Indian Institute of Information Technology Kalyani

Report of the Screening Committee (PhD Admission-Spring 2021-2022)

Ref. Advt. No. IIITK/Academic/PHD/22/10 Dated: 19.11.2021 Date: 18.12.2021

Date of written test and interview: 05.01.2022 (10:00am)

Venue: IIIT Kalyani campus

List of candidates:

Computer Science & Engineering

| Name | Status | Comments |
|---------------------|----------|----------|
| Ahana Patra | Selected | |
| Akbar Ali | Selected | |
| Amirul Hoque | Selected | |
| Anirban Dey | Selected | |
| Ankur Prakash | Selected | |
| Arun Manna | Selected | |
| Ashwini Bande | Selected | |
| Bijendar Kushwaha | Selected | |
| Biswajit Halder | Selected | |
| Debapriya Sengupta | Selected | |
| Debasis Sardar | Selected | |
| Debmani Saha | Selected | |
| Joydeep Kundu | Selected | |
| Kunal Roy | Selected | |
| Lokare Anil Ramrao | Selected | |
| Monisha Singh | Selected | |
| Murari Krishna Saha | Selected | |
| Nayan Dutta | Selected | |
| Prithwish Das | Selected | |
| Priyanka Biswas | Selected | |
| Priyanka Ghosh | Selected | |
| Pronita Mukherjee | Selected | |
| Purbasha Das | Selected | |
| Purushottam Mohanta | Selected | |
| Ratan Kumar Mondal | Selected | |
| Rimpa Dutta | Selected | |
| Saikat Sarkar | Selected | |
| Samad Hussen | Selected | |
| Sanjukta Mishra | Selected | |
| Sayan Dasgupta | Selected | |

| Sayanta Harh | Selected | |
|--------------------------|----------|---|
| Shaon Bandyopadhyay | Selected | |
| Sharmistha Bhattacharya | Selected | |
| Shibdas Bhattacharya | Selected | |
| Sikha Das | Selected | |
| Somaditya Roy | Selected | |
| Soumen Bajpayee | Selected | |
| Soumik Guha Roy | Selected | |
| Subhra Prokash Dutta | Selected | |
| Subindu Saha | Selected | |
| Subinoy Sikdar | Selected | |
| Swagata Das | Selected | |
| Tulika Sarkar | Selected | |
| Bijay Singh | Rejected | XII board cutoff |
| Bipasha Biswas | Rejected | Undergraduate cutoff |
| Jayanti Das | Rejected | XII board cutoff |
| Nazrul Islam | Rejected | XII board cutoff |
| Sayantan Hatu | Rejected | Undergraduate cutoff |
| Shalini Tomar | Rejected | X and XII board cutoff |
| Sitikantha Chattopadhyay | Rejected | X and XII board cutoff |
| Sourabh Biswas | Rejected | B.Sc, M.Sc in Mathematics with no GATE/NET qualification |
| Suresh Babu Dasari | Rejected | External category-not a research scholar in any reputed research/academic institute |
| Vivek Kumar Jha | Rejected | XII board cutoff and no marksheet/certificate attached |

Electronics and Communication Engineering

| Name | Status |
|------------------------|----------|
| Abhishek Biswas | Selected |
| Ashish Kumar Sarangi | Selected |
| Asmita Biswas | Selected |
| Atul Ranjan Srivastava | Selected |
| Ayantani Bhattacharjee | Selected |
| Chayan Gupta | Selected |
| Debajit Sarma | Selected |
| Debnath Ghosh | Selected |
| Dola Sameera | Selected |
| Dola Sundeep | Selected |
| Jay Dip Mathur | Selected |
| Manisankar Biswas | Selected |
| Ritesh Kumari | Selected |
| Saswati Dey | Selected |
| Saurabh Kore | Selected |
| Shuvra Jyoti Bose | Selected |

| Sourav Karmakar | Selected |
|----------------------|----------|
| Sourish Haldar | Selected |
| Subham Banerjee | Selected |
| Sunanda Mukhopadhyay | Selected |
| Sunil Gupta | Selected |
| Surya Karan Singh | Selected |

Mathematics

| Name | Status | Comments |
|-------------------|----------|---------------------------------|
| Amit Samaddar | Selected | |
| Aratrika Pandey | Selected | |
| Chandan Sur | Selected | |
| Satyam Singh | Selected | |
| Swarnajit Purahit | Rejected | No valid NET/GATE qualification |
| Fz-456 | Rejected | Dummy data submitted |

Physics

| Name | Status | Comments |
|-----------------|----------|---------------------------------|
| Sajid Ali | Selected | |
| Sushanta Mandal | Selected | |
| Santana Debnath | Rejected | No valid NET/GATE qualification |

Syllabus for Ph.D. Admission: written test (CSE)

Total Marks: 50 (Written Test)

Time: 1hr 30 min

Question Pattern: MCQ based problem solving (except English writing)

- 1. English writing and communication skill
- 2. Mathematics: Probability and statistics, Linear Algebra, Discrete Mathematics
- 3. C-Programming Skill
- 4. Data Structure and Algorithms
- 5. Formal Languages and Automata Theory
- 6. Operating Systems
- 7. Computer Organization and Architecture
- 8. Database Management System
- 9. Computer Networks

Syllabus for Ph.D. Admission: written test (ECE)

Question Pattern: MCQ based problem solving (except English writing)

- 1. English writing and communication skill
- 2. Mathematics: Probability and statistics, Linear algebra, Differential calculus
- 3. C-Programming Skill
- 4. Operational Amplifier and Integrated Circuit
- 5. Solid State Device
- 6. Analog and Digital Communication
- 7. Circuit Theory
- 8. Signals and Systems

Syllabus for Ph.D. Admission: written test (Mathematics)

Question Pattern: MCQ based problem solving (except English writing)

- 1. English writing and communication skill
- 2. Mathematics: Elasticity, Linear Algebra, Linear Integral Equations, Ordinary Differential Equations, Partial Differential Equations.

Elasticity:

Analysis of strain and stress, strain and stress tensors; Geomatrical representation; Compatibility conditions; Strain energy function; Constitutive relations; Elastic solids Hookes law; Saint-Venant's principle, Equations of equilibrium; Plane problems-Airy's stress function, vibrations of elastic, cylindrical and spherical media.

Linear Algebra:

Finite dimensional vector spaces; Linear transformations and their matrix representations, rank; systems of linear equations, eigenvalues and eigenvectors, minimal polynomial, Cayley-Hamilton Theorem, diagonalization, Jordan-canonical form, Hermitian, Skew-Hermitian and unitary matrices; Finite dimensional inner product spaces, Gram-Schmidt orthonormalization process, self-adjoint operators, definite forms.

Linear Integral Equations:

Linear integral equation of the first and second kind of Fredholm and Volterra type, Solutions with separable kernels. Characteristic numbers and eigen functions, resolvent kernel.

Ordinary Differential Equations:

First order ordinary differential equations, existence and uniqueness theorems for initial value problems, systems of linear first order ordinary differential equations, linear ordinary differential equations of higher order with constant coefficients; linear second order ordinary differential equations with variable coefficients; method of Laplace transforms for solving ordinary differential equations, series solutions; Legendre and Bessel functions and their orthogonal properties.

Partial Differential Equations:

Linear and quasilinear first order partial differential equations, method of characteristics; second order linear equations in two variables and their classification; Cauchy, Dirichlet and Neumann problems; solutions of Laplace, wave in two dimensional Cartesian coordinates, Interior and exterior Dirichlet problems in polar coordinates; Separation of variables method for solving wave and diffusion equations in one space variable; Fourier series and Fourier transform and Laplace transform methods of solutions for the above equations.

Syllabus for Ph.D. Admission: written test (Physics)

- 1. Space and Atmospheric Physics
- 2. Waves and Oscillations
- 3. Thermodynamics and Statistical Physics
- 4. Atomic Physics
- 5. Electrodynamics
- 6. Mathematical Methods in Physics (including Probability and Statistics)
- 7. Programming Skills (C/Fortran)
- 8. English writing and communication skills

Schedule

Date: 05.01.2022 (Wednesday)

Venue: IIIT Kalyani Campus (Webel IT Park, Kalyani)

Room: G03

Reporting time: 10:00am

Written test: 10:15am - 11:45am

Result publication: 12:45pm

Interview: 1:30 pm onwards

Final result: Will be announced in Institute website by 07.01.2022

Note:

- 1. Candidates selected for both CSE and ECE will be allowed to appear for any one discipline.
- 2. Candidate should produce NOC from employer (for part-time category) if he/she has not submitted it with application form.
- 3. Candidate should bring any photo ID card on the day of examination.