Subject-Wise Preparation Tips for NDA II 2026 Mathematics

Mathematics is a **critical component** of the NDA II 2026 Written Exam, carrying **300 marks** out of the total **900 marks**. A strong command over mathematical concepts is essential not only to clear the cut-off but also to secure a top rank. The exam, conducted by the Union Public Service Commission, tests Class 11 and 12 level concepts with an emphasis on speed, accuracy, and problem-solving ability.

This guide provides **subject-wise preparation tips, strategy, and resources** to help aspirants excel in NDA Mathematics.

NDA II 2026 Mathematics Exam Overview

Paper	Marks	Duration	Type
Mathematics	300	2.5 Hours	Objective (MCQs)

- Negative marking: **−0.83 per wrong answer**

- Maximum marks: 300

- All questions are **multiple choice**

Subject-Wise Preparation Tips

1️ Algebra

Topics:

- Sets, Relations, and Functions

- Complex Numbers & Quadratic Equations

- Sequences and Series (AP, GP, HP)

- Permutations and Combinations

- Binomial Theorem & Logarithms

Preparation Tips:

- Focus on formulae and practice derivations

- Solve previous year NDA algebra questions

- Create a **formula notebook** for quick revision

- Practice **10–15 problems daily** to build speed

2️⃣ Matrices and Determinants

Topics:

- Types of Matrices (Square, Diagonal, Identity)

- Matrix Operations

- Determinants and their Properties

- Inverse of a Matrix

- Solving Linear Equations using Cramer's Rule

Preparation Tips:

- Memorize properties of determinants

- Solve multiple problems on **matrix multiplication and inversion**

- Attempt previous years' NDA questions on matrices and determinants

- Use **shortcuts for determinant evaluation** to save time

3️⃣ Trigonometry

Topics:

- Trigonometric Ratios & Identities

- Heights and Distances

- Solutions of Triangles

- Inverse Trigonometric Functions

Preparation Tips:

- Revise all **fundamental trigonometric identities** regularly

- Practice **application-based problems** for heights and distances

- Solve at least **5–10 daily problems** to improve accuracy

- Focus on understanding, not rote memorization

4️⃣ Analytical Geometry

2D Geometry Topics:

- Straight Lines, Pair of Lines

- Circle, Parabola, Ellipse, Hyperbola

- Coordinate Geometry fundamentals

3D Geometry Topics:

- Coordinates in Space

- Direction Cosines and Ratios

- Equation of Line and Plane

- Angle between lines and planes

Preparation Tips:

- Memorize **standard equations of curves and lines**

- Solve diagram-based problems for better visualization

- Use graphing to understand concepts wherever possible

5️⃣ Differential Calculus

Topics:

- Limits & Continuity

- Differentiation (Standard Rules)

- Derivatives of Composite & Implicit Functions

- Applications: Increasing/Decreasing Functions, Maxima & Minima

Preparation Tips:

- Learn **derivation rules and standard formulae** thoroughly

- Solve **optimization problems** regularly

- Practice previous NDA calculus questions to improve speed

6️⃣ Integral Calculus & Differential Equations

Topics:

- Integration as Inverse of Differentiation

- Methods of Integration

- Definite Integrals & Area under Curves

- First-Order Differential Equations

Preparation Tips:

- Revise **integration formulae** daily

- Solve a variety of definite integral problems

- Practice differential equations with examples from previous NDA papers

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7️⃣ Vector Algebra

Topics:

- Vector Addition & Subtraction

- Scalar (Dot) and Vector (Cross) Products

- Applications in Geometry

Preparation Tips:

- Focus on **dot & cross product formulas**

- Visualize vectors in 2D & 3D space for better understanding

- Practice application-based vector problems

8️ Statistics & Probability

Statistics Topics:

- Mean, Median, Mode

- Variance & Standard Deviation

Probability Topics:

- Random Experiments & Sample Space

- Events and Probability Laws

- Conditional Probability & Bayes' Theorem

Preparation Tips:

- Understand **concepts before formulas**

- Practice **solving problems with shortcuts**

- Solve previous years' NDA probability & statistics questions

General Preparation Strategy for NDA Mathematics

1. **Start with NCERT Basics** – Class 11 & 12 NCERT books for all topics

2. **Daily Practice** – Allocate at least 2 hours daily to Mathematics

3. **Formula Revision** – Maintain a formula notebook for quick revisions

4. **Solve Previous Year Papers** – Analyze trends and frequently asked questions

5. **Mock Tests** – Take weekly full-length mock tests to improve speed and accuracy

6. **Focus on Weak Areas** – Identify weak topics and revise them consistently

Recommended Resources

- NCERT Mathematics Books (Class 11 & 12)

- NDA Previous Year Question Papers

- Arihant NDA/NA Exam Prep Books

- Online mock tests & test series

❓ FAQs – NDA II 2026 Mathematics

1. What is the weightage of Mathematics in NDA II 2026?

Mathematics carries **300 marks out of 900**, roughly 33% of the total written exam.

2. Is NCERT enough for NDA Mathematics preparation?

Yes, for basics, but practice with **previous year papers and mock tests** is essential.

3. Are there negative marks in NDA Mathematics?

Yes, **0.83 marks are deducted** for every wrong answer.

4. How much time should I devote daily to NDA Maths?

Ideally, **2–3 hours daily** with regular revision and problem-solving.

5. Which topics are most important for NDA Mathematics?

Algebra, Trigonometry, Calculus, and Coordinate Geometry carry high weightage.

6. How can first-time aspirants improve speed in Mathematics?

Daily practice, mock tests, and formula memorization are key.

7. Are there shortcuts for NDA Maths problems?

Yes, especially in **determinants, algebra, and trigonometry**, but accuracy must not be compromised.

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