



15th September, 2026

**IMPORTANT INFORMATION TO THE CANDIDATES APPLIED FOR THE
POST OF TECHNICIAN AT NIT PATNA AGAINST ADVERTISEMENT No.
NITP/Rect-NT/03/2026**

Selection Process

Selection Process for the post of Technician will consist of two stages as detailed below:

- (a) **Stage-I:** Multiple Choice Question (MCQ) Based Test
- (b) **Physical Document verification**
- (c) **Stage-II:** Trade Test [Qualifying in nature]. Only for those who are successful after Stage-I.

The candidates are required to report for the MCQ Test (Stage-I) on 24.10.2026 at 2:00PM and the Trade Test (Stage-II) will be held on 26.10.2026 at 9:00 AM. Both the Tests will be held at NIT Patna, Ashok Rajpath Campus. Late comers will not be allowed to appear in the test.

Scheme of Examination

(a) Stage-I [Multiple Choice Question (MCQ) Based Test]

- The Test will be of 90 Minutes duration and will be Computer Based Test (CBT).
- The maximum marks for the Test will be 100 having 100 Multiple Choice Questions (MCQs) and will comprise of 30 questions from Part A of the Syllabus and 70 questions from Part B of the Syllabus.
- All questions will carry equal marks and there will be no negative marking.
- Minimum Qualifying Marks: [UR/EWS/OBC(NCL):40%; SC/ST/PwD: 35%].
- Based on the marks obtained in the MCQ Test (Stage-I), candidates will be shortlisted for Trade Test (Stage-II) in the ratio of 1:10 for trade-wise and reservation-wise vacancies.

There will be a detailed document verification of the candidates called for Trade Test (Stage-II). Only those candidates who are found eligible after the document verification will be allowed to appear in the Trade Test (Stage-II).

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(b) Stage-II [Trade Test]

- Only those who are shortlisted from [Stage-I], and have been found eligible after the document verification will be allowed to appear in the Trade Test.
- Trade Test will be specific to the department/section/Trade for which the applicant has applied.
- The Trade Test will be of 90 Minutes duration.
- The Trade Test will be qualifying in nature i.e. the candidates will be assessed as either “Qualified” or “Not Qualified”, and will have no weightage in preparing the final merit list.

Final Selection

- (a) Only those candidates who qualify in the Trade Test (Stage-II) will be considered for the final merit list.
- (b) **The final merit list will be prepared on the basis of marks obtained by the candidates in the MCQ Test (Stage-I) only.**

Preparation of final merit list:

- (i) If there is a Un-reserved seat for a particular trade then

A) a list of candidates for unreserved posts, if any will be prepared in the order of merit. This list will also include reserved category candidates securing position in the merit at par with Un-reserved category candidates;

B) A separate list for EWS, OBC(NCL), OBC(NCL)-PwD SC and ST candidates will be drawn in the order of merit excluding the name of reserved category candidates who figure in the unreserved category list on their own merit without relaxed standard.

Else,

the merit list will be prepared for each category.

- (ii) **Tie-breaking in final merit:** the inter-se merit of candidates securing same marks will be decided in the following manner:
1. Marks secured in the MCQ test (Stage-I) (Candidates



- securing higher marks will be ranked higher). If the marks obtained in the MCQ test are same, then;
2. Marks Scored in MCQ Test from Part B of the Syllabus. If the marks obtained in the MCQ Test from Part B of the Syllabus are same, then;
 3. Date of Birth (Candidates higher in age will be ranked higher). If the date of birth is also same, then;
 4. Alphabetical order of the name recorded in matriculation or equivalent certificate will be considered.
- (c) The test materials, if any, will be taken back from the candidates.
- (d) No TA/DA shall be paid for appearing in the tests.
- (e) Any request for change of date of test(s) will not be entertained. The Institute reserves the right of cancelling the candidature of any candidate found indulging in any malpractice, i.e., hiding any material information, misrepresentation of facts or canvassing for candidature.
- (f) The information for test will be sent on the email mentioned in the application form and Institute shall not be held responsible for the non-receipt of information on the email address mentioned in the application form.
- (g) Candidates have been allowed to appear in the MCQ Test **provisionally without** verification of Mark sheets/Degrees/Certificates/ validity of Certificates etc.
- (h) Mere appearance in the Test(s) or qualifying in the Test does not entitle a candidate to be considered for appointment unless he/she fulfils the eligibility conditions.
- (i) The candidates must carry a valid Aadhar Card for appearing in the Test.
- (j) **APPLICANTS MUST FULLY SATISFY THEMSELVES ABOUT THEIR ELIGIBILITY AS PRESCRIBED IN THE ADVERTISEMENT, BEFORE APPEARING IN THE TEST.** If an applicant is inadvertently allowed to appear at the Test who otherwise does not fulfil the minimum eligibility requirement, he/she cannot, at a later date, use that as a right to claim that



he/she meets the eligibility requirements. The Institute reserves the right to cancel the candidature of a candidate/or cancel the appointment if it is found that:

- (a) **Minimum eligibility requirements are not fulfilled.**
- (b) **False documents submitted**
- (c) **Any other similar valid reason.**

Syllabus

Candidates may note that the Syllabus given below is not exhaustive but indicative only.

PART A (Common for all Trades)

1. Aptitude - Averages, Number System, Profit and Loss, Time and Work, Problems on Trains, Compound Interest, Decimal Fractions, Calendar, Area, Problems on Numbers, Square Root and Cube Root, Boats and Streams, Probability, Interest, Percentage, Ratio, Time and Distance, Problems on Ages, Partnership, Clock, Simplifications, Volume and Surface, Problems on H.C.F and L.C.M, Logarithm, Chain Rule, Pipes and Cistern, Odd Man Out and Series, Height and Distance
2. Reasoning - Number Series Compilation, Missing Number Finding, Continuous Pattern Series, Direction Sense Test, Puzzle, Verbal Classification, Matching Definitions, Logical Deduction, Series Compilations, Classification, Missing Character Finding, Odd Man Out, Blood Relations, Analogy, Coding and Decoding, Truth Verification of The Statement, Syllogisms, Analogies, Verbal Reasoning, Statement And Conclusions, Letter and Symbol Series, Logical Problems, Logical Sequence Of Words, Arithmetic Reasoning, Data Sufficiency.
3. General English- Antonyms, Synonyms, Spelling Check, Change of Voice, Spotting Errors, Sentence Improvement, One Word Substitute, Selecting Words, Sentence Corrections, Idioms and Phrases, Communication Skills, Common Error Detection, Sentence Compilation, Ordering of Words, Ordering of Sentences, Verbal Analogies, Sentence Formation, Completing Statements, Change of Speech.
4. General Knowledge - Indian History, Indian Economy, Indian Culture, Environmental Science, Awards and Honors, Famous Places in India, World Organization, Sports, Books and Authors, Famous Personalities, Days and Years, Indian and World Geography, Indian Politics, General Sciences, and Current Affairs
5. Computer Fundamentals - Operating System, MS Office, Internet based operations and email, antivirus and other online tools used in day-to-day office work.

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PART B

Technician in Software

- 1. Knowledge of web pages/server:** Internet, WWW, Web Browsers, Web Server installing/configuring/maintaining, URLs, HTTP/HTTPS protocols (Get/Post/Put/Patch/Delete methods, status codes, headers, cookies, authentication, request/response handling), API server, Frontend and Backend architecture, Docker, Docker Compose, Nginx configuration, Reverse proxy, Routing, Git version.
- 2. Knowledge of web development, and programming skills for web page development:** HTML, XML, PHP, CSS, JavaScript, Client/server architecture, Client-side scripting, Server-side scripting, NextJS, TypeScript, REST APIs, API server integration with NextJS, JSON data structures and payloads, Docker and Docker Compose, Nginx, reverse proxy, routing, SSL/TLS, Git/version control, software development workflows.
- 3. Maintenance of Institute/department level web pages/web site etc.:** Website installing/configuring, API server integration with web frontend, Webpage/website deployment troubleshooting, Debugging through application logs, software development workflows.
- 4. Fundamental knowledge of Installing and maintaining web server hardware and software:** Windows Server Configuration, Active Directory, User and Group Creation and Management, GPO, File System and Storage, Permissions, DNS, DHCP, Server Roles and Features (IIS), Virtualization (Hyper-V), Backup and Recovery, Windows Licensing and Activation (Key Management Service), Windows Deployment Services, Remote Desktop Services, Windows Server Update Services, Print Services, Disk Management, Network Policy Server, Certificate Services, Windows Firewall with Advanced Security, Task Scheduler, Server Manager, System Tools (Resource Monitor, Performance Monitor, Device Manager, Event Viewer), PowerShell scripting, Windows Admin Center, Containers, NIC Teaming; Server computer hardware components, Server chassis and form factors (Tower, Rack, Blade), Rack Infrastructure (including Rails, Cable Management, and Power Distribution Units), Power Backup (Rack UPS, Power Supply Redundancy), Storage Devices, RAID, RAID Controller / Host Bus Adapter, Hot-swappable Components, Network Interface Cards (NIC), BIOS/UEFI Configuration, Hardware Virtualization, Monitoring and Diagnostics, Server Maintenance and Troubleshooting, Remote Management Technologies (iDRAC, iLO, etc.), Firmware Updates, Trusted Platform Module (TPM), KVM.
- 5. Knowledge of web programming/ programming (C/C++/Java/Python)/ Database(ORACLE/MS-SQL)/MS-Excel/MS-Access/Operating System(Win/Linux):** JavaScript, RESTful architecture, Request/response lifecycle, NextJS component-based frontend, TypeScript/NextJS web interfacing, NodeJS/Fastify API backend development/consuming, JSON, Docker, Nginx, SSL/TLS; C/C++/Java/Python programming; PostgreSQL/MySQL, ORACLE/MS-SQL database operations, SQL queries, relations, ORM, Prisma; MS-Excel/MS-Access basic and advanced operations; Windows OS, Windows server OS, Linux OS, Kernel, Packages in Linux.



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- 6. Maintenance of PC/Server etc.:** Windows OS installation methods, Safe Mode Boot options, Last Known Good Configuration, Windows Diagnostic Tools, System Restore, Restore point, Windows Recovery tools and methods; Linux OS installation, Boot Loaders, Linux Administration, Linux networking services, Troubleshooting through log files.
- 7. Maintenance of data:** Backup of data, application logs, Troubleshooting (of frontend, API, database), Data recovery techniques after hardware/software failure, Prevention against cyber-attacks.

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Technician in Hardware

- 1. Computer Hardware:** Basic and practical knowledge of RAM, ROM, Cache Memory, Buffer Memory, BIOS, motherboard, chipsets, expansion slots, processors and other computer components; SMPS, hard drives, SSDs, storage devices and interfaces; display technologies including LED, LCD, VGA, DVI and HDMI; multimedia and portable/mobile computing devices; printers and printer troubleshooting.
- 2. Operating Systems:** Basic and practical knowledge of Windows installation and configuration; Safe Mode and boot options; Last Known Good Configuration; Windows diagnostic and recovery tools; System Restore and creation of restore points; backup, recovery and restore procedures; basic knowledge of UNIX/Linux operating system, differences between Windows and Linux, Linux installation, boot loaders, kernel, shells and utilities; basic configuration of networking services.
- 3. Application Software:** Basic and practical knowledge of installation and operation of various office tools; Word, Excel, Power point, document creation, editing, formatting, shortcuts and tables; Excel worksheets, basic formulas and functions, data entry and printing, Online meeting platforms hosting and troubleshooting, Media Player.
- 4. Web Technology:** Knowledge of Internet related services & web servers
- 5. Troubleshooting and Support:** Identification, installation, replacement and troubleshooting of computer hardware & printer components; operating system and application installation; CCTV configuration, identification of hardware/network faults and their troubleshooting. Printer Installation & Sharing on Network; basic network configuration; and diagnosis and rectification of common computer hardware and software problems. Maintenance of Smart Classes equipment, projector, Audio/Video System, basic troubleshooting of UPS. Connecting of devices in network and related troubleshooting.

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Technician in Networking

- 1. Computer Networking:** Basic and practical knowledge of LAN, WAN, WLAN and Internet and Intranet; IPv4/IPv6; network media and network topologies; basic functions and operation of Hubs, Switches, Routers, Modems, Transceivers, Wireless Controllers and Access Points; Ethernet and Wi-Fi; AP configuration, basic knowledge of DHCP, DNS; UTP/STP, Cat5e/Cat6, fibre-optic cables, RJ-45 and cable testing; IP CCTV, NVR and PoE; basic network security; and practical troubleshooting using Ping, Traceroute, IP/DNS/DHCP and connectivity checks.
- 2. Application Software:** Basic and practical knowledge of installation and operation of various office tools; Word, Excel, Power point, document creation, editing, formatting, shortcuts and tables; Excel worksheets, basic formulas and functions, data entry and printing, Online meeting platforms hosting and troubleshooting, Media Player.
- 3. Web Technology:** Knowledge of Internet related services & web servers
- 4. Troubleshooting & Support:** Basic practical skills in computer and network installation, LAN cable preparation, testing, IP configuration, switch/router and Wi-Fi configuration, CCTV configuration, identification of hardware/network faults and its troubleshooting. Printer Installation & Sharing on Network. Installation & maintenance of Smart Class equipment, Installation and maintenances of Bio-matric devices. Wiring of LAN cable and networking and remote support.

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Technician in Material Engineering

1. Engineering Materials and Their Properties

Classification of engineering materials into metals, alloys, ceramics, polymers, composites, semiconductors and nanomaterials. Ferrous and non-ferrous materials, including iron, steel, cast iron, aluminium, copper, zinc, nickel and titanium. Basic physical, mechanical, thermal, electrical, magnetic, optical and chemical properties of materials, including density, porosity, melting point, thermal expansion, electrical conductivity and resistivity. Basic atomic structure and types of chemical bonding, including ionic, covalent and metallic bonding. Crystal structures such as simple cubic (SC), body-centred cubic (BCC), face-centred cubic (FCC) and hexagonal close-packed (HCP). Unit cell, lattice parameters, coordination number and atomic packing factor. Crystalline and amorphous materials, grains and grain boundaries, and basic crystal defects such as vacancies, interstitial defects, substitutional defects and dislocations.

2. Material Synthesis and Powder Processing

Basic principles and laboratory procedures involved in the synthesis and preparation of materials. Solid-state synthesis, powder preparation, mixing, grinding, ball milling, sieving, compaction, calcination and sintering. Solution-based synthesis involving dissolution, precipitation, filtration, washing and drying. Basic sol-gel processing, including precursor preparation, hydrolysis, condensation, gel formation, drying and calcination. Fundamentals of nanomaterial synthesis, including top-down and bottom-up approaches and preparation of nanoparticles, nanostructured materials and thin films.

3. Material Characterization Techniques

Basic principles, operation and applications of material characterization techniques. X-ray diffraction (XRD), including Bragg's law, diffraction patterns, phase identification, crystallinity and basic crystallite-size determination. Fundamentals of mechanical testing of materials, including tensile, compression, bending, hardness. Tensile-test concepts such as stress, strain, elastic region, yield strength, ultimate tensile strength, toughness, brittle and ductile fracture.

4. Nanomaterials and Nanotechnology

Basic concepts of nanotechnology and nanomaterials, including nanoparticles, nanocomposites, nanostructured materials. Basic top-down and bottom-up synthesis techniques and general applications of nanomaterials.

5. Physical Principles

Basic physics relevant to technical and laboratory applications, including units and dimensions, measurement and errors, force, motion, work, energy, power, heat, temperature and thermal expansion. Fundamentals of electricity, current, voltage, resistance, Ohm's law, electrical power and magnetism. Basic concepts of waves, optics and modern physics relevant to material characterization and laboratory instruments.

6. Fortran Programming

Basic Fortran programming and computational concepts, including program structure, variables, constants, data types, arithmetic, relational and logical operators.



Technician in Computing

- 1. MS Word:** Text formatting, Styles and templates, Creating official letters and reports, Header/Footer, Page numbering, Watermarks, Spell check, Thesaurus, and Mail Merge, Table creation and formatting.
- 2. MS Excel:** Excel Basics, Basic formulas: SUM, AVERAGE, MIN, MAX, COUNT, Cell Referencing & Formula Copying, Formulas & Functions: VLOOKUP, HLOOKUP, XLOOKUP, IF statements, SUMIFS/COUNTIFS, Data Tools: Sorting, Filtering (Advanced), Data Validation, Conditional Formatting, Charts: Creating dynamic graphs (Pivot Tables and Pivot Charts), Macros: Recording simple macros and assigning to buttons.
- 3. MS PowerPoint:** Creating slides using templates. Inserting pictures, tables, and charts. Applying slide transitions and basic animations.
- 4. Server/PC/Printer/Lab Equipment:** Knowledge of basic components and functioning of servers, personal computers, printers and computer laboratory equipment. Installation, configuration, maintenance and troubleshooting of PCs, servers, printers and associated peripherals. Identification and replacement of defective hardware components, basic system setup, routine preventive maintenance and handling of commonly used laboratory equipment.
- 5. Programming in C/C++:** Fundamentals of programming using C and C++; data types, variables, operators, input/output statements, conditional and looping statements, functions, arrays, strings, pointers and structures. Basic object-oriented programming concepts in C++ including classes, objects, constructors, inheritance and polymorphism. Compilation, execution and debugging of simple programs.
- 6. Programming in Java:** Fundamentals of Java programming; data types, operators, control statements, arrays, strings, methods, classes and objects, constructors, inheritance, interfaces, polymorphism and exception handling. Compilation, execution and debugging of basic Java programs

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Technician in CSE

- 1. MS Word:** Text formatting, Styles and templates, Creating official letters and reports, Header/Footer, Page numbering, Watermarks, Spell check, Thesaurus, and Mail Merge, Table creation and formatting.
- 2. MS Excel:** Excel Basics, Basic formulas: SUM, AVERAGE, MIN, MAX, COUNT, Cell Referencing & Formula Copying, Formulas & Functions: VLOOKUP, HLOOKUP, XLOOKUP, IF statements, SUMIFS/COUNTIFS, Data Tools: Sorting, Filtering (Advanced), Data Validation, Conditional Formatting, Charts: Creating dynamic graphs (Pivot Tables and Pivot Charts), Macros: Recording simple macros and assigning to buttons.
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- 6. Programming in Java:** Fundamentals of Java programming; data types, operators, control statements, arrays, strings, methods, classes and objects, constructors, inheritance, interfaces, polymorphism and exception handling. Compilation, execution and debugging of basic Java programs

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