NDA I 2024 Exam Pattern

The Union Service Commission (UPSC) prescribes the exam pattern of NDA I 2024 EXAM.
संघ लोक सेवा आयोग द्वारा प्रस्तावित परीक्षा NDA I 2024 परीक्षा प्रारूप।

NDA selection process is divided into three stages-
NDA चयन प्रक्रिया तीन चरणों में आयोजित की जाती है–

1. Written Examination / लिखित परीक्षा
2. SSB Interview/SSB / साक्षात्कार
3. Medicals / मेडिकल

However, the written exam of NDA itself is divided into two parts i.e.
हालांकि NDA लिखित परीक्षा स्वम दो चरणों में आयोजित होती है

- NDA written exam of Mathematics/NDA की गणित की लिखित परीक्षा
- NDA written exam of General Ability Test (GAT)/NDA की सामान्य योग्यता परीक्षण

Now, the General Ability Test (GAT) is further sub divided into two parts:
अब, सामान्य योग्यता परीक्षण के भी दो चरण है

- Part-A English Test / भाग–अ अंग्रेजी परीक्षा
- Part-B General Awareness of General Knowledge Test / भाग–ब सामान्य ज्ञान की सामान्य परख परीक्षण

The structure of the NDA exam pattern for written exams is as mentioned below.

NDA Exam Pattern – Written Exam				
NDA Written Exams	Subject	Maximum marks	Number of Questions	Duration
Paper 1	Mathematics	300	120	2 hrs 30 mins
Paper 2	GAT	600	150	2 hrs 30 mins
Total		900	270	5 hours

NDA Selection Process Important pointers- / NDA चयन प्रक्रिया महत्वपूर्ण तथ्य

1. All the questions in the NDA exam will be objective i.e., Multiple Choice Questions.
   इस परीक्षा में समस्त पूछे गए प्रश्न वैकल्पिक होंगे

2. The medium of the exam will be bilingual (English & Hindi) with a total of 900 marks.
   परीक्षा द्विभाषी (हिन्दी तथा अंग्रेजी) के साथ कुल 900 अंक होगे।

3. Total 270 questions are asked of which 120 questions are from Mathematics and 150 questions from GAT section.
   कुल 270 प्रश्न पूछे जाते हैं जिनमें से 120 प्रश्न गणित और 150 प्रश्न सामान्य योग्यता परीक्षण से सम्मलित होते है।

4. The NDA syllabus covered in the exam is 10 + 2 standards NDA
   पाठ्यक्रम पूर्णतः 10 + 2 परीक्षा स्तर की होती है

5. There is negative marking for wrong answers which is given in detail below-
   प्रत्येक गलत उत्तर के लिए ऋणात्मक अंक निर्धारित है जिसका विवरण निम्नवत् है

NDA Marking Scheme/NDA अंकन योजना

The UPSC formulates the NDA marking scheme. As per the scheme, no marks are deducted if a question is left unanswered but there is a provision of negative marking for wrong answers. Candidates will lose 1/3rd of marks allotted to each question for incorrect answers. Go through the detailed NDA marking scheme below:

UPSC NDA मार्किंग योजना तैयार करता है। योजना के अनुसार, यदि कोई प्रश्न अनुत्तरित रह जाता है तो कोई अंक नहीं काटा जाता है, लेकिन गलत उत्तरों के लिए नकारात्मक अंकन का प्रावधान है। गलत उत्तरों के लिए उम्मीदवारों को प्रत्येक प्रश्न के लिए आवंटित अंकों का 1/3rd काटा जाएगा। नीचे विस्तृत NDA अंकन योजना

NDA Exam Pattern – Negative Marking Scheme		
Written Exams	Marks for each correct answer	Marks deducted for each incorrect answer
Mathematics	2.5	0.83
GAT	4	1.33

After qualifying the written exam of NDA, candidates have to appear for the SSB Interview rounds. The pattern of NDA Interview is as mentioned below:

NDA की लिखित परीक्षा उत्तीर्ण करने के बाद, उम्मीदवारों को एसएसबी साक्षात्कार के दौर के लिए उपस्थित होना है। एनडीए साक्षात्कार का पैटर्न निम्नानुसार है:

NDA – SSB Interview Pattern		
Stage 1/प्रथम चरण	Screening Test/छटनी परीक्षा	Verbal and non-verbal tests./ मौखिक और गैर-मौखिक परीक्षण। 2. PPDT/चित्र अनुभूति और विश्लेषण परीक्षण
Stage 2/द्वितीय चरण	Psychological Test/मनोवैज्ञानिक परीक्षण	1. Thematic Apperception Test (TAT) विषयगत समप्रत्यक्ष परीक्षा 2. Word Association Test (WAT) शब्द समावेशन परीक्षा 3. Situation Reaction Test (SRT) परिस्थिति जन्य प्रतिक्रिया परीक्षण 4. Self Description Test (SD) स्वम विवरण परीक्षण
	Group Testing Officers Test समूह परीक्षण अधिकारी परीक्षण	1. GD 2. GPE 3. PGT 4. HGT 5. IOT 6. Command Task/निर्देश लक्ष्य 7. Snake race/Group Obstacle Race सर्प दौड़/तथा बाधा दौड़ 8. Individual lecture व्यक्तिगत व्याख्यान 9. FGT
	Personal Interview & Conference व्यक्तिगत साक्षात्कार एवंम सम्मेलन	–

NDA Syllabus – National Defence Academy

The topic-wise syllabus of each subject is as mentioned below:
प्रत्येक विषय के विषयवार पाठ्यक्रम

NDA Syllabus

PAPER-I MATHEMATICS (Code No. 01) (Maximum Marks-300)

1. **ALGEBRA**
   - Concept of set, operations on sets, Venn diagrams. De Morgan laws, Cartesian product, relation, equivalence relation. Representation of real numbers on a line. Complex numbers—basic properties, modulus, argument, cube roots of unity. Binary system of numbers. Conversion of a number in decimal system to binary system and vice-versa. Arithmetic, Geometric and Harmonic progressions. Quadratic equations with real coefficients. Solution of linear inequations of two variables by graphs. Permutation and Combination. Binomial theorem and its applications. Logarithms and their applications.

2. **MATRICES AND DETERMINANTS :**
   - Types of matrices, operations on matrices. Determinant of a matrix, basic properties of determinants. Adjoint and inverse of a square matrix, Applications-Solution of a system of linear equations in two or three unknowns by Cramer's rule and by Matrix Method.

3. **TRIGONOMETRY :**
   - Angles and their measures in degrees and in radians. Trigonometrical ratios. Trigonometric identities Sum and difference formulae. Multiple and Sub-multiple angles. Inverse trigonometric functions. Applications-Height and distance, properties of triangles.

4. **ANALYTICAL GEOMETRY OF TWO AND THREE DIMENSIONS**:
   - Rectangular Cartesian Coordinate system. Distance formula. Equation of a line in various forms. Angle between two lines. Distance of a point from a line. Equation of a circle in standard and in general form. Standard forms of parabola, ellipse and hyperbola. Eccentricity and axis of a conic. Point in a three dimensional space, distance between two points. Direction Cosines and direction ratios. Equation two points. Direction Cosines and direction ratios. Equation of a plane and a line in various forms. Angle between two lines and angle between two planes. Equation of a sphere.

5. **DIFFERENTIAL CALCULUS :**
   - Concept of a real valued function–domain, range and graph of a function. Composite functions, one to one, onto and inverse functions. Notion of limit, Standard limits—examples. Continuity of unctions—examples, algebraic operations on continuous functions. Derivative of function at a point, geometrical and physical interpretation of a derivative—applications. Derivatives of sum, product and quotient of functions, derivative of a function with respect to another function, erivative of a composite function. Second order derivatives. Increasing and decreasing functions. Application of derivatives in problems of maxima and minima.

6. **INTEGRAL CALCULUS AND DIFFERENTIAL EQUATIONS :**
   - Integration as inverse of differentiation, integration by substitution and by parts, standard integrals involving algebraic expressions, trigonometric, exponential and hyperbolic functions. Evaluation of definite integrals—determination of areas of plane regions bounded by curves—applications.
   - Definition of order and degree of a differential equation, formation of a differential equation by examples. General and particular solution of a differential equations, solution of first order and first degree differential equations of various types—examples. Application in problems of growth and

decay.

7. **VECTOR ALGEBRA :**
   - Vectors in two and three dimensions, magnitude and direction of a vector. Unit and null vectors, addition of vectors, scalar multiplication of a vector, scalar product or dot product of two vectors. Vector product or cross product of two vectors. Applications—work done by a force and moment of a force and in geometrical problems.

8. **STATISTICS AND PROBABILITY :**
   - **Statistics**: Classification of data, Frequency distribution, cumulative frequency distribution—examples. Graphical representation—Histogram, Pie Chart, frequency polygon— examples. Measures of Central tendency—Mean, median and mode. Variance and standard deviation—determination and comparison. Correlation and regression.
   - **Probability**: Random experiment, outcomes and associated sample space, events, mutually exclusive and exhaustive events, impossible and certain events. Union and Intersection of events. Complementary, elementary and composite events. Definition of probability—classical and statistical—examples. Elementary theorems on probability—simple problems. Conditional probability, Bayes' theorem—simple problems. Random variable as function on a sample space. Binomial distribution, examples of random experiments giving rise to Binominal distribution.

PAPER-II GENERAL ABILITY TEST (Code No. 02) (Maximum Marks—600)

Part 'A'—ENGLISH (Maximum Marks—200)

The question paper in English will be designed to test the candidate's understanding of English and workman like use of words. The syllabus covers various aspects like: Grammar and usage, vocabulary, comprehension and cohesion in extended text to test the candidate's proficiency in English.

Part 'B'—GENERAL KNOWLEDGE (Maximum Marks—400)

The question paper on General Knowledge will broadly cover the subjects : Physics, Chemistry, General Science, Social Studies, Geography and Current Events.

- The syllabus given below is designed to indicate the scope of these subjects included in this paper. The topics mentioned are not to be regarded as exhaustive and questions on topics of similar nature not specifically mentioned in the syllabus may also be asked.

Candidate's answers are expected to show their knowledge and intelligent understanding of the subject.

Section 'A' (Physics)

- Physical Properties and States of Matter, Mass, Weight, Volume, Density and Specific Gravity, Principle of Archimedes, Pressure Barometer.
- Motion of objects, Velocity and Acceleration, Newton's Laws of Motion, Force and Momentum, Parallelogram of Forces, Stability and Equilibrium of bodies, Gravitation, elementary ideas of work, Power and Energy.
- Effects of Heat, Measurement of Temperature and Heat, change of State and Latent Heat, Modes of transference of Heat.
- Sound waves and their properties, Simple musical instruments.
- Rectilinear propagation of Light, Reflection and refraction.
- Spherical mirrors and Lenses, Human Eye.
- Natural and Artificial Magnets, Properties of a Magnet, Earth as a Magnet.
- Static and Current Electricity, conductors and Non- conductors, Ohm's Law, Simple Electrical Circuits, Heating, Lighting and Magnetic effects of Current, Measurement of Electrical Power, Primary and Secondary Cells, Use of X-Rays.
- General Principles in the working of the following:

Simple Pendulum, Simple Pulleys, Siphon, Levers, Balloon, Pumps, Hydrometer, Pressure Cooker, Thermos Flask, Gramophone, Telegraphs, Telephone, Periscope, Telescope, Microscope, Mariner's Compass; Lightening Conductors, Safety Fuses.

Section 'B' (Chemistry)

- Physical and Chemical changes.
- Elements, Mixtures and Compounds, Symbols, Formulae and simple Chemical Equations, Law of Chemical Combination (excluding problems).
- Properties of Air and Water.
- Preparation and Properties of Hydrogen, Oxygen, Nitrogen and Carbondioxide, Oxidation and Reduction.
- Acids, bases and salts.
- Carbon—different forms.
- Fertilizers—Natural and Artificial.
- Material used in the preparation of substances like Soap, Glass, Ink, Paper, Cement, Paints, Safety Matches and Gun- Powder.
- Elementary ideas about the structure of Atom, Atomic Equivalent and Molecular Weights, Valency.

Section 'C' (General Science)

- Difference between the living and non-living.
- Basis of Life—Cells, Protoplasms and Tissues. Growth and Reproduction in Plants and Animals.
- Elementary knowledge of Human Body and its important organs.
- Common Epidemics, their causes and prevention.
- Food—Source of Energy for man. Constituents of food, Balanced Diet.
- The Solar System—Meteors and Comets, Eclipses.
- Achievements of Eminent Scientists.

Section 'D' (History, Freedom Movement etc.)

- A broad survey of Indian History, with emphasis on Culture and Civilisation.
- Freedom Movement in India.
- Elementary study of Indian Constitution and Administration.
- Elementary knowledge of Five Year Plans of India. Panchayati Raj, Co-operatives and Community Development.
- Bhoodan, Sarvodaya, National Integration and Welfare State, Basic Teachings of Mahatma Gandhi.
- Forces shaping the modern world; Renaissance, Exploration and Discovery; War of American Independence.
- French Revolution, Industrial Revolution and Russian Revolution.
- Impact of Science and Technology on Society.
- Concept of one World, United Nations, Panchsheel, Democracy, Socialism and Communism.
- Role of India in the present world.

Section 'E' (Geography)

1. The Earth, its shape and size. Lattitudes and Longitudes, Concept of time.
2. International Date Line.
3. Movements of Earth and their effects.
4. Origin of Earth. Rocks and their classification; Weathering—Mechanical and Chemical, Earthquakes and Volcanoes.
5. Ocean Currents and Tides
6. Atmosphere and its composition; Temperature and Atmospheric Pressure, Planetary Winds, Cyclones and Anti-cyclones; Humidity; Condensation and Precipitation;
7. Types of Climate
8. Major Natural regions of the World.

9. Regional Geography of India—Climate, Natural vegetation. Mineral and Power resources; location and distribution of agricultural and Industrial activities. Important Sea ports and main sea, land and air routes of India.
10. Main items of Imports and Exports of India.

Section 'F' (Current Events)

1. Knowledge of Important events that have happened in India in the recent years.
2. Current important world events.
3. Prominent personalities—both Indian and International including those connected with cultural activities and sports.

NOTE : Out of maximum marks assigned to part 'B' of this paper, questions on Sections 'A', 'B', 'C', 'D', 'E' and 'F' will carry approximately 25%, 15%, 10%, 20%, 20% and 10% weightages respectively.

TRISHUL DEFENCE ACADEMY HAS BEEN COMPREHENSIVE OF NDA SYLLABUS FOR WHICH EFFORTS HAS BEEN MAXIMUM IN PROVIDING THE COMPLETE DETAILS OF NDA SYLLABUS TO MAKE YOUR PREPARATION EASIER & SMARTER.

WISH YOU ALL THE SUCCESS
JAI HIND