertation/thesis.

b) Maximum two chances shall be given to the scholar for clearing the coursework, failing to which may lead to cancellation of admission.

c) 80 % attendance for coursework classes is required.

Evaluation process of coursework:

Paper setting & evaluation: The Controller of Examination section shall appoint paper setters nominated by Vice-Chancellor at his own discretion or from the list recommended by PhD committee.

Research methodology paper of the course work:

Subject	Type of Question	Marks	Centre Name
Research Methodology	MCQ	100	University Exam Centre

Note:

- The course work is a pre-requisite for PhD program and all admitted candidates shall be required to complete the prescribed course work within the first year of PhD program.
- Qualifying Examinations on prescribed Course work will be conducted by the university and the candidate must have to appear in the said examination after his/her registration.

After completion of Course work the candidate must have to submit half-yearly progress report duly signed by supervisor, co-supervisor, Head of the Department & Head of the Institution. The candidate must have to present their work annually in front of the PhD committee.

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

9. Role of Departmental Research Advisory Committee & PhD Committee

The Research Advisory Committee shall be responsible to:

Review the research proposal and finalize the topic of research;

Orient the research scholar to develop the study design and methodology of research;

Identify the course(s) to be undertaken; and

Review periodically and assess the progress of the research work of the research scholar.

The Departmental Research Advisory Committee shall, once in six months, insist the scholar to make a presentation of the progress of research work before the Committee for evaluation and further guidance.

The Departmental Research Advisory Committee shall communicate the six-monthly progress reports to the University and serve a copy of the same to the research scholar concerned.

The Research Advisory Committee, in case the progress of the research scholar is not satisfactory, shall:

Record the reasons for the same and suggest corrective measures; and

Recommend to the University for cancellation of registration, if the research scholar fails to implement the corrective measures suggested, citing specific lapses on the part of the scholar.

10. Under the supervision of Research Advisory Committee the scholar will have to complete the followings during his/her candidature:

a) Mandatory course work of 6 months has to be completed within the first year.
b) The research scholar shall be required to submit a half-yearly progress report objectively evaluated by the research supervisor and Research Advisory Committee in January and July of each year until the submission of the final thesis.
c) The candidate must have to present their work annually in front of the PhD committee.
d) The research scholar must maintain a logbook with details of course attended, seminars presented etc.
e) Candidates are expected to have at least **ONE** publication in peer-reviewed indexed journals with first authorship of the papers as approved by the UGC/ concerned regulatory authorities as applicable. Publication should be related to the subject of the thesis and the corresponding acceptance letters must be submitted.

On completion of minimum stipulated period of research work, the PhD scholar has to prepare & submit draft thesis (final synopsis) with abstract, soft copy in PDF format to the Dean of faculty through proper channel. Convener of PhD committee shall circulate this to members of the PhD committee at least 15 days before the Pre-PhD seminar.

11. Attendance requirement and Treatment of Part time PhD scholars

Notwithstanding anything contained in these Regulations or any other Rule or Regulation, for the time being in force, the University shall not conduct PhD program through distance education mode.

Part-time research for PhD shall be allowed provided all the conditions mentioned in the extant PhD Regulations are met in full irrespective of part time research or full-time research.

Scholars granted registration shall have to mark attendance in the department/research center concerned for not less than 180 days prior to submission of thesis in not more than three spells as full-time research scholar.

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

It is mandatory to attend and complete pre-PhD coursework of 6 months duration within the first year of PhD program for both full-time and part-time students.

Attendance of full-time scholars will be governed by the attendance requirement of the institute where they are pursuing the course.

If a full-time scholar is absent continuously for three months without written intimation to the department or place of work, the concerned research supervisor shall report the same to the concerned Dean of Faculty. Break/ absence in study may be permitted for a maximum period of 6 months in extraordinary circumstances with specific permission from the Dean of Faculty. Prior permission has to be sought by the candidate with recommendation of the research supervisor before proceeding to leave. If prior permission is not sought/ obtained, action will be taken to cancel registration of the candidate.

Attendance record must be maintained with the research supervisor in the office of the department and sent to the respective Dean of the Faculty along with half-yearly progress report for University record.

Candidates who hold full-time jobs in educational/ research/ administrative institutions may be permitted to pursue part-time PhD programmes only if the research guide and place of research work are in the same place of his/ her work so that continuous supervision may be maintained. However, the employer must undertake to allow the candidate to complete PhD related work and issue a NOC from the organization to that effect. Part time PhD applicants must ensure that his / her official duties permit him /her to devote sufficient time for research and facilities for pursuing research in chosen field are available at place of work.

12. Submission of Conclusion Report/ Final Synopsis/Draft Thesis (Final Synopsis):

✓Criteria to be fulfilled for submission of Conclusion Report/Final Synopsis/Draft Thesis:

a) Written recommendation of Research Advisory Committee through the supervisor.
b) Satisfactory completion of coursework.
c) Completion of research project including course work within stipulated period (to be certified by Supervisor through Research Advisory Committee).
d) Research publication in peer-reviewed indexed journals (at least one, proof of acceptance needed).
e) Two presentations in conferences/ seminars based on PhD work (to be certified by the supervisor).
f) Satisfactory half-yearly progress reports submitted by the supervisor through proper channel.
g) Satisfactory annual presentation
h) Satisfactory attendance report.
i) Presentation of at least two progress seminar every year.

13. Pre-submission seminar and recommendation for submission of Final Thesis:

Prior to submission of draft thesis, research supervisor shall prepare a panel of six experts (with publications in related field of research) as examiners in pre-PhD seminar, to evaluate written part of thesis and viva-voce. Dean of Faculty shall send the recommended panel of experts along with their consent and publication list in related research field to the Vice-chancellor for approval and appointment as examiners / experts.

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

Before final submission of thesis, PhD scholar must present his /her research work at a meeting of PhD committee constituted under each Faculty of the university in presence of invited / interested researchers.

The candidate must present the draft thesis (final synopsis) in a **Pre-PhD presentation** at least 6 months prior to submission of final thesis before the PhD committee on recommendation of the supervisor to the Dean of concerned faculty.

Notification of the seminar should be put up on the University website at least 15 days before the seminar and the soft copy of the draft thesis must be circulated among the members of the committee. The scholar shall be asked to deliver an open seminar before the committee in presence of research supervisor and 2 experts nominated from approved panel of six experts submitted by the research supervisor. The seminar may also be arranged in presence of Research Advisory Committee with permission of the Vice- Chancellor. The candidate must submit abstract and soft copies of the draft thesis to the Dean of faculty for circulation among the members of the PhD committee.

14. Pre-PhD / Pre-submission Seminar Report: Specific suggestions from members/ Experts in writing have to be incorporated by the candidate in the draft thesis. If the committee is satisfied and finds it suitable for submission as a PhD thesis, it may advise the scholar to prepare final thesis and submit soft copy in PDF format to the Dean of faculty. If the committee is not satisfied with the quality of work done, it may recommend a revision and direct the scholar to reappear in the seminar for approval. Based on the recommendation of Pre-PhD seminar, Dean of faculty shall accord approval for writing final thesis. If the Dean of Faculty approves the recommendations of the Pre-PhD seminar it will be subsequently ratified by the Chairman of the PhD committee/ Vice-Chancellor.

15. Submission of thesis:

Within 3 months of date of approval of Conclusion Report/ Final Synopsis/ Draft Thesis in Pre- PhD Seminar, the PhD candidate is required to submit the final thesis.

Following criteria to be fulfilled by candidate for submission of thesis:

a) Completion of stipulated period of research documented by satisfactory half-yearly progress reports.
b) Publication from his PhD work in refereed journals / peer reviewed journal: PhD scholars must publish at least one (1) research paper in refereed journal (according to NMC guidelines) and make two paper presentations in conferences/seminars before the submission of the dissertation/thesis for adjudication, and produce evidence for the same in the form of presentation certificates and/or reprints/ acceptance letter.
c) Originality report for plagiarism check (As specified in Plagiarism Policy and Guidelines).
(**Annexture)**
d) Certificate of presentation of PhD work in seminar/ conference (at least 2).
e) Qualified and Completed coursework: Certificate/Result to be attached.
f) Successfully presented Pre-PhD seminar with approval of draft thesis.
g) Thesis submission form duly signed and forwarded by the supervisor, Head of the institution along with requisite fees.
h) Soft copies of Thesis, Abstract, Certifications as specified in E-thesis Submission(Soft copies of entire thesis and synopsis in PDF format along with abstract of thesis)

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

16. Plagiarism Policy

As per the UNIVERSITY GRANTS COMMISSION (PROMOTION OF ACADEMIC INTEGRITY AND PREVENTION OF PLAGIARISM IN HIGHER EDUCATIONAL INSTITUTIONS) REGULATIONS, 2018 following guidelines must be adhered to establish institutional mechanism to facilitate responsible conduct of research, promotion of academic integrity and deterrence from plagiarism. **(Annexure-K)**

Dean of Faculty shall take necessary steps for appointment of examiners for evaluation of thesis. In case the research work by the scholar is found to be copied without proper acknowledgement, credit or reference, suitable action will be taken by the University as per its plagiarism policy. In case of plagiarism, PhD scholar shall be liable to be punished by withdrawal of the thesis or PhD degree even if awarded.

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

17. Evaluation of Theses

The Ph.D. Scholar shall, upon satisfactory completion of course work and obtaining the grade prescribed above, be required to undertake the research work and produce a draft thesis within a reasonable time, as stipulated by the University based on these Regulations.

The scholar shall make a **pre-submission presentation of the thesis** before a panel consisting of PhD & Departmental Research Advisory Committee, two internal or external experts of Thesis committee from relevant field of research and Dean of the Faculty concerned.

Pre-submission presentation shall be open to all faculty members and research scholars/students, and the feedback and comments obtained from the participants may be suitably incorporated into the draft thesis, as advised by the thesis experts.

The Chairperson of the Pre-submission seminar (Dean of concerned Faculty) shall countersign the certificate attested by the Supervisor that the thesis to be submitted to the University must contain the feedback and comments obtained from the Thesis Experts, Faculty members which are to be suitably incorporated into the draft thesis, as advised by the panel.

PhD scholars shall publish at least one research paper in refereed journal, duly approved by the UGC/University, and make two paper presentations in conferences/seminars, recognized by the Department concerned, before the submission of the thesis for adjudication and produce evidence for the same in the form of presentation certificates and reprints.

The thesis submitted for adjudication shall contain an undertaking from the research scholar and a certificate from the Research Supervisor attesting to the originality of the work, vouching that there is no plagiarism using the software approved by the UGC/University and that the work has not been submitted for the award of any other degree/diploma of the University or to any other Institution.

The thesis for PhD submitted for adjudication, shall be evaluated by one Internal Examiner and two External Examiners proposed by Research Supervisor, who are not in employment of the University and may be from outside the state respectively.

The two External Examiners for evaluation of PhD thesis shall be appointed by the Vice Chancellor from among the panel of six experts prepared and submitted by the supervising teacher and duly scrutinized by Head of the Department and countersigned by Dean of the Faculty concerned, invariably with sufficient modifications, if required, giving due consideration to the specialization in the topic of study.

18. Evaluation of Thesis and Recommendation for Viva-Voce:

The research guide shall submit a panel of 6 examiners, as already stated, for evaluation of thesis and PhD viva-voce to the Vice-Chancellor while forwarding the copies of draft thesis (final synopsis) to the University.

The panel must include 50% of examiners from outside the state. There shall be no examiner from the same organization. The Vice-Chancellor will appoint 3 examiners from the panel out of which 2 will be outside the state where the research scholar pursued his research work.

THE WEST BENGAL UNIVERSITY OF HEALTH SCIENCES
DD–36, Sector-I, Salt Lake, Kolkata 700 064

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

Soft copies of abstract of thesis may be sent to adjudicators for their consent for evaluation and availability, requesting them to respond by return mail. After receiving their consent, Electronic non-editable version of entire thesis with all necessary certifications included, along with evaluation proforma will be sent stating that the assessment report to be submitted within a timeframe of three to four weeks. In case examiner does not send report by the deadline suggested, another examiner may be appointed after obtaining permission from the Vice-chancellor from approved panel.

Thesis must be evaluated by **at least 2 external examiners** who are not in employment of the university/institute concerned and outside the state and one internal examiner.

The public viva-voce of research scholar to defend thesis will be conducted only if evaluation report of all examiners are satisfactory and include recommendation for conducting the viva-voce examination. All 3 examiners shall submit a detailed thesis evaluation report in prescribed proforma within four weeks from the date of receipt of the thesis.

Detailed procedure for evaluation of thesis shall be prescribed in the guidelines for Research Degree Programs. Each examiner shall be requested to send **a detailed evaluation report and his recommendations in the prescribed proforma within four weeks** of the date of receiving the thesis. If the thesis report is not received from an examiner in three weeks, a reminder will be sent to the examiner. If no response is received from the examiner within one week thereafter, an other examiner shall be appointed from the approved panel.

Each Examiner will examine the thesis to judge that the thesis is 'apiece of research work' characterized by:
(i) The discovery of facts, or
(ii) A fresh approach towards interpretation and application off acts, theories and creation of new knowledge.
(iii)His opinion on the candidate's capacity for critical examination and sound judgment.
The thesis shall involve in depth study and critical review of the area of research and creation of new knowledge in the area concerned. It should bear evidence of candidate's analytic capacity as well as carry out independent investigation, design or development. It should focus on fresh approach towards interpretation of facts, theories or significant contribution to knowledge development or a combination of these.
All examiners will submit the reports in the prescribed proforma and the evaluation report shall clearly indicate one of the following:

1. The thesis may be **recommended** for the award of PhD degree.

2. The thesis is unsatisfactory or rejected.

3. The thesis **may be accepted for award of PhD degree after suggested modifications are incorporated**.

The examiner must indicate whether he/she would like to re-examine the thesis after revision.

In case two examiners recommend rejection, the thesis shall be rejected.

If one of the evaluation reports of the examiners is unsatisfactory and does not recommend viva-voce, University shall send it to another examiner out of approved panel and viva voce will be held if the report of latest examiner is satisfactory and recommend viva-voce. But in case of his/her non-recommendation/rejection the thesis shall be rejected and PhD scholar shall be declared ineligible for award of degree.

The thesis shall be accepted only when at least two external examiners approve it. The research scholar who is required to resubmit the thesis must do so within two months from the date of receipt of examiners' comment by the University. The resubmitted thesis shall be examined by the same examiner who recommended resubmission.

The entire process of evaluation of PhD thesis shall be completed within 3 (three) months from the date of submission of thesis.
The examiners reports shall be forwarded to the guide(s) who will inform the candidate (if eligible for oral defense) only those comments and queries which require explanation and answers without disclosing the identities of the examiners. The report of internal examiner shall be counted as one report.

If all the three reports recommend acceptance of the thesis, the candidate shall be eligible for oral defense.

Any doubt arising out of the procedure laid down in these regulations shall be referred to the Vice -Chancellor for a decision.
[If any other matter not explicitly provided herein or of an exceptional nature arises, it may be referred to the Vice Chancellor for his decision.]

19. Public Viva Voce

Public viva voce, based on the observations given in the evaluation report, shall be conducted by a Board of Examiners consisting of one of the External Examiner as Chairperson, from the duly approved panel nominated by the Vice Chancellor, Dean of the Faculty concerned as Convener and the Research Supervisor & one Internal Examiner as members.

Public viva voce shall be open to all faculty members of the Department, research scholars and interested experts/researchers/students.

Public viva voce of the research scholar to defend the thesis shall be conducted only if the recommendations in the evaluation report(s) of the two External Examiner(s) on the thesis, submitted in the format specified by the University for the purpose, is/are satisfactory and specific recommendation for conduct of the public viva-voce is made.

The thesis shall be sent to another External Examiner, contained in the approved panel of examiners, in case the evaluation report of one of the External Examiners is unsatisfactory and does not recommend for conduct of the public viva-voce.

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

Public viva-voce examination, in respect of scholars referred to in Clause 9.4 of these Regulations, shall be held only if the recommendation in the report of the third External Examiner is satisfactory.

The thesis shall be rejected, in case the recommendation in the report of the third Examiner is unsatisfactory and the research scholar concerned shall be made ineligible for the award of the degree, based on the thesis already submitted.

A scholar who fails in the public viva voce, in the first instance, conducted to ascertain the genuineness of the research shall be required to reappear once for public viva voce within six months but not before three months from the date of conduct of first public viva voce, by remitting the fee prescribed by the University. The recommendations of the Board in the second instance shall be approved by the University and no more chance for public viva voce shall be available to the scholar.

The University shall formulate appropriate methods, so as to complete the entire process of evaluation of the thesis for PhD in a time bound manner.

20. Award of PhD degrees and Notification

After fulfilling all the requirements prescribed in the regulations, the degree shall be awarded namely **PhD in Health Sciences**. The degree certificate shall include name of the subject / discipline concerned /field of specialization and name of concerned Faculty.

Award of degrees to candidates registered/waiting for registration for research leading to PhD Degree shall be governed by the provisions of the UGC(Minimum Standards and procedure for Awards of MPhil/PhD Degree)Regulation2016 and subsequent Amendments(1st amendment) & (2nd amendment) Regulations2018, UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations 2018and guidelines thereof adopted by the University.

Recognition of **PhD degree in Health Sciences** awarded by the University shall be decided based on the recommendations and **approval of the Academic Council**.

The University shall issue a provisional certificate to the effect that the degree has been awarded with the provisions of UGC Minimum Standards and Procedures for Award of PhD Degree Regulation 2016, Minimum Standards and Procedure for Award of MPhil/PhD Degrees) (1st amendment) & (2nd amendment) Regulations, 2018 and UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations 2018.

The Controller of Examinations shall issue a provisional degree certificate in accordance with the decision of the Vice-Chancellor .Once PhD degree is awarded to the candidate, the Electronic version of thesis shall be kept under custody of the Dean of faculty in the office. Electronic version of thesis shall be deposited in university library and concerned PhD research centre.

21. Depository with INFLIBNET

The University shall submit an electronic copy of the Ph.D. thesis to the INFLIBNET, following the successful completion of the evaluation process and before the announcement of the award of Ph.D. degree, for hosting the same accessible to all.

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

The University shall issue a Provisional Certificate to each scholar, prior to the actual award of the Degree, to the effect that the Degree has been awarded in accordance with the provisions of the UGC (Minimum Standards and procedure for Awards of MPhil/PhD Degree) Regulations 2016 and UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations 2018.

22. Repeal and Saving

All directives and orders issued, before the commencement of these regulations, by the University under the existing regulations and guidelines shall cease to apply for the period for which such orders/ directions were issued.

In case of disputes, the Vice Chancellor, as the academic head of the University, shall examine the cases individually and take an appropriate decision.

NOTE:

Notwithstanding all that has been stated in above regulations, the University shall have the right to modify any of the above regulations from time to time with prospective or immediate effect.

Notwithstanding anything contained in these regulations, all PhD scholars shall be governed by the Code of Conduct and general rules, procedures framed by the University and in force from time to time.

If at any stage it is found that the material quoted / referred in thesis is copied from any other sources / author / researcher and the same is plagiarized as per norms of the university, then the university shall withdraw the PhD degree of such candidate or shall not process the thesis for further evaluation / examination as the case may be, following appropriate procedure.

The provisions contained in present Regulation with regard to **registration, adjudication, assessment, originality check for plagiarism** shall be applicable to candidates already registered for PhD Programme at the West Bengal University of Health Sciences.

Any issues concerning procedure or interpretation of provisions contained in this Regulation shall be referred to the Vice-Chancellor whose decision shall be final. All such cases shall be reported to the Academic Council.

Sd/-

Registrar, WBUHS

THE WEST BENGAL UNIVERSITY OF HEALTH SCIENCES
DD–36, Sector-I, Salt Lake, Kolkata 700 064

Memo No: WBUHS/Dean/2022-23/0362 Dated: 17/11/2022

Kindly view the link for Fees Structure for PhD Program under WBUHS:

https://wbuhs.ac.in/phd/fees-structure