



डा बी आर अम्बेडकर राष्ट्रीय प्रौद्योगिकी संस्थान, जालन्धर-144027
Dr B R AMBEDKAR NATIONAL INSTITUTE OF TECHNOLOGY, JALANDHAR - 144027

Admission to PhD (Full-Time, Part-Time and Self-Sponsored) Programme in Engineering, Sciences, Humanities and Management for the Academic Year 2022-2023 (Session July- 2022)

Applications are invited for admission to PhD (Full-Time, Part-Time and Self-Sponsored) Programme in Engineering, Sciences, Humanities and Management for the Academic Year 2022-2023 (Session July-2022). The Broad areas of Research, Eligibility Criteria, Selection Procedure, Reservation, Teaching Assistantship-cum-Scholarships etc. are given in this advertisement.

How to apply: The link to fill the online application form can be accessed through Institute website www.nitj.ac.in. Please submit separate application forms, if applying for more than one programme. An application fee of Rs.1000/- (Rs.500/- for SC/ST/PWD candidates) is required to be paid online. The candidates are required to apply online and there is no requirement to send the Hard Copy of the application form to the Institute. Application fee shall not be refunded in any case.

Last date for submission of online application form is 18/05/2022.

For more details, the candidates are advised to visit the Institute website www.nitj.ac.in for updates.



डा बी आर अम्बेडकर राष्ट्रीय प्रौद्योगिकी संस्थान, जालन्धर-144011

D B R AMBEDKAR NATIONAL INSTITUTE OF TECHNOLOGY, JALANDHAR – 144027

Admission to PhD (Full-Time, Part-Time and Self-Sponsored) Programme for the Academic Year 2022-2023
(Session July-2022)

A) PhD (Full-Time, Admission under financial support from NIT Jalandhar, Part-Time without financial support and Self-Sponsored):

| Sr. No. | Department Email address of HOD | (Broad Areas of Research) |
|---------|---|--|
| 01 | Biotechnology obt@nitj.ac.in | Bioprocess Engineering, Environmental Biotechnology, Nanobiotechnology, Enzyme Technology, Industrial Biotechnology, Bioprocess and Bioreactor Design, Biohydrogen, Biofuels, Microbial and Environmental Biotechnology, Biorefinery, Bioplastics, Enzyme Engineering, Bioinformatics, Proteomics, Environmental Remediation, Biomaterials, Tissue Engineering, Environmental Engineering, Applied Biotechnology, Biofilms, Bioremediation, Wastewater treatment, Bio filtration, Aerogels/hydrogels, Waste management, Algal biotechnology, Bio-chemical/Bioprocess engineering for biorefinery, Bioenergy, Bioplastics production and degradation, Biosynthesis of value-added chemicals |
| 02 | Chemical Engineering och@nitj.ac.in | Environment engineering, Advanced Oxidation Processes, Treatment of effluent of textile industry, Nanomaterials for Energy and Environment, Catalysis, Reaction Engineering and modelling, Selective hydrogenation, Remediation of Sugar industry waste, Conversion of biomass to fuels and chemicals, Lignin valorization, Biofuels and Bioproducts, Waste to energy, Solid waste Management, Thermochemical conversion Processes, Composite Materials and Corrosion, Multiphase Flow, CFD simulations of non-Newtonian fluids, Microfluidics, Heat transfer studies of Nano fluids(LSA), Rheology of complex fluids, Polymeric thin films Hydrogels, Bio-fluid mechanics, Fabrication of smart materials, Magnetic-field driven flow instabilities, Hydrodynamic stability, poroelasticity, CFD, Risk Assessment, Fire Dynamics, Chemical Process Safety, Modelling and Simulation, CO2 sequestration, waste water treatment utilization and management, Edible films and coatings, Nanomaterials Synthesis for Energy Application, Droplet-based microfluidics for sensing and Biomedical application, Heat transfer in porous media, Surfactant thin film stability analysis, New and Renewable Energy, Membrane Separation Process, Chemical Process Safety, polymers and composite, bio fuels, Nanomaterial / Nanocomposite, Multiphase flow, Polymer-nanoparticle composites, Photo-nano-catalysis, Thin Film Polymeric Coatings, Renewable hydrogen production and Antimicrobial coating, Hydrocarbon Engineering, Polymeric sensors, Anti-dust coatings, Biodegradable and edible films and composites. |
| 03 | Civil Engineering oce@nitj.ac.in | Geotechnical Engineering; Structural Engineering; Transportation Engineering; Environmental Engineering; Hydraulics & Water Resources Engineering |
| 04 | Computer Science & Engineering ocs@nitj.ac.in | Artificial Intelligence, Big Data Analytics, Cloud Computing, Computer Networks, Cyber Warfare, Data Hiding, Data Science, Databases & Data Mining, Distributed Network, Image Processing, Information Security, Machine Learning, Mixed criticality systems, Multimedia Streaming, Real time scheduling Theory, Safety critical systems, Scientific Computing, Soft Computing, Software Defined WSN's, Software Engineering, Steganography, Wireless networks, Pattern Recognition, Internet of Things, Network Security, Biometrics Authentication, Ad hoc Networks, Adversarial ML, Explainable AI, Mobile Ad hoc Networks (MANETs), Probabilistic Data Structures, Deep Learning, Parallel and Distributed Processing, Fault Tolerant, Mobile Computing |
| 05 | Electrical Engineering oic@nitj.ac.in | Control System, Nonlinear Control, Observer Design, Control of Microgrid, Power System Economics, Artificial Intelligence based Electricity Market Design, Renewable Forecasting, Power System Flexibility, Energy Storage, Machine Learning and autonomous systems, Artificial Intelligence and computer vision, Field computations in HV environments, E-field reduction using Optimization techniques, Substation design, Illumination modeling, and design, Condition monitoring of transformers, Bio-systems, Exposure studies |
| 06 | Electronics & Communication Engineering oc@nitj.ac.in | Assistive Technologies, AI for Healthcare, Serious Games, Biomedical signal/Image processing, Image/Signal Processing, Telemedicine/Health Care, VLSI Design, Nano electronic Devices, Biomedical Signal/Image Processing and Advanced Digital Signal Processing, Biomedical signal/Image processing, Plant signaling, Signal Processing, Wireless Communication Systems, Plant |

| | | |
|----|---|---|
| | | Signalling, Nanoscale Devices/ VLSI Design/ High Frequency Design, Wireless Systems/Wireless Sensor Networks/ Signal processing/ Neuro developmental disorder diagnosis and intervention, Antenna Designing, Microwave and RF component Designing, Peer-to-Peer Networks and Convex Optimization, Computer networks, IoT, M2M Communications, RF Circuit Design, Wireless sensor networks and Machine learning, Analytical Modelling of Nanoscale devices, Low power VLSI Design, Study and analysis of new device materials for nanoscale IC design. |
| 07 | Information Technology ocs@nitj.ac.in | Cloud Computing, IoT, Fog/Edge computing, Machine/Deep learning, Soft Computing, Blockchain |
| 08 | Instrumentation & Control Engineering oi@nitj.ac.in | Biomedical Instrumentation & Signal Processing, Intelligent Virtual Inst. System, WSN-IOT & its applications; Smart Sensors & Image Analysis; ML, *Instrumentation, Robotics, *Automation, Biomedical Engineering, Power System Operation & Control ; Renewable Energy ; Soft Computing, Control Systems, Renewable Energy Applications, Process Dynamics & Control, Process Integration with Renewable Energy, Optimization Techniques, Machine/Deep Learning, Computer Vision, UAV Autonomous Navigation, Biomedical Instrumentation, Control System, Sliding Mode Control, Fractional Order Control, Two Wheeled Mobile Robot, UAVs, Solar System, Renewable Energy, Smart materials and Structure based Sensors, Bio Sensors, Deep learning & Machine Learning for Measurement Systems, Biomedical Engineering, Low Temperature Instrumentation, |
| 09 | Industrial & Production Engineering oi@nitj.ac.in | Experimental & Computational Fracture Mechanics, Stress Corrosion Cracking, Fracture And Fatigue Analysis Of Weldments, Finite Element Analysis, Ergonomics, Human Factors Engineering, Logistics And Supply Chain Management, Occupational Health Safety And Environment, Surface Engineering, Thermal Spray Coating Technology, Laser Surface Texturing, Conventional / Advanced Machining Processes, Hybrid Manufacturing, Advanced Alloys & Composites, Additive Manufacturing, Nano-Finishing, Advance Machining Techniques, Forming/Material Modelling, Microwave Processing Of Materials, Advanced Manufacturing, Reliability And Maintenance Engineering, Welding Engineering, Tribology, Planning, Scheduling And Optimization Of Manufacturing Systems, Non-Conventional Manufacturing Processes |
| 10 | Mechanical Engineering ome@nitj.ac.in | Mechatronics, Robotics system Dynamics & Control, Modeling and Simulation of Physical system, Biomechanics, Heat Transfer, Fluid Mechanics, Combustion, Computational Fluid Dynamics(CFD), Solar Thermal and Polygeneration, Alternative Fuels for combustion Engines, IC Engine Emission Control Engine Combustion Investigations Biodiesel Development Fuel Efficient Engines, Welding Technology, Solar Thermal Engineering, Stir Fixation, Welding, Vibration, Fatigue of Composite materials |
| 11 | Textile Technology otx@nitj.ac.in | Technical Textiles, Sewing Threads, Nonwoven Technology, Textile Management, Environmental Pollution caused by Textiles, Seam Engineering, Yarn Manufacturing, Fabric Manufacturing, Medical Textiles, Fabric Structure, Textile wet processing, Bioprocessing applications in Textiles, Spinning, Garment Design, Textile Structural Composites, Fibre reinforced composites, 3D weaving, Mechanical Processing of Textiles, Structure property relationships in textiles, Staple Fibre Spinning, Comfort, Yarn Structural Mechanics, Carpet Characterization, Textile Structure-Property Relationship, Quality Control & Marketing in Textile, Textile management. |
| 12 | Humanities & Management ohm@nitj.ac.in | General Management, Marketing Management, Human Resource Management, Entrepreneurship development and Management. Change Management. Behavioral Finance, Financial Economics, stock market and Portfolio Management, Financial Intermediation, Fintech, Corporate Governance, and Entrepreneurship. Green Marketing, sustainable purchase behavior, Brand Management, Marketing Management, Services Marketing, Rural Marketing and Retail Marketing English: English Language, Literature, ELT, Professional Communication, Gender and Culture Studies, Linguistics, Sociolinguistics, applied linguistics, English Literature, English Literature and Language- Gender Studies: Feminism, 1. Schizoanalysis of Literature. 2. Psychoanalysis and Popular Culture. 3. Health Humanities. 4. Literary and Critical Theory. 5. American Literature. 6. Comic Studies: Comic books and Strips/ Sequential Arts/ Graphic Novels/Animation/ Digital Media and Films |

| | | |
|----|---|---|
| 13 | Physics oph@nitj.ac.in | Laser Plasma Interactions, Theoretical Nuclear Physics, Radiation Physics, Experimental Nuclear Physics, Theoretical High Energy Physics, Condensed Matter Physics (Experimental), Liquid Crystals (Experimental), Condensed Matter Physics (Experimental), Theoretical High Energy Physics, Theoretical Condensed Matter Physics, Quantum Thermodynamics |
| 14 | Chemistry ocy@nitj.ac.in | Superabsorbents / Smart Nano-materials, Biodegradable Green Nano-composites, Nano-science and Technology, Nano- and environment friendly functional smart materials, Materials chemistry/Surface Chemistry, Smart Polymers, Organic Synthesis, Inorganic Chemistry (Synthesis and application of coordination complexes, Nanocatalysis and Organic Synthesis, Advance Materials, Chemosensors for detection of hazardous and bioactive compounds, Ionic liquids, Micellization behavior of surfactants and their applications in material chemistry, Solution thermodynamics of binary liquid mixtures, Green nanomaterials for environmental remediation, Green synthesis of nanomaterials for pollutant detection and remediation of Water, Transition metal based nanostructures: Analytical methodologies and industrial applications, Multifunctional Porous Materials (Metal Organic Frameworks and Covalent Organic Frameworks) for Energy, Environment and Catalysis applications, Nanomaterials for Chemo- and Biosensing and Catalysis, |
| 15 | Mathematics oma@nitj.ac.in | Applied Mathematics (Solid Mechanics Thermoelasticity), Sampling Techniques (Statistics), Commutative Algebra, PDE (Partial Differential Equation), Numerical Analysis, Inequalities, Optimization |
| 16 | Centre for Energy and Environment occe@nitj.ac.in | New and Renewable Energy, Solar Energy, Bio Energy, Biofuels, Hybrid Systems, Fuel Cells, Climate Change. Environmental and Allied areas of Renewable Energy |

B) Eligibility Criteria

1) PhD Full-Time (under Institute Fellowship)

- **Engineering Departments (Sr. No. 1 to 11): Engineering Departments: General (For all Departments):** Master's Degree in Engineering/Technology in the relevant area of research along with Bachelor's Degree in appropriate branch of Engineering/Technology with a first class or minimum 60% marks (or CGPA of 6.5 on 10 point scale) in the qualifying examination.
- For all Engineering Departments (Sr. No. 1 to 11), direct Ph.D. admission is also available in case of candidate with B Tech/B.E./BS (4 year) with a CGPA of 8.0 and above on a 10 point scale or 75% aggregate from a Centrally Funded Technical Institute (CFTI). All such candidates must be GATE qualified. Number of credit courses to be cleared will be 24 credits before comprehensive examination.

Engineering Department Specific Qualifications:

- Department of Biotechnology:** "The Candidate should be B.E./B.Tech and/or M.E./M.Tech in the relevant branches of Engineering/Technology out of which either B.E./B.Tech. or M.E./M.Tech should be in Biotechnology. The candidates with M.Sc.in Biotechnology/Industrial Biotechnology/ Environment Biotechnology/ Biochemical Engineering/ Biochemical Technology/ Biomedical Technology/ Biochemistry/ Microbiology/ Bioinformatics with GATE/NET in Biotechnology are also eligible.
- Department of Chemical Engineering:** The qualification for admission to PhD programme in the Department is Master Degree in Chemical Engineering or its allied branches. Master degree in Science (Chemistry or its equivalent) must have qualified in GATE/NET for scholarship. However, the candidate with Master degree in Science without GATE/NET can join in PhD (Part-Time) Programme.
- Department of Instrumentation and Control Engineering:** The candidate should have Master's degree in Science in related fields but more preference will be given to Master's Degree in Science with Engineering (Ex. M.Sc Engg.). Interdisciplinary department candidates will also be allowed (Ex. CSE, Mechanical Engg./Chemical Engg. Etc.).
- Department of Textile Technology:** The qualification for admission to PhD programme is M. Tech. in any discipline whereas B.Tech should be in Textile Technology/Engineering.
- Centre for Energy and Environment:** Centre for Energy and Environment: MTech. in Renewable Energy,

Chemical Engineering, Electrical Engineering (and allied areas), Instrumentation & Control, Material Science, Agriculture Engineering, Mechanical Engineering, Thermal Engineering, Packaging Technology etc. along with B. Tech. or Master Degree in Environmental Science/Technology or M.Sc. in Physics, Chemistry with a first class of minimum 60% marks (or CGPA of 6.5 on 10 point scale in the qualifying examination).

- **Science Departments:** Master's Degree in appropriate branch of Science with a first class or minimum 60% Marks (or CGPA of 6.5 on 10 point scale) in the qualifying examination.

- **Humanities & Management:**
- **Humanities:**
 - **PhD (English Literature):** Master's degree In English or English Language Teaching with at least 55% marks or a CGPA of 6.0 on 10 point scale.
 - **PhD (Linguistics):** Master's degree in Linguistics or English or English Language Teaching with at least 55% marks or a CGPA of 6.0 on 10 point scale.
- **Management:**
 - **PhD (Management):** Master's degree in Management or Commerce with at least 60% marks or a CGPA of 6.5 on 10 point scale.

The candidates in Humanities and Management must be NET/GATE qualified for the award of stipend-cum- teaching assistantship as per Ministry of HRD norms and Institute norms.

Note 1: Only primary mode of evaluation (CGPA or percentage) as mentioned in the qualifying degree certificate/mark sheet will be considered while verifying eligibility. Conversion from CGPA to percentage or vice versa given by individual Institute/University will not be allowed

Note 2: For the SC / ST / PwD applicants, the eligibility requirement of marks be relaxed by 5%, or by a CGPA of 0.5 (on a 10 point scale) at both the Bachelor's and Master's level

- 1.1 For all Engineering Departments, GATE is not mandatory for scholarship of the candidates with Master's degree in Engineering. Candidate with Master's degree in science must have qualified in GATE/NET for scholarship. However, the candidates with Master's degree in Science without GATE/NET can join in PhD (Part-Time) programme.
- 1.2 For all Engineering Departments, it is also possible for Direct Ph.D. admission in case of candidate with B Tech/B.E/BS (4 year) with a CGPA of 8.0 and above on a 10 point scale or 75% aggregate from a Centrally Funded Technical Institute (CFTI). All such candidates must be GATE qualified. Number of credit courses to be cleared will be 24 credits before comprehensive examination.
- 1.3 Candidates with GATE/NET (JRF/LS)/ UGC (JRF/LS) / Inspire Fellow / Sponsored by some outside agency as a full-time candidate need not clear Institute written examination. For all other candidate(s), Institute written examination is to be cleared. However, GATE/NET (JRF/LS)/ UGC (JRF/LS) / Inspire Fellow/ Sponsorship from outside agency or Institute Examinations are only for shortlisting of the applicants. Mere shortlisting of an applicant does not confirm admission to Ph.D. Programme. The admission shall be solely based upon the performance of individuals during "presentation and interaction" and availability of the Supervisor in the proposed area of research.

2) PhD programmes (Part-Time):

Faculty/Technical/Scientific staff of NITJ; External candidates sponsored by Industry/Institute having R & D facility recognized by NITJ having minimum two-years' experience and possessing the same academic qualifications as that for PhD regular candidates, are eligible to apply for PhD Programme as a part-time candidate. The Part-Time candidate(s) shall be required to submit a No Objection Certificate from their Employers stating that the concerned candidate(s) is an employee of that organization and is allowed to pursue his/her research work at NIT, Jalandhar, and his/her routine work permit him/her to devote sufficient time for research work.

For a foreign national candidate who applies through Ministry of Human Resource Development, Govt. of India, or Indian Council of Cultural Relations, Govt. of India, are eligible to apply provided that they possess the same minimum qualifications as required for PhD admission in case of Regular candidates.

3) PhD (Full-Time) with external fellowships like JRF/DST INSPIRE etc.

Candidate who has already secured funding/fellowship from reputed external agencies like JRF/DST INSPIRE etc. can also apply for admission to PhD (Full-Time) programme. These candidates, if selected, will not be provided any fellowship/contingency grant by the Institute.

4) PhD (Full-Time) in Self-Sponsored Mode (without Institute Fellowship)

Candidates who are willing to pursue PhD in Full-Time mode can also opt for Self-Sponsored Mode. These candidates will not get any stipend/fellowship from the Institute.

5) PhD (Full-Time) for candidates/staff working under the Research Projects sponsored by MHRD/DST/UGC or some other government agency at NIT, Jalandhar

The candidate/staff working under the projects at NIT, Jalandhar sponsored by MHRD/DST/UGC/some other government agency/industrial organization and coordinated by the institute faculty as certified by the concerned Principal Investigator/Coordinator; those having appropriate provisions for salaries and contingency grant for the required shall also be eligible for admission to PhD Full-Time programme, only if, they have at least two years of remaining Project period at NIT Jalandhar.

The academic qualifications for the programmes mentioned at Sr. No. 2, 3, 4 & 5 will be same as that for PhD (Full-Time) as mentioned at Sr. No. B.

C) Seat Matrix:

The number of seats depends upon the number of available research guides in the Institute, vacancies available with the guide and research infrastructure in the concerned Department. The admission of candidates to PhD programme depends on the expertise available in a department and the willingness of the candidate to work in the corresponding research areas. The following table shows the tentative number of seats available in various Departments for admission during July 2022; however, it is not obligatory for the Institute or concerned Department to fill all the seats mentioned in this matrix. The number of seats may increase/decrease as per the vacancies available at the time of admission.

| S. No. | Name of Department | PhD (Full-Time) tentative number of Seats Institute Fellowship | | | | | | Tentative no. of seats under JRF/DST/Inspire Fellowship etc. | Tentative no. of seats under Part-Time (Institute) | Tentative no. of seats under Part Time (Under Project) | Tentative no. of seats under Self-Sponsored Mode |
|--------|---|--|----|-----|----|----|-----|--|--|--|--|
| | | TOTAL | UR | OBC | SC | ST | EWS | | | | |
| 1. | Biotechnology | 7 | 3 | 2 | 1 | 1 | 0 | 08 | 08 | 04 | 04 |
| 2. | Civil Engineering | 13 | 5 | 4 | 2 | 1 | 1 | -- | 07 | -- | - |
| 3. | Chemical Engineering | 17 | 7 | 5 | 3 | 1 | 1 | 04 | 25 | 02 | 18 |
| 4. | Computer Science & Engineering | 11 | 4 | 3 | 2 | 1 | 1 | 07 | 08 | -- | 05 |
| 5. | Electronics & Communication Engineering | 15 | 6 | 4 | 2 | 1 | 2 | 04 | 12 | -- | 04 |
| 6. | Instrumentation & Control Engineering | 12 | 5 | 3 | 2 | 1 | 1 | 01 | 07 | -- | - |
| 7. | Industrial & Production Engg | 15 | 6 | 4 | 2 | 1 | 2 | 01 | 08 | -- | 03 |
| 8. | Mechanical Engg | 18 | 7 | 5 | 3 | 1 | 2 | 01 | 06 | -- | 02 |
| 9. | Textile Technology | 12 | 5 | 3 | 1 | 1 | 2 | -- | 11 | -- | - |
| 10. | Physics | 9 | 4 | 2 | 1 | 1 | 1 | 11 | -- | 02 | - |
| 11. | Chemistry | 9 | 4 | 2 | 1 | 1 | 1 | 08 | 02 | -- | - |
| 12. | Mathematics | 8 | 3 | 2 | 1 | 1 | 1 | 07 | -- | -- | - |

| | | | | | | | | | | | |
|-----|---------------------------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|-----------|
| 13. | Humanities & Management | 4 | 2 | 1 | 1 | 0 | 0 | 07 | 02 | -- | - |
| 14. | Centre for Energy & Environment | 0 | 0 | 0 | 0 | 0 | 0 | -- | 02 | -- | 02 |
| 15. | Information Technology | 2 | 1 | 1 | 0 | 0 | 0 | 02 | 02 | -- | - |
| 16. | Electrical Engineering | 3 | 1 | 1 | 1 | 0 | 0 | -- | -- | -- | - |
| | TOTAL | 155 | 63 | 42 | 23 | 12 | 15 | 61 | 100 | 08 | 38 |

Reservation of the PhD (Full-Time) Institute Fellowship Seats shall be as per Government of India norms and number of seats available in the respective Department.

Horizontal Reservation of 5% to PwD candidates in each category (UR, EWS, SC, ST, OBC) shall be applicable

Candidates are advised to apply accordingly. No request for admission to a reserved category seat which is 'NIL' as per this advertisement shall be considered.

D) Admission Procedure

- i. Candidates with GATE/NET (JRF/LS)/ UGC (JRF/LS) / Inspire Fellow / Sponsored by some outside agency as a full-time candidate need not clear Institute written examination. For all other candidate Institute written examination is to be cleared. However, GATE/NET (JRF/LS)/ UGC (JRF/LS) / Inspire Fellow/ Sponsorship from outside agency or Institute Examinations are only for shortlisting of the applicants. Mere shortlisting of an applicant does not confirm admission to Ph.D. Programme. The admission shall be solely based upon the performance of individuals during "presentation and interaction" and availability of the Supervisor in the proposed area of research.
- ii. The admission to PhD programme (Full-Time, Part-Time & Self-Sponsored) in all disciplines mentioned in this advertisement shall be made purely on the basis of a "presentation" to be made by the shortlisted applicants in their proposed area of research followed by "interaction" to be conducted by the respective Department Admission Committee. Mere shortlisting of an applicant does not confirm admission to Ph.D. Programme.
- iii. Shortlisting of candidates (other than GATE/NET (JRF/LS)/ UGC (JRF/LS) / Inspire Fellow / Sponsored by some outside agency as a full-time candidate) shall be done by Departmental Admission Committee for the process of "presentation and interaction" for the applicants. For this purpose, a screening test shall be conducted by the respective Departments. Only those applicants who score marks above the cutoff of 40%, i.e. 24 marks out of 60 for UR category candidates, and 35% i.e. 21 out of 60 for SC/ST/OBC/EWS/PWD candidates in the screening test shall be eligible for presentation and interaction process. Marks obtained in the screening test shall not be counted for preparation of final merit list of the successful candidates. The details of the Syllabi will be separately notified on the Institute website i.e. www.nitj.ac.in
- iv. The Pattern of Examination shall be as of GATE and NET examination. The Screening Test will be of MCQ Mode.
- v. The Department Admission Committee for each Department shall recommend the suitable candidates for admission based on its assessment of presentation and interaction. Marks obtained in the screening test shall not be counted for preparation of final merit list of the successful candidates.
- vi. Merely shortlisting of an applicant does not confirm admission to Ph.D. programme. The admission shall be solely based upon performance of individuals during "presentation and interaction" and availability of the Supervisor in the proposed area of research. The Department Admission Committee/Institute reserves the right not to recommend any candidate for admission to PhD in the respective Department if the performance of the shortlisted candidates is not found satisfactory during "presentation and interaction". The decision of Department Admission Committee (approved by the competent authority of the Institute) shall be final.
- vii. The merit list of the selected candidates (based on presentation & interaction) shall be prepared on marks basis. A candidate who scores less than 40 marks (out of 100) for "presentation & interaction" shall not be

considered “qualified” for admission to PhD programme and his/her name shall not be recommended for admission by Departmental Admission Committee.

- viii. The list of recommended candidates for admission to PhD (Full-Time & Self-Sponsored) programme shall be made in order of merit. The candidates who will be in order of merit can opt for the Self-Sponsored mode of admission otherwise the seat available in Self-Sponsored mode will be made available to the next candidate in order of merit. There will no upgradation of the candidate admitted under Self-Sponsored mode to Full-Time (Institute Fellowship) mode.
- ix. All the admitted candidates shall be governed by the PhD regulations of the Institute and other instructions issued by the Institute time to time.

E) Other Issues

- i. An applicant is required to apply on different application forms in case he/she wants his/her candidature to be considered in more than one Department. The candidates applying under Full-Time (Institute Fellowship) need not apply separately i.e. they have to only opt for the willingness whether they are willing to pursue PhD under Self-Sponsored mode.
- ii. Category (UR/EWS/OBC/SC/ST/PWD) once chosen by the applicant in his/her application form shall not be changed at a later stage. Candidate(s) claiming any reservation category (EWS/OBC/SC/ST/PWD) and also UR category should apply on separate application forms for the purpose.
- iii. OBC/EWS Certificate must have been issued on or after **1st April 2022** so that the candidates from creamy layer are identified. No certificate issued before this date shall be acceptable.
- iv. All the candidates should ensure that they possess the required educational qualification by the last date of submission of the application under this Advertisement.
- v. Certificate Checking: The certificates (in original) of all the candidates recommended for admission shall be checked by the individual Department before deposition of fee by the candidates.
- vi. The candidate (in service) applying for full-time PhD programmes need to apply through proper channel. Any application without “No Objection Certificate” from the employer shall not be considered for shortlisting.
- vii. The application without proof of application fee as applicable/self-attested copies of documents/certificates/testimonials shall be rejected and shall not be considered for shortlisting.

F) Reservation

The reservation rules will be followed as per Government of India guidelines prevailing at the time of admission, at the Institute level for Full-Time programme (i.e. 40.5% for UR, 27% for OBC, 15% for SC and 7.5% for ST and 10% for EWS category) as per the seat matrix shown in this Advertisement.

G) Teaching Assistantship-cum-Scholarships

Eligible candidates for stipend cum teaching assistantship shall be paid as per instructions issued by Ministry of Human Resource Development (MHRD) from time to time.

- (i) For all Engineering Departments, GATE is not mandatory for scholarship for the candidates with Master’s degree in Engineering. Candidate with Master’s degree in science must have qualified in GATE/NET for scholarship. For all other Programmes, GATE/NET shall be compulsory for Institute Scholarship. Candidates admitted under Full-Time (Institute Fellowship/JRF/any other external Fellowship) will be allotted certain teaching load as prescribed by the Institute time to time.
- (ii) No Stipend cum Teaching Assistantship/Scholarship and Contingency grant shall be given to the candidates admitted as under Part-Time and Self-Sponsored PhD programme. However, Stipend-cum-Teaching Assistantship/Scholarship and Contingency grant to the candidate working under the Sponsored Projects coordinated by the faculty of the institute shall be given as per the terms and conditions of the project.
- (iii) In case, the provisional admission is done under some project grant/financial support from other funding agencies, the relevant rules of the funding agency shall be implemented for the disbursement of

stipend/scholarship. No financial assistance shall be given by the Institute in such cases. All other criteria of admission to Ph.D. programmes shall remain same for such candidates.

- (iv) Stipend-cum-teaching assistantship for Research Scholars admitted to the appropriate discipline under Institute support shall be started from the date of his/her joining in the Department.
- (v) The candidates admitted under PhD Full-Time (Self-Sponsored) programme shall not be allotted any teaching load.

H) Important Dates

| Sr. No. | Activity | Date |
|---------|--|---|
| 1. | Last date for submission of Applications | 18.05.2022 |
| 2. | Display of list of eligible candidates by the concerned HOD in the Institute website | 23.05.2022 |
| 3. | Written Test (if required, in the respective Department. Reporting time 9:30 AM) | 26.05.2022* |
| 4. | Display of list of candidates eligible for presentation & interaction | 26.05.2022 by 4:00 PM in the respective Departments |
| 5. | Presentation/interaction by all eligible candidates | 27.05.2022 & 28.05.2022** |
| 6. | Display of list of selected candidates | 31.05.2022 |
| 7. | Deposition of fee & Registration | 10.06.2022 |
| 8. | Commencement of classes | Shall be notified on the Institute website |

* Humanities & Management Department written test will be held on 27.05.2022 (Reporting time 11:00 AM)

** Humanities & Management Department Presentation/interaction by the candidates who have qualified the test will be held on 28.05.2022

All the dates mentioned above are tentative subject to change at any stage by the competent authority. All the candidates interested in seeking admission are requested to visit the Institute website regularly for updates.

- I) All disputes pertaining to the admissions shall fall within the jurisdiction of Jalandhar only.
- J) All admissions will be provisional till these are confirmed subject to medical fitness, payment of all the fees, fulfillment of eligibility conditions, and verifications of certificates by the Academic Section of the Institute. The candidates whose result will be awaited as on date of counselling must have to submit the result (original/revaluation) immediately after its notification but latest by **September 30, 2022**, failing which the admission may be cancelled.
- K) The Institute reserves the right to modify or cancel this Advertisement/any part of this Advertisement at any stage.

Dean Academic