



PRESIDENCY UNIVERSITY

Kolkata

Admission Notification for Ph.D. Programme

Session 2022-2023 (July cycle)

Ref.No.: PU/FC/122/PhD/notice/2022

Date: 20/04/2022

Online Applications are invited from UGC or UGC – CSIR NET / NET – LS or DBT-BET (only for Institute of Health Sciences) qualified candidates for admission to the Ph.D. Programme of Presidency University in various departments for the session 2022-2023 commencing from July 2022. Only completed online applications will be considered. Applicants are required to pay application fee after submission of online form within stipulated date. No application will be considered without payment of Application Fee.

Essential qualification:

a) Candidates for admission to the Ph.D. program shall have a Master's degree with at least 55% of marks in aggregate or its equivalent grade.

A relaxation of 5% of marks or an equivalent relaxation of grade may be allowed for those belonging to SC/ST/OBC-A/OBC-B/ Person with Disability (PwD) as per UGC guidelines.

b) UGC or UGC-CSIR NET/NET-LS qualified. DBT-BET qualified candidates are eligible to apply for Institute of Health Sciences only.

Important Dates:

Start date for applying online	:21 st April, 2022
Last date for applying online	:2 nd May, 2022(till 5pm)
Last date for paying application fee online	:3 rd May, 2022(till 11pm)
Interview/test schedule	:Will be communicated through email/ notice

Application form: will be available in <http://presiuniv.ac.in/>

Application Fee: Rs 500 + applicable bank charges

Provisional Seat Matrix:

Department wise and category wise availability of seats are given below. Reservation of seats for Person with Disability (PwD) will be as per Department of Higher Education (University branch), Government of West Bengal order no 1084(20)-Edn(U)/EH/1U-89/13 dated 7th December, 2018. PwD seats are included in the total number of seats in respective departments.

Sl. No.	Department/ School	Category wise available seats				
		UR	SC	ST	OBC-A	OBC-B
1	Bengali	2	1	1	1	0
2	Hindi	2	2	2	2	0
3	History	4	2	1	1	1
4	Philosophy	3	1	0	1	0
5	Political Science	1	0	0	0	0
6	Sociology	2	1	2	2	1
7	Chemistry	15	5	0	0	4
8	Economics	8	1	1	2	2
9	Geography	2	2	0	0	1

Sl. No.	Department/ School	Category wise available seats				
		UR	SC	ST	OBC-A	OBC-B
10	Geology	24	13	4	7	2
11	Life Sciences	7	8	3	9	0
12	Mathematics	12	5	1	2	2
13	Physics	20	7	3	4	3
14	Statistics	4	1	0	1	1
15	Institute of Health Science (Newtown Campus)	4	1	1	1	1

Available Research Areas/ Specialisations

Bengali:

- Medieval Bengal literature & theory of literature
- Drama, Fiction
- Modern Bengali Poetry
- Any other

Hindi:

Contemporary poetry, Poetics, Comparative Literature, Language, Folk lore, Criticisms, Poetry, Fiction or any other

History: Open/Any

Philosophy:

Philosophy of Film and Literature , Philosophy of Gender Studies, Social-Political Philosophy, Western and Indian Logic

Political Science:

Urban Politics

Sociology: Open/Any

Chemistry:

Physical Chemistry, Organic Chemistry, Inorganic Chemistry

Economics:

- Financial Economics
- Empirical Development Economics (Including Health Economics, Socio-Economic Mobility, Migration and Aspiration, Electoral incentives etc.)
- Environmental & Resource Economics
- Social Network Analysis

Geography:

- Hydrology/Fluvial Geomorphology
- River Ecology/Fluvial Geomorphology/Physical Landscape Analysis/River Science (*only for SC candidate*)
- Political Geography
- Human Geography (*only for OBCB candidate*)

Geology: Open/Any

Life Sciences:

- Impact of climate change on aquatic environment, marine ecology
- Heart development and disease
- Biotechnological improvement of crop plants

- d) Antimicrobial activity of natural compounds and effect of mobile phone emitted electromagnetic radiations
- e) Cell migration
- f) Cancer molecular biology, Molecular toxicology, Using bioinformatic tools to understand cancer pathophysiology
- g) Microbiology
- h) Cancer Proteogenomics
- i) Environmental Toxicity Management
- j) Cancer cell signaling, experience in bioinformatics and RNA seq data analysis. Preference will be given to those with proven experience in in vivo experiments.
- k) Biochemistry of plant and animal systems
- l) Molecular Microbiology (DNA replication, DNA topology modulators)
- m) Structural biochemistry of photoreceptors - characterization and applications in protein design and engineering for optogenetics
- n) Epigenetics in plants under stress conditions, Host-pathogen interactions
- o) Protein Characterization, Screening and Efficacy assessment of Molecule(s) for ameliorating Chemotherapeutic Overdose
- p) Insect-plant-pathogen interactions, Invasive plant ecology and biocontrol, Wildlife-human interactions under changing environment

Mathematics:

General Relativity, Cosmology, Cryptology, Graph Theory, Differential Equations, Geometry and Topology, Lie Groups and Representation Theory, Dynamical Systems, Operations Research, General Topology, Fractal Geometry.

Physics:

- a) Solid State Energy storage device, Sodium Ion Batteries, Novel 2D materials
- b) Quantum Optics (Theory)
- c) Quantum information, Ultracold atoms in optical lattices
- d) Planetary/Atmospheric Remote Sensing
- e) Cosmology, Large Scale Structure, Galaxy Evolution, Active Galaxies, Astrophysics, Nuclear Physics

Statistics:

- a) Nonparametric Inference
- b) Statistical inference on manifold data
- c) Test of hypothesis under curved exponential family
- d) Robust Bayesian Inference
- e) Sequential Design
- f) Survival Analysis

Institute of Health Sciences (vacancies are given specialisation-wise):

- a) RNA biology (1)
- b) Microbiology (4)
- c) Plant biotechnology (1)
- d) Reproductive Biology/Cell Biology (1)
- e) Cancer biology (1)

Preference will be given to those with prior laboratory/research experience in the specified areas.

Selection Procedure:

All applicants are required to upload a research proposal. Applicants may be shortlisted based on the research proposals/area of availability of guide in the proposed research areas.

All eligible candidates will have to appear at an interview / test (online/offline mode), conducted by the Departmental Ph.D. Selection Committees of the University. In interview, the candidates will be expected to discuss their research interests.

Following the admission procedure, a list of qualified candidates (preferably mentioning their areas of research interest(s)) will be published and displayed by the University through the official website.

Candidates selected for the Ph.D. Programme will be attached to the respective Department at the time of their provisional admission and will be required to enrol on payment of a non-refundable fee, determined by the University.

**Sd/-
Secretary, Faculty Councils, Presidency University**