



THE UNIVERSITY OF BURDWAN

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FC(Sc. and Arts)/CW & M. Phil/Admn./2018-19/160

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INFORMATION SHEET

**ADMISSION TO COURSE WORK FOR Ph. D-Phase-1 (2019) AND M. Phil (2018-2020)
PROGRAMME IN SCIENCE**

General information to the candidates

In compliance of the UGC (minimum standards and procedure for award of M.Phil/Ph.D degrees) Regulation, 2016, the University of Burdwan has amended the University regulations for Ph.D and M.Phil programmes in the meetings of Executive Council on 28.12.2016 and 22.02.2017 respectively. As per the current regulations, Course Work programme is pre-requisite to both Ph.D and M.Phil programmes and it will be offered as one semester regular programme of 12 credits. All in-service applicants (including those intending to prosecute Ph.D as part-time scholar) shall have to apply through proper channel. Candidates who wish to avail state-funded fellowships are also to go through this process.

(A) The following persons are eligible to seek admission to Ph.D. Programme:

- (1) Candidates holding the Master's Degree of The University of Burdwan or a professional degree considered to be equivalent to the Master's Degree of The University of Burdwan in the subject concerned or allied/relevant subject, with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC-7 point scale (or an equivalent grade in a point scale wherever grading system is followed) or an equivalent degree from a foreign educational institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorised by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions, may apply to the concerned Secretary of the Faculty Council for Post-graduate Studies concerned in the prescribed form for admission to the Ph.D. Programme in any of the subjects in which the Doctoral Degree may have been instituted.
- (2) A relaxation of 5% of marks, from 55% to 50% or equivalent relaxation of grade may be allowed for those belonging to SC/ST/OBC-A/OBC-B/Differently Abled and other categories of candidates as per the decision of the UGC from time to time or for those who had obtained their Master's degree prior to 19th September 1991.
- (3) The eligibility marks of 55% (or an equivalent grade in a point scale wherever grading system is followed) and the relaxation of 5% to the categories mentioned above are permissible based only on the qualification marks without including the grace mark procedures.
- (4) Subject to fulfillment of the conditions stipulated in clause (1) or (2), and (3) above-
 - (i) candidates who have cleared the full-time regular M. Phil. course work with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC 7- point scale (or an equivalent grade in a point scale wherever grading system is followed) and successfully completing the M. Phil. degree shall be eligible to proceed to do research work leading to Ph.D. degree in an integrated doctoral programme. A relaxation of 5% marks from 55% to 50% or an equivalent relaxation of grade may be allowed for those belonging to SC/ST/OBC-A/OBC-B/differently abled and other categories of candidates as per the decision of the UGC from time to time.
 - (ii) a candidate whose M. Phil. dissertation has been evaluated and the viva voce is pending may be admitted to the Ph.D. Programme.
 - (iii) candidates possessing a degree, considered equivalent to the M. Phil. degree of The University of Burdwan, from a foreign educational institution accredited by an Assessment and Accreditation Agency which

is approved, recognized or authorised by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions, shall be eligible for admission to Ph.D. programme.

(B) The following persons are eligible to seek admission to M. Phil. Programme:

(1) Candidates holding the Master's Degree of The University of Burdwan or a professional degree considered to be equivalent to the Master's Degree of The University of Burdwan in the subject concerned or allied/relevant subject, with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC-7 point scale (or an equivalent grade in a point scale wherever grading system is followed) or an equivalent degree from a foreign educational institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorised by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions, may apply to the concerned Secretary of the Faculty Council for Post-graduate Studies concerned in the prescribed form for admission to the Ph.D. Programme in any of the subjects in which the Doctoral Degree may have been instituted.

(2) A relaxation of 5% of marks, from 55% to 50% or equivalent relaxation of grade may be allowed for those belonging to SC/ST/OBC-A/OBC-B/Differently Abled and other categories of candidates as per the decision of the UGC from time to time or for those who had obtained their Master's degree prior to 19th September 1991.

(3) The eligibility marks of 55% (or an equivalent grade in a point scale wherever grading system is followed) and the relaxation of 5% to the categories mentioned above are permissible based only on the qualification marks without including the grace mark procedures.

(C) Procedure for admission:

(1) **Written Entrance Test :** For getting admission to the Ph.D. Programme a candidate shall have to appear for the written test of 100 marks with 50 questions of 2 marks each in Multiple Choice Questions (MCQ) model on OMR sheet. Candidates will be allowed to retain the carbon copy of the OMR sheet with them after the completion of the examination. Each candidate is to secure a minimum qualifying marks of 50% in the Written Entrance Test to qualify for the viva voce. **The syllabus of the Entrance Test shall cover two sections, viz, research methodology and the specific subject with 25 questions each from the two sections.**

(2) **Exemption from Written Test:** Candidates who have a full-time regular M. Phil. Degree with course work or have qualified in the UGC-NET (including JRF)/CSIR-NET (including JRF)/SET/SLET/ GATE or teacher fellowship shall be **exempted** from appearing at the Entrance Test for admission to the Ph.D. Programme.

(3) **Interview:** After qualifying in the Entrance Test or getting exemption from it, **each candidate shall have to appear for an interview of 50 marks to be conducted by the Doctoral Committee at the level of individual University Department of Studies/University School of or Centre for Studies concerned.** At the time of interview, the Doctoral Committee will objectively assess the research interest of the candidate in the relevant field/area as well as his/her past academic records, and award marks giving weightage to those components as follows :

Component	Marks	Break up, if any	Marks	Remarks
Academic Records	30	Under Graduate	10	To be awarded on the basis of % of marks obtained by the candidate
		Post Graduate	15	
Viva –voce	20	NET/SET/SLET/ GATE	05	
Total	50			

Subject-wise merit list will be prepared and the allotment of the Supervisor(s) for each candidate shall be decided by the Doctoral Committee in its subsequent meetings before the commencement of the Course Work keeping in view the research interest of the candidate, expertise of the Supervisor(s) and also the number of existing research scholars of the Supervisor(s). The Doctoral Committee will also assess the eligibility of candidates in respect of suitability/ inter- disciplinary/relevance of the subject opted for.

(C) No candidate, except J.R.F. or S.R.F., State Funded fellow/ UGC Fellow will be entitled to fellowship money. He/she will have to carry on the course work, research work at his/her own expense under prescribed norms & conditions which will be intimated in due course.

(D) Subject wise Vacancy: (* Reservation Criteria as per Govt. Rules)

Shown in the following table:

VACANCY AT A GLANCE: PH. D. C.W.-2019-PHASE-1

DEPARTMENT	AREA OF RESEARCH WORK	NO OF EXISTING VACANCY
PHYSICS	Materials Science	14
	Nonlinear Optics/Optical Parametric Oscillator	
	Condensed Matter Physics and Materials Science	
	Experimental Nonlinear Optics	
	Material Science	
	Condensed Matter Physics	
	Molecular Spectroscopy — Study of hydrated and non-hydrated clusters in biomolecules	
	Experimental Condensed matter, Materials Science, Solid State Ionics	
	Cosmology	
	Green synthesis nanoparticles	
MICROBIOLOGY	Microbial diversity, Xenobiotic degradation & Comparative genomics	06
	Molecular and cellular biology of <i>Entamoeba histolytica</i>	
	1. Bio-prospecting of extremophiles (Thermo, Cycro and halophiles) 2. PGPR organisms (PPFM and endophytic nitrogen fixers)	
	Plant Microbiology	
BIOTECHNOLOGY	Plant Tissue Culture, Cell & Molecular Biology	04
	Microbiology	
ENVIRONMENTALSCIENCE	Eco-toxicology Monitoring techniques and Ichthyology	11
	Nanotechnology and nanoscience, soil and water pollution, adsorption chemistry, indoor pollution	
	Hydro geochemistry, Air quality Monitoring, RS/GIS	
GEOGRAPHY	Urban Social Geography	06
	Man-Animal Conflict	
	River Health	
	Soil Erosion and Reservoir Sedimentation	

	Geo-environment, Public Health and GIS	
ZOOLOGY	Medical Parasitology	20
	Molecular Biology and Human Genetics	
	Systematic studies of nematoceros Diptera and strepsiptera	
	Ecology and Environmental Biology	
	Pharmacognosy	
	Parasitology and Microbiology	
	Aquaculture, Fish Nutrition, and Probiotics.	
	Helminth taxonomy and Systematics	
	Cancer genomics, epigenetic regulation, metabolic pathways in cancer	
	Toxicology	
	Ecology and Environmental Biology with special interest on silkworm biology, diversity in Dooars and fish toxicity.	
	Molecular Genetics, Biodiversity and Ecotoxicology	
MATHEMATICS	Computational Optimization	10
	Functional Analysis	
	Topology	
	Geometric Analysis	
	Value Distribution Theory	
	Inventory Control	
	Differential Geometry of Manifolds	
	Fluid Mechanics	
	Quantum scattering theory	
CHEMISTRY	Inorganic Reaction Mechanism	15
	Photophysical Insights on Carbon Nanostructured Materials	
	Recognition of ions/ molecules by spectroscopic techniques	
	Catalysis, Bio remediation	
	Glass Fertiliser, Nuclear Waste Glass	
	Synthesis of Heterocyclic compounds; Development of reaction	

	methodology	
	Nanomaterials synthesis and their applications in different fields	
	Chemistry and Pharmacology of Saccharides	
PHYSIOLOGY	Ergonomics & Occupational Health	08
	Ergonomics & Occupational Health	
	Endocrinology & Reproduction	
	Endocrinology & Reproduction	
BOTANY	MYCOLOGY AND PLANT PATHOLOGY	17
	PHYCOLOGY	
	PLANT PHYSIOLOGY AND BIOCHEMISTRY	
	MICROBIOLOGY	
	MICROBIOLOGY	
	CYTOLOGY AND GENETICS	
	TAXONOMY OF ANGIOSPERMS	
	ECOLOGY	

VACANCY AT A GLANCE: M. PHIL PROGRAMME:2018-20

SL. No.	Department	Total Vacancy
1	BOTANY	19
2	CHEMISTRY	27
3	ENVIRONMENTAL SC	09
4	GEOGRAPHY	16
5	MATHEMATICS	08
6	PHYSICS	15
7	STATISTICS	04
8	ZOOLOGY	10

(E) Instruction for S.C. /S.T. / OBC-A/ OBC-B Candidates :

Candidates belonging to S.C. /S.T. / OBC-A/ OBC-B categories, shall have to submit proper certificate as per following:

Relevant Certificate must conform to West Bengal Govt. Memo No. 1813-BCW/MR-94/11 dated 20th June, 2001. Candidates claiming reservation against SC/ST quota of seats must submit relevant caste certificates issued in their favour by one of the authorities listed below:

- (i) Deputy Collector of Land Revenue, Kolkata Collector of Stamp Revenue, Kolkata Metropolitan Magistrate, Kolkata, Addl. Chief Metropolitan Magistrate, Kolkata, Chief Metropolitan Magistrate, Kolkata, 1st Class Stipendiary Magistrate, Executive Magistrate, Sub- Divisional Magistrate, Sub-Divisional Officer, Deputy Collector, Addl. District Magistrate, Collector and District magistrate within their respective jurisdictions in case of candidates claiming to be Schedule Caste or Schedule Tribe and ordinarily residing within such jurisdictions.
- (ii) Deputy Director, Backward Classes Welfare, West Bengal and Commissioner, Backward Classes Welfare, West Bengal in the case of candidates claiming to be Schedule Caste or Schedule Tribe residing in any part of W.B.

Schedule of Written Admission Test :

Written test for all the subjects will be held as per following programme:

Date of the written test : **May 3, 2019.**

Commencement of test : 12 noon

Reporting time : 11.30 a.m.

Duration of test : 2 hours

Venue of the Examination : Will be notified later.

Admit card to be downloaded from: April 29, 2019.

No postal communication will, however, be made in this regard.

Publication of the result of the written test and other details in University website: May 10, 2019.

Last date of issue & submission of forms: April 23, 2019

- **The Schedule of Written Admission Test or the Admission Schedule is liable to alteration in the exigency of the situation arising out of unavoidable circumstances**

**Sd/-
Senior Secretary
Faculty Council (Sc)**