

JEST-2001

Joint Entrance Screening Test – 2001

For Ph.D. Programmes in Physics / Mathematics / Theoretical Computer Science

Applications are invited from highly motivated persons, with a consistently good academic record, for enrollment in a Ph.D. Programme in Physics (including Theoretical and Observational Astronomy, Astrophysics, Physics in Biology, Plasma Physics & Technology, Earth & Atmospheric Sciences and Space Sciences) / Mathematics / Theoretical Computer Science, at any of the following institutes:

- ★ **Indian Institute of Astrophysics (IIA)**, Bangalore, for Physics, Astronomy & Astrophysics.
- ★ **The Institute of Mathematical Sciences (IMSc)**, Chennai, for Theoretical Physics, Mathematics and Theoretical Computer Science.
- ★ **Institute for Plasma Research (IPR)**, Gandhinagar, for Plasma Physics (Experimental & Theoretical), Non-linear dynamics, Computer simulation and Modelling.
- ★ **Institute of Physics (IOP)**, Bhubaneswar, for Theoretical Physics: Condensed matter, High energy physics, Nuclear physics; Experimental Physics: Condensed matter, Heavy ion collisions.
- ★ **Inter-University Centre for Astronomy and Astrophysics (IUCAA)**, Pune, for Physics, Astronomy & Astrophysics.
- ★ **Inter-University Consortium for DAE Facilities (IUC-DAEF)**, Indore, for Physics (Experimental Condensed Matter & Synchrotron Radiation, Low temperature, Magnetism, Spectroscopy).
- ★ **Jawahar Lal Nehru Centre for Advanced Scientific Research (JNCASR)**, Bangalore, for Physics (condensed matter physics, statistical mechanics, chemistry and physics of materials).
- ★ **Mehta Research Institute of Mathematics and Mathematical Physics (MRI)**, Allahabad, for Theoretical Physics, Mathematics and Astrophysics.
- ★ **National Centre for Biological Sciences (NCBS)**, Tata Institute of Fundamental Research, Bangalore, for Physics in Biology.
- ★ **National Centre for Radio Astrophysics (NCRA)**, Tata Institute of Fundamental Research, Pune, for Physics (Astronomy & Astrophysics).
- ★ **Physical Research Laboratory (PRL)**, Ahmedabad, for Physics (Experimental & Theoretical, Space Sciences, Earth & Atmospheric Sciences, Non-linear Dynamics, Computational Physics), Astronomy & Astrophysics.
- ★ **Raman Research Institute (RRI)**, Bangalore, for Physics (Experimental Physics: Soft Condensed Matter, Optics; and Theoretical Physics), Astronomy & Astrophysics.
- ★ **S.N. Bose National Centre for Basic Sciences (SNBNCBS)**, Calcutta for Physics (Physics of Materials, Statistical Physics, Quantum Optics, Quantum Field Theory and Astrophysics).

Minimum Qualifications

Physics: M.Sc. Degree in Physics or M.Sc. / M.E. / M.Tech. degree in related disciplines. Candidates with M.Sc. (Mathematics) will also be considered at IIA and those with M.Sc. (Physical Chemistry) at RRI. At IPR, Masters' degree in Physics / Engineering Physics / Applied Physics, etc., is necessary. Graduates with a B.E. or B.Tech. degree will also be considered at IIA, IUCAA, JNCASR, NCBS, NCRA and RRI.

Mathematics: M.Sc. degree in Mathematics or M.Sc. / M.E. / M.Tech. degree in related disciplines. Candidates with B.E. / B.Tech. will also be considered at MRI.

Theoretical Computer Science: M.Sc. / M.E. / M.Tech. in Computer Science or related disciplines, and should be interested in the mathematical aspects of computer science.

Exceptionally talented B.Sc. / B.E. / B.Tech. graduates in Physics / Mathematics / Computer Science will also be considered at IMSc for an early start in a Ph.D. Programme in their respective disciplines; B.Sc. graduates will be considered for the Integrated Ph.D. programme at NCBS.

In all disciplines, persons who expect to complete their final qualifying examination by August 2001, are also eligible to apply.

Details about the various institutes and their Ph.D. Programmes are given in the brochures, which will be mailed with the application form.

Selection Procedure

Candidates applying for Ph.D. Programmes in Physics / Theoretical Computer Science will have to appear for the JEST (written examination) at any one of the following centres:

Ahmedabad, Allahabad, Bangalore, Bhubaneswar, Calcutta, Chandigarh, Chennai, Delhi, Guwahati, Hyderabad, Indore, Jaipur, Kanpur, Kharagpur, Kochi, Madurai, Mumbai, Nagpur, Patna, Pune, Raipur, Santiniketan and Udaipur.

Using the JEST results each institute will call separately, a limited number of candidates for its further selection procedure depending on its requirements. Travelling allowance will be provided to those who attend interviews.

Admission to the Ph.D. Programmes in Mathematics at IMSc / MRI will be on the basis of an At-Home Examination, for which the question paper will be sent to the applicants after receiving their completed application forms, and subsequent separate interviews at IMSc / MRI.

All selected candidates will receive Research Fellowships.

How to apply

There are separate application forms for Physics, Mathematics, and Theoretical Computer Science.

For **Physics**, application forms can be obtained by writing to: The Coordinator, JEST-2001, National Centre for Radio Astrophysics, TIFR, Post Bag 3, Ganeshkhind, Pune 411007, along with a self-addressed envelope (size approximately 30cm×12.5cm) stamped Rs.30. Information about JEST 2001 can be found at <http://www.ncra.tifr.res.in/~j2001>

For **Mathematics and Theoretical Computer Science**, applications forms can be obtained by writing to: The Chief Administrative Officer, The Institute of Mathematical Sciences, C.I.T. Campus, Tharamani, Chennai 600 113, along with a self-addressed envelope (size approximately 30cm×12.5cm) stamped Rs.15.

Important Dates

- Request for application forms should reach by November 30, 2000.
- Completed application form should reach by December 15, 2000.
- The JEST for Physics / Theoretical Computer Science will be held on Sunday, February 4, 2001.