

NDA Exam Pattern & Syllabus

Mathematics + GAT (English & General Knowledge) · Negative marking · SSB · Narayan Gurukul Academy (ClassApna)

NDA Written Exam Pattern — 900 marks

Paper 1 — Mathematics (300 marks)

- 120 questions, 2.5 hours.
- +2.5 marks per correct answer; -0.83 per wrong answer (1/3 negative marking).
- Paper is English-only.

Paper 2 — General Ability Test, GAT (600 marks)

- 150 questions, 2.5 hours. +4 marks per correct answer; -1.33 per wrong answer.
- Part A English (50 questions, 200 marks).
- Part B General Knowledge (100 questions, 400 marks).

Negative marking in NDA is one-third of the marks per question. Unattempted questions carry no penalty — skip over guessing.

Mathematics syllabus

- Algebra: sets, complex numbers, quadratic equations, permutations, combinations, binomial theorem, logarithms, A.P., G.P., H.P.
- Matrices and Determinants: operations, properties, inverse, solving linear equations.
- Trigonometry: ratios, identities, heights and distances, inverse trigonometry.
- Analytical Geometry: straight lines, circles, conics (parabola, ellipse, hyperbola).
- Differential Calculus: limits, continuity, differentiation, maxima and minima.
- Integral Calculus and Differential Equations: integration rules, definite integrals, first-order equations.
- Vector Algebra: vectors, dot and cross products, applications.
- Statistics and Probability: mean, median, mode, dispersion, probability basics.

GAT — English (Part A)

- Grammar and usage, vocabulary.
- Fill-in-the-blanks, spotting errors, sentence improvement.
- Reading comprehension, paragraph reformulation.

GAT — General Knowledge (Part B)

- Physics: mechanics, heat, light, electricity, sound, modern physics basics.
- Chemistry: matter, atoms and molecules, metals and non-metals, everyday chemistry.
- General Science (Biology): human body, plants, diseases and immunity basics.
- History: ancient, medieval and modern India, the freedom struggle, major movements.
- Geography: earth, Indian physical and economic geography, world geography essentials.
- Current Events: national and international affairs of the last year.

SSB Interview — 900 marks

- Stage 1 (screening): Officer Intelligence Rating test + Picture Perception and Discussion Test, same day.
- Stage 2 (five days): psychology tests, group testing (GD, GOREs, command tasks), personal interview.
- Medical examination follows the SSB.

Selection total = 900 written + 900 SSB = 1800 marks. The SSB is an independent skill — most selections are decided there.

Eligibility

- Indian citizens, unmarried, both male and female.
- Age: 16.5 to 19.5 years at the time of joining the academy.
- Army wing: Class 12 pass in any stream.
- Air Force and Naval wings: Class 12 pass with Physics, Chemistry and Mathematics.
- Class 12 (final year) candidates can apply for the written exam.

Exam pattern reference (3 rows, internal)

- Paper 1 — Mathematics — 120 questions · 300 marks · 2.5 hours
- Paper 2 — General Ability Test (GAT) — 150 questions · 600 marks · 2.5 hours
- Written total — 270 questions · 900 marks · —

GAT internal split

- English (Part A) — 50 200
- General Knowledge (Part B) — 100 400
- GK: Physics — $\approx 25\%$ —
- GK: Chemistry — $\approx 15\%$ —
- GK: General Science (Biology) — $\approx 10\%$ —
- GK: History & Freedom Struggle — $\approx 20\%$ —
- GK: Geography — $\approx 20\%$ —
- GK: Current Affairs — $\approx 10\%$ —