

Research Eligibility Test (RET) -2025
Enrolment in the Ph.D. (Sc) Program
in Physiology
Department of Physiology,
University of Calcutta

Applications are invited for admission to the Ph.D. (Sc) program of the Department of Physiology, University of Calcutta. The candidates are advised to apply in the **prescribed application format (vide below)** and submit the duly filled in applications along with self-attested photocopies of relevant/supporting documents to the office of the Head of the Department of Physiology, 92 APC Road, Calcutta-700009, University of Calcutta. They are also required to submit the google form: <https://forms.gle/4EdLFNB1RmSCVXEa8>

A maximum of 58 (**Fifty eight**) Ph.D. students may be accommodated if found suitable. Final admission for PhD program are subject to the rules and regulation of the University and the Government notification for reservation rules with notification no. 07-Edn (U)/IU-89/13 dated 2nd January, 2014. The allocation of the supervisors will be finalized by the evaluation through RET.

Candidates having M.Sc. degree will have to appear in **an admission test followed by an interview**. Candidates who have cleared **NET / GATE / SLET / equivalent examinations** are **exempted from the admission test** and entitled directly to **appear in the interview**.

RET schedule

The last date for accepting application form: **18.12.2025**

Written examination [at the dept]: **6.1.2026, time: 1.00 PM**

Tentative date for declaration of the results of written test [at the dept]: **13.01.2026**

Interview [at the dept] of eligible candidates: **19.01.2026 (time: 12.00 noon)**

Mode of written test

A 'one-hour written examination' will be held in the Dept. of Physiology. The question will be in the form of Multiple Choice Questions (MCQ) based on the syllabus (vide below).

Notification of selected candidates for enrolment in the Ph.D. program will be announced in the University website and displayed on the departmental notice board.

***Qualifying RET does neither ensure any financial support nor guarantee registration for the Ph.D. degree.**

For further details regarding the new regulations and admission procedure for Ph.D programme in general, the website of the University of Calcutta may be referred to (www.caluniv.ac.in).

Please Note: Related to Application Form

Self-attested photocopies of all relevant testimonials [e.g. Certificate if belonging to SC/ST/OBC-A/OBC-B/PC, Final mark sheet and certificate of M.Sc. (if applicable), Evidence (if any) of qualifying NET / GATE / SLET / equivalent examinations] must be submitted by the candidate along with the application form. Incomplete applications will not be entertained.

University of Calcutta
RET-PHYSIOLOGY 2024
APPLICATION FORM
for the enrolment in the Ph.D. program

Department /Centre: Department of Physiology

Name (IN BLOCK LETTERS):

Date of Birth:

Father's Name:

Marital Status:

Whether SC/ST/OBC/Physically Challenged:

Nationality:

Address for Communication:

Phone No.:

E-mail ID:

Academic Qualifications:

Name of the Examination	Year	Board/University	Subject taken	Div./Class	% of Marks

Whether qualified in NET/GATE/equivalent examination:

Signature of the applicant with date:

University of Calcutta
Department of Physiology
Syllabus for admission test for enrolment to the Ph.D. Program

1. Cellular & Molecular Physiology (15 marks)

- a. Cellular organization, cell to cell communication and signalling
- b. Biomacromolecules and their principles of interactions
- c. Enzymology
- d. Bioenergetics
- e. Metabolism
- f. Molecular biology
- g. Biotechnology
- h. Human genetics
- i. Physiology of excitable cells

2. Systems Physiology (15 marks)

- a. Blood and Hemodynamics
- b. Cardiovascular Physiology
- c. Respiratory Physiology
- d. Neurophysiology
- e. Sensory physiology
- f. Gastrointestinal Physiology
- g. Renal Physiology
- h. Endocrinology and Reproductive Physiology

3. Advanced Physiology (15 marks)

- a. Exercise and Sports Physiology
- b. Work Physiology & Ergonomics
- c. Immunobiology
- d. Microbial Physiology
- e. Molecular Neurophysiology, Applied Neurophysiology & Advanced Electrophysiology
- f. Stress Physiology
- g. Molecular Endocrinology and Neuro-Endocrinology
- h. Nutritional Biochemistry and Dietetics
- i. Principles of Environmental Physiology
- j. Space & Aviation Physiology
- k. Biomedical Instrumentation

4. Computer Applications and Biostatistics (5 marks)