

NPCIL Exam Pattern

It is strongly recommended that all candidates obtain precise and pertinent details concerning the NPCIL Exam Pattern, as this pattern holds significant importance for applicants in preparing for the upcoming examination.

Nurse, Operation Theatre Assistant, Pharmacist

The exam will comprise 50 MCQs for 1 hour. 3 marks will be awarded for each correct answer. 1 mark will be deducted for each incorrect answer.

Topics	No. of Questions	Marks	Duration
Mathematics	20 Questions	150 Marks	1 Hour
Science	20 Questions		
General Awareness	10 Questions		
Total	50 Questions		

Stipendiary Trainee/ Scientific Assistant

The exam will comprise 50 MCQs for 1 hour. 3 marks will be awarded for each correct answer. **1 mark will be deducted** for each incorrect answer. Further, the tests may be conducted in single/ multiple sessions depending upon logistics requirements.

Part 1

- English - 20 Questions
- General Awareness - 20 Questions
- Quantitative Aptitude - 20 Questions

Part 2

- Respective Discipline - 60 Questions

Stipendiary Trainee/ Technician

Topics	No. of Questions	Marks	Duration
Mathematics	20 Questions	150 Marks	1 Hour
Science	20 Questions		
General Awareness	10 Questions		
Total	50 Questions		

The exam will comprise 50 MCQs for 1 hour. 3 marks will be awarded for each correct answer. 1 mark will be deducted for each incorrect answer. Further, the tests may be conducted in single/ multiple sessions depending upon logistics requirements.

Assistant, Steno

There will be a screening examination to be held to shortlist candidates. The format of the screening examination shall be common for all the Non-Technical Cadres. In keeping with the minimum educational qualification of graduation as per the Recruitment Norms, the questions will be of Graduation Level. The Examination will consist of 50 MCQ for 1 hour. The test will be conducted for a maximum of 150 marks. 3 marks will be awarded. 1 mark will be deducted for each incorrect answer.

Topics	No. of Questions	Marks	Duration
General Knowledge & Current Affairs	25 Questions	150 Marks	1 Hour
Computer Knowledge	15 Questions		
English	10 Questions		
Total	50 Questions		

NPCIL Exam Syllabus

Computer Knowledge

- MS Word, Microsoft OneNote
- Microsoft Access
- Introduction to Computer Science
- Boolean Algebra
- Computer Networks
- Emerging Technologies and Web Publishing
- PC Software and Office Automation
- Database Management System
- Data Structures
- MS PowerPoint
- MS Visio and MS Excel
- Microsoft Outlook
- The Internet
- Workplace Productivity Tools
- MS Project, Microsoft Publisher

English

- Reading Comprehension
- Jumbled Sentence
- Phrase Replacement
- One Word Substitution
- Error Spotting
- Sentence Improvement
- Cloze Test
- Fill in the Blanks
- Wrong Spelt
- Active Voice and Passive Voice

- Direct and Indirect Speech

Mathematics

- Relations and Functions
- Logarithms
- Complex Numbers
- Quadratic Equations
- Sequences and Series
- Trigonometry
- Cartesian System of Rectangular Coordinates
- Statistics
- Differentiation
- Introduction to Three-Dimensional Geometry
- Straight Lines
- Circles
- Conic Sections
- Permutations and Combinations
- Vectors
- Exponential and Logarithmic Series
- Sets and Set Theory
- Probability Function
- Limits and Continuity
- Applications of Derivatives
- Indefinite Integrals Binomial Theorem
- Matrices
- Determinants
- Definite Integrals

Science

- Physical World and Measurement
- Organic Chemistry
- Atomic Nucleus / Solid and Semi-Conductor Device
- Optics
- Electromagnetic Waves
- Mechanics of Solids and Fluids
- Food
- Electromagnetic Induction and Alternating Current
- Metals and Non-Metals
- Laws of Motion
- Computer Science
- Physiology and Human Diseases
- Kinematics and Current Events
- Electrostatics
- Magnetic Effect of Current and Magnetism
- Work, Energy, and Power
- Physiology and Human Diseases
- Principles of Communication

- Nutrition and Health
- Dual Nature of Matter and Radiations
- Heat Thermodynamics

General Awareness/ General Knowledge/ Current Affairs

- Directions
- Arithmetical Reasoning
- Judgment
- Problem-Solving
- Number Series
- Syllogistic Reasoning
- Decision Making
- Visual Memory
- Analogies
- Non-Verbal Series
- Mirror Images
- Cubes and Dice
- Coding-Decoding
- Alphabet Series
- Clocks & Calendars

Quantitative Aptitude

- Simplification
- Pie Chart
- Geometry
- Fundamental Arithmetical operation
- Algebra
- Data Interpretation
- Number System
- Profit & Loss
- Problem On Ages
- HCF & LCM
- Simple & Compound Interest
- Bar Graph
- Time & Speed
- Pictorial Graphs
- Average
- Percentages
- Time & Work
- Statistical Charts
- Mensuration
- Trigonometry
- Area
- Investment

Respective Discipline

Computer Science Engineering

- Knowledge of C++
- Operating Systems – DOS
- PHP
- MS SQL Server
- Oracle PL_SQL Architecture
- ASP.NET
- ADO.NET
- Java & JavaScript
- Manageable switch/ router & wireless LAN with the network security
- Firewall & antivirus
- UML
- Object-Oriented designing
- Proposing and creating architecture and re-usable libraries in.NET
- JavaScript
- Networking with LAN/WAN
- Novel
- Window OS client & server & Linux OS client & server.
- Web Services
- Window Services
- JSON
- Grid Computing, Distributed
- OS
- Image processing, Digital signal processing
- Image processing
- VLSI
- Embedded System

Mechanical Engineering

- Refrigeration and air-conditioning
- Engineering Materials
- Metal Casting
- Turbomachinery
- Operations
- Thermodynamics
- Numerical Methods
- The Strength of Materials
- Operations Research
- Tool Engineering
- Vector Calculus
- The design of Machine Elements
- Calculus
- Joining Processes
- Forming Processes
- Fluid Mechanics

- Probability & Statistics
- Engineering Mechanics
- Differential Equations
- Theory of Machines

Electrical Engineering

- Network Analysis
- Analog and Digital Electronics
- Electromagnetic Theory
- Instrumentation
- Electronics Devices
- Machines
- Control Systems
- Power Systems
- Power System Protection
- Switchgear and Protection
- Power System Analysis & Control
- Utilization of Energy
- Power Electronics & Drives

Electronics Engineering

- Analog Communications
- Power Electronics & Drives
- Digital Communications
- Advanced Communications
- Circuit Theory/ Digital Electronics
- Analog Electronics
- Basic Electronics/ Power Electronics
- Computer Hardware
- Measurement & Instrumentation
- Microprocessors & Microcontrollers
- Industrial Electronics

Civil Engineering

- Building Design and Drawing
- Building Technology
- Construction Management and Quantity Surveying
- Economics and Management
- Environmental Engineering
- Environmental Studies in Civil Engineering
- Functional Design of Buildings
- Geomatics
- Geosciences
- Geotechnology
- Mechanics of Fluids
- Mechanics of Solids

- Open Channel Hydraulics and Hydrology
- Structural Analysis
- Structural Design
- Surveying
- Transportation Engineering
- Water Resources Engineering

Instrumentation

- Basics of Circuits and Measurement Systems
- Analog Electronics
- Digital Electronics
- Signals, Systems, and Communications
- Electrical and Electronic Measurements
- Control Systems and Process Control
- Analytical, Optical, and Biomedical Instrumentation
- Industrial Safety
- Safety, Health & Environmental Management
- Safety Engineering
- Safety Legislation
- Occupational Health & Industrial Hygiene
- Risk Management & Permit to Work System
- Controlling Environment Pollution

Physics

- Electromagnetic Induction and Alternating Current
- Atomic Nucleus/ Solid and Semiconductor Devices
- Kinematics
- Organic Chemistry
- Metals and Non-Metals
- Dual Nature of Matter and Radiations
- Physical World and Measurement
- Optics
- Nutrition and Health
- Electromagnetic Waves
- Principles of Communication
- Heat Thermodynamics
- The Motion of System of Particles & Rigid Body
- Laws of Motion
- Magnetic Effect of Current and Magnetism
- Mechanics of Solids and Fluids
- Electrostatics
- Physiology and Human Diseases
- Work, Energy, and Power

Chemical Engineering

- Physical Chemistry

- Inorganic Chemistry
- Organic Chemistry
- Atomic Structure
- Chemical Bonding
- States of Matter & Ionic Equilibrium
- Thermodynamics & its Applications
- Oxygen Containing Functional Groups
- Electrochemistry
- Organic Molecules

Note: This Syllabus is only for the sake of reference. Kindly go through the link provided below.

