## Joint Entrance Screening Test -2018

## For Ph. D. Programmes in

Physics/Theoretical Computer Science/Computational Biology /Neuroscience

Sunday, February 18, 2018, from 10.00 a.m. to 1.00 p.m.

## **Test Centres**

Ahmedabad, Allahabad, Aligarh, Bengaluru, Bardhaman, Bhubaneswar, Bhopal, Chandigarh, Chennai, Delhi, Goa, Guwahati, Indore, Hyderabad, Jaipur, Kanpur, Kharagpur, Kolkata, Kochi, Madurai, Mangalore, Mumbai, Nainital, Nagpur, Patna, Pune, Raipur, Roorkee, Sambalpur, Silchar, Siliguri, Srinagar, Thiruvananthapuram, Udaipur, and Visakhapatnam. Apply online through https://www.jest.org.in from November 15 to December 16, 2017.

The Science & Engineering Research Board (SERB) (statutory body established through an Act of Parliament) recognized JEST as a National Eligibility Test sponsored programmes/projects vide their Office Memo No. SB/S9/Z-01/201S. Qualifying in JEST does not entitle an applicant to get a Research Fellowship. Using the JEST results, each institute will call a limited number of candidates for further selection depending on their requirements.



**Aryabhatta Research** Institute of Observational Sciences, Nainital Astronomy and Astrophysics,

Atmospheric Physics.



Bose Institute, Kolkata

Atmospheric Sciences, Biophysics, Complex systems and networks, Condensed matter physics and materials science, High energy Physics and Astroparticle physics, Quantum physics and Quantum information, Nuclear and radiation physics.



**Indian Institute of** Astrophysics, Bengaluru Astronomy & Astrophysics, Astronomical Instrumentation,

Atomic physics.



**International Centre** for Theoretical Sciences, TIFR, Bengaluru Astrophysical Relativity, Data Assimilation &

Dynamical Systems, Statistical Physics & Turbulence, String Theory.



**Inter-University Centre for Astronomy and** Astrophysics (IUCAA), Pune

Physics, Astronomy & Astrophysics.



**Indian Institute of** Science, Bengaluru Condensed matter physics

(Experiments & Theory), Astronomy & Astrophysics (Theory), Atomic & Molecular physics (Experimental), Bio-crystallography & Bio-informatics, & High energy physics [Theory).



**Indian Institute of Science Education and** Research, Bhopal

Condensed matter physics (Theory and Experiment) Soft matter physics (Theory), Biophysics, Laser plasma interactions, Ultrafast physics (Experiments), Astrophysics and Cosmology, High energy physics (Theory, phenomenology, experiment), Nonlinear optics, Atomic & Molecular physics (Theory & experiment).



**Indian Institute of Science Education and** Research, Kolkata

Condensed matter physics, Field Theory. IISER KOLKATA Classical & Quantum Gravity, Cosmology, Solar Science, High Energy Physics, Nonlinear Dynamics, Statistical Physics, Soft Matter, Optics & Spectroscopy, Atomic physics, Biophotonics, Spintronics, Nanoscience, NMR, Quantum Information, Biological Physics and Complex Systems.



**Indian Institute of Science Education** and Research, Mohali

Quantum Information (Experiment and Theory), Complex systems & Networks, Theoretical Astrophysics & Cosmology, String Theory, Statistical physics, Quantum thermodynamics, Condensed Matter (Theory and Experiment), NMR-Methodology, Ultra-fast Physics, low temperature physics.



**Indian Institute of Science Education and** Research, Pune

Condensed matter physics, Computational material science, Nanotechnology Atomic Physics & Quantum Optics, Nonlinear dynamics. Astrophysics, Particle physics and Field theory, Solar & Plasma physics, Quantum information processing, Soft



**Indian Institute of Science Education and** Research, Thiruvananthapuram

Experimental; Magnetism, Superconductivity, Nanoscience, Photonics, Semiconductor Physics, Surface sciences, Nanoscale plasmonics, Ultrafast spectroscopy, Nonlinear optics; Theory: Cosmology, Gravitational waves, Quantum information, Statis tical physics, Condensed matter, String theory & Nonlinear dynamics.



**Indian Institute of Space Science and** Technology, Thiruvananthapuram

Astronmy & Astrophysics, Atmospheric sciences, Applied & Adaptive optics, Atomic and Molecular physics, Condensed matter physics, Nanotechnology, Nonlinear dynamics, Photonics, Quantum information and Statistical Physics.



Jawaharlal Nehru Centre for Advanced Scientific Research, Bengaluru

Experimental & Theoretical condensed matter physics, Biophysics, Advanced electron microscopy. Statistical mechanics, Materials science & Soft condensed matter.



**National Brain Research** Centre, Gurgaon

Neurosciences: Systems, Computational, cognitive and molecular neurocomputing, neuroinformatics and neuroimaging.



**National Centre for Radio** Astrophysics, TIFR, Pune Astronomy & Astrophysics.



Raman Research Institute, Bengaluru

Astronomy & Astrophysics, Light and matter physics, soft condensed matter physics (liquid crystals, physics in biology) and Theoretical physics.



Physical Research Laboratory, **Ahmedabad** 

Theoretical physics, Astronomy & Astrophysics, Solar physics. Space & Atmospheric sciences, Planetary science, Geophysics, Atomic & molecular physics & Optical physics.



S.N. Bose National Centre for Basic Sciences, Kolkata

Astrophysics and Cosmology. Chemical and Biological physics, Condensed matter physics & material science, High energy physics and Quantum field theory, Mathematical physics. Nanosciences, Quantum optics & quantum information, Statistical physics, Complex system.



**TIFR Centre for Interdisciplinary** Hyderabad

Condensed matter physics & materials science of nonequilibrium, Soft & living matter, Fluid dynamics, Intense laser-matter interactions, Computational physics, Statistical physics, NMR of Biophysical & other



Tata Institute of Fundamental Research,

Astronomy & Astrophysics, Condensed matter physics & material science, High energy physics, Nuclear & Atomic physics, Theoretical physics.



**UGC-DAE Consortium for Scientific** 

Research,

Thin films, X-ray, Optical & Electron spectroscopies, Electrical, magnetic & thermal properties at low temperature & high magnetic fields, Neutron diffraction, Positron annihilation, Mossbauer & γ ray spectroscopies, Experimental nuclear physics.



Harish-Chandra Research Institute, Allahabad

Theoretical physics & Astrophysics.

**National Institute of Science** 



**Indira Gandhi Centre for Atomic** Research, Kalpakkam

Solid state phase transformations, Superconductivity, Structure & dynamics of soft condensed matter, Computational materials science, Accelerator-based irradiation induced phenomena, Low dimensional systems, Physics of interfaces, Nano-materials, Thin films technology & Theoretical physics.



The Institute of Mathematical Sciences, Chennai Theoretical Physics, Theoretical

Computer Science & Computational Biology.



Institute of Physics, Bhubaneswar

Physics (Condensed matter, Nuclear and High energy physics) & Accelerator-based research.



**Institute for Plasma** Research,

Gandhinagar Theoretical &

Experimental Plasma Physics, Fusion related Physics & Industrial Plasma Physics.



University.

String theory, Lattice QCD, Experimental high energy physics, Soft condensed matter physics, Electronic structure, Statistical mechanics, Superconductivity & Magnetism, Nano-science, Non-linear Optics, Ultracold Atoms, Quantum optics & quantum information.

**Education and Research, Bhubaneswar** 



Raja Ramanna Centre for Advanced Technology, Indore

Lasers & their Applications, Laser plasma interaction, Cold atom physics, Condensed matter physics, Super conductivity & magnetism, Crystals & Thin Films, Nanomaterials & Applications, Non-linear & Ultrafast Optical studies, Beam physics and Free electron laser.



Saha Institute of **Nuclear Physics, Kolkata** 

Condensed matter physics (Theory and Experiment), Nuclear physics (Theory & Experiment), High energy physics (Theory & Experiment), Relativistic heavy ion collisions & QCD phase transition (Theory & Experiment), Astroparticle physics, Cosmology, Quantum gravity, String theory, Mathematical physics, Surface science & Plasma physics.



**Variable Energy Cyclotron** Centre, Kolkata

Accelerator physics, Condensed matter physics & materials science, Nuclear physics (Experiment and Theory), Relativistic heavy ion collisions & QCD Phase transition (Experiment and Theory) and Physics of neutrinos (Experiment).

## **Eligibility Criteria**

M.Sc, Integrated Ph.D.: B.Sc. in physics/mathematics; Regular Ph.D.: M.Sc in physics/ applied-physics;

B.Tech./B.E./M.E./M.Tech./4 year B.S./M.C.A. may also be considered for M.Sc and Ph.D (integrated and regular) programmes in some institutes. Please check the websites of individual institutions for further details. Students in the final year of these courses are also eligible to appear for JEST 2018. Application through email or by post will not be accepted.

Application Fee: Rs.300/- (Rs.150/- for SC/ST).

For further information please visit JEST website: https://www.jest.org.in