

Ground Zero Defence Academy

NDA 2026 Syllabus - Complete Guide for

Overview

The NDA 2026 examination is conducted by the Union Public Service Commission (UPSC) twice a year for admission to the Army, Navy, and Air Force wings of the National Defence Academy.

The comprehensive syllabus covers two main papers: Mathematics and General Ability Test (GAT), designed to assess candidates' academic knowledge and aptitude for military leadership.

Exam Pattern 2026

Paper	Duration	Questions	Maximum Marks	Negative Marking
Mathematics	2.5 hours	120	300	-0.83 marks
General Ability Test (GAT)	2.5 hours	150	600	-1.33 marks
Total	5 hours	270	900	Yes

The GAT paper is further divided into English (200 marks) and General Knowledge (400 marks).

Detailed Mathematics Syllabus

Core Topics and Weightage

Algebra (25 Questions - 62.5 Marks)

- Sets, relations, and functions
- Complex numbers and their properties
- Arithmetic, geometric, and harmonic progressions
- Quadratic equations with real coefficients
- Permutations and combinations
- Binomial theorem and applications
- Logarithms and their properties

Matrices and Determinants (30 Questions - 75 Marks)

- Types of matrices and operations
- Determinant properties and calculations
- Adjoint and inverse of square matrices
- Solution of linear equations using Cramer's rule and matrix method

Trigonometry (30 Questions - 75 Marks)

- Angles measurement in degrees and radians
- Trigonometric ratios and identities
- Sum and difference formulae
- Multiple and sub-multiple angles
- Inverse trigonometric functions
- Applications in height, distance, and triangle properties

Analytical Geometry (20 Questions - 50 Marks)

- Rectangular Cartesian coordinate system
- Distance formula and equation of lines
- Circles, parabola, ellipse, and hyperbola
- Three-dimensional geometry concepts

Calculus (45 Questions - 112.5 Marks)

- Differential Calculus: Limits, continuity, differentiation rules, applications
- Integral Calculus: Integration techniques, definite integrals, differential equations

Vector Algebra (15 Questions - 37.5 Marks)

- Vector operations in 2D and 3D
- Scalar and vector products
- Applications in geometry and physics

Statistics and Probability (10 Questions - 25 Marks)

- Random experiments and sample space
- Probability definitions and theorems

- Conditional probability and Bayes' theorem
- Binomial distribution

General Ability Test (GAT) Syllabus

English Section (50 Questions - 200 Marks)

Topic	Questions	Marks
Grammar and Usage	8	32
Vocabulary (Synonyms & Antonyms)	10	40
Comprehension	6	24
Spotting Errors	5	20
Fill in the Blanks	10	40
Sentence Improvement	6	24
Ordering of Words	5	20

Key Areas Covered:

- Parts of speech, tenses, voice, and narration
- Reading comprehension and inference
- Error identification and sentence correction
- Vocabulary building and contextual usage

General Knowledge Section (100 Questions - 400 Marks)

Physics (25 Questions - 100 Marks)

- Physical properties and states of matter
- Motion, velocity, acceleration, and Newton's laws

- Force, momentum, and gravitation
- Heat, temperature, and sound waves
- Light, reflection, refraction, and optical instruments
- Electricity, magnetism, and Ohm's law
- Simple machines and general physics principles

Chemistry (16 Questions - 64 Marks)

- Physical and chemical changes
- Elements, mixtures, and compounds
- Properties of air and water
- Preparation of gases (H_2 , O_2 , N_2 , CO_2)
- Acids, bases, salts, and pH concepts
- Carbon forms and atomic structure
- Materials used in daily life applications

General Science (11 Questions - 44 Marks)

- Living and non-living matter differentiation
- Cell structure, tissues, and organ systems
- Human body systems and their functions
- Plant biology and photosynthesis
- Diseases, health, and nutrition
- Environmental science concepts

History (17 Questions - 68 Marks)

- Ancient India: Indus Valley, Vedic period, Mauryas, Guptas
- Medieval India: Delhi Sultanate, Mughal Empire
- Modern India: British rule, freedom movement
- World History: Renaissance, French Revolution, Industrial Revolution
- Constitutional History: Indian Constitution basics

- International Relations: United Nations, India's role

Geography (17 Questions - 68 Marks)

- Physical Geography: Landforms, climate, natural vegetation
- Indian Geography: Location, physical features, resources
- World Geography: Continents, oceans, major countries
- Economic Geography: Agriculture, industries, population
- Environmental Geography: Conservation and sustainability
- Map Reading: Scale, symbols, topographical maps

Current Affairs (17 Questions - 68 Marks)

- National developments and government policies
- International events and relations
- Sports achievements and awards
- Science and technology advancements
- Defence and security matters

SSB Interview and Medical Standards

SSB Interview Process (900 Marks)

Day 1: Screening Test

- Officer Intelligence Rating (OIR)
- Picture Perception and Description Test (PPDT)

Day 2: Psychological Tests

- Thematic Apperception Test (TAT)
- Word Association Test (WAT)
- Situation Reaction Test (SRT)
- Self-Description Test (SDT)

Day 3-4: Group Testing Officer Tasks

- Group discussions and planning exercises

- Progressive Group Tasks and obstacles
- Command tasks and lecturettes

Day 5: Conference and Interview

- Personal interview with assessors
- Final recommendation decision

Physical and Medical Standards

Height Requirements:

- General candidates: 157 cm minimum
- Air Force: 162.5 cm minimum
- Gorkhas and hill region candidates: 5 cm relaxation

Physical Fitness Standards:

- 2.4 km run in 15 minutes
- Minimum 20 push-ups and sit-ups
- 8 chin-ups minimum
- Rope climbing (3-4 meters)

Medical Requirements:

- Perfect vision (6/6) or correctable to 6/6
- Normal hearing ability
- Healthy dental condition (minimum 14 points)
- Well-developed chest (81 cm minimum with 5 cm expansion)
- No chronic diseases or psychiatric conditions

Training at NDA

Three-Year Program Structure

The NDA follows a comprehensive three-year training program divided into six terms, with each academic year running from January to May and July to December.

Daily Schedule at NDA:

- 6:00 AM: Morning drill and PT
- 8:30 AM: Breakfast
- 9:00 AM - 1:00 PM: Academic classes
- 3:00 PM - 6:00 PM: Games and sports
- 6:30 PM - 8:00 PM: Study time
- 8:30 PM: Dinner
- 10:00 PM: Lights out

Financial Support:

- Government covers lodging, books, uniforms, boarding, and medical treatment
- Personal expenses: ₹3,000 per month (covered by parents/guardians)
- Additional aid of ₹1,000 per month for families earning below ₹21,000 monthly

Preparation Strategy

Subject-wise Approach

Mathematics Preparation:

- Focus on NCERT books of Classes 11 and 12
- Practice theorem proofs and applications
- Emphasize calculus and trigonometry (highest weightage)
- Regular problem-solving from previous years' papers

GAT Preparation:

- English: Daily newspaper reading, grammar practice
- Physics & Chemistry: Focus on concepts rather than numerical
- History & Geography: Use standard textbooks and current affairs magazines
- Current Affairs: Regular updates from reliable news sources

Recommended Timeline

6-Month Intensive Program:

- Months 1-2: Foundation building and concept clarity

- Months 3-4: Topic-wise practice and mock tests
- Months 5-6: Revision, previous years' papers, and SSB preparation

The NDA 2026 syllabus demands comprehensive preparation across multiple disciplines, combining academic excellence with personality development for military leadership. Success requires dedicated study, regular practice, and holistic development to meet the challenges of both written examination and SSB interview.

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