



Crack NDA I 2022 A Course for 11th Students

Score 450+ Marks in NDA I 2022





Exam Pattern & Syllabus for Indian Coast Guard (Navik & Yantrik)

Let's look at the Indian Coast Guard exam format for each of the two positions: Yantrik and Navik.

Indian Coast Guard Yantrik and Navik Exam Pattern

Depending on the position applied for, candidates must pass the following tests.

Post	Sections Involved	Passing Marks	Remarks
Navik (DB)	Section-I	30 (for UR/EWS/ OBC) 27 (for SC/ST)	
Navik (GD)	Section (I+II)	30+20=50 (for UR/ EWS/ OBC) 27+17= 44 (for SC/ST)	Passing in section I & II separately is compulsory
Yantrik (Electrical)	Section (I+III)	30+20= 50 (for UR/ EWS/ OBC) 27+17= 44 for (SC/ST)	Passing in section I & III separately is compulsory
Yantrik (Electronics)	Section (I+IV)	30+20= 50 (for UR/ EWS/ OBC) 27+17= 44 (for SC/ST)	Passing in section I & IV separately is compulsory
Yantrik (Mechanical)	Section (I+V)	30+20= 50 (for UR/ EWS/ OBC) 27+17= 44 (for SC/ST)	Passing in section I & V separately is compulsory

The following are the details of the sections stated above:

Name of Exam	Details	Subject-wise allocation	Passing Marks	Syllabus
Section 1	Maximum Marks: 60 Time alloted: 45 mins. Total no. of	Maths - 20 Science - 10 English - 15 Reasoning - 10 GK - 5	30 (for UR/EWS/ OBC category) 27 (for SC/ST category)	Class 10 th Syllabus



	Questions: 60			
Section 2	Maximum Marks: 50 Time allotted: 30 mins. Total no. of Questions: 50	Maths - 25 Physics - 25	20 (for UR/EWS/ OBC category) 17 (for SC/ST category)	Class 12 th Maths and Physics Syllabus
Section 3	Maximum Marks: 50 Time allotted: 30 mins. Total no. of Questions: 50	Electrical Engineering - 50	20 (for UR/EWS/ OBC category) 17 (for SC/ST category)	Diploma Level Electrical Engineering syllabus
Section 4	Maximum Marks: 50 Time allotted: 30 mins. Total no. of Questions: 50	Electronics Engineering - 50	20 (for UR/EWS/ OBC category) 17 (for SC/ST category)	Diploma Level Electronics Engineering syllabus
Section 5	Maximum Marks: 50 Time allotted: 30 mins. Total no. of Questions: 50	Mechanical Engineering - 50	20 (for UR/EWS/ OBC category) 17 (for SC/ST category)	Diploma Level Mechanical Engineering syllabus



Indian Coast Guard Yantrik Syllabus

Indian Coast Guard Yantrik Syllabus for General Knowledge:

- Awards
- Authors
- Culture
- Flowers
- Defence
- Religion
- Languages
- Capitals
- Wars
- Neighbors
- Current Affairs
- History
- Anthem
- Heritage & Arts
- Dance
- Currencies
- Bird
- Animal
- Abbreviations
- Discoveries
- Diseases & Nutrition
- Song
- Flag
- Freedom Movement
- Monuments
- Personalities
- Important National Fact
- Championships
- Winners
- Common Names
- Full forms
- Soil
- Rivers
- Mountains
- Ports
- Inland Harbours
- Number of Players
- Culture
- Religion



Dance

Indian Coast Guard Yantrik Syllabus for Reasoning:

- Figural Analogy
- Clocks & Calendars
- Number Series
- Embedded figures
- Mathematical Reasoning
- Statements & Arguments
- Blood relation
- Similarities & differences
- · Coding & decoding
- Alphabet Series
- Puzzles

Indian Coast Guard Yantrik Syllabus for English:

- Idioms and Phrases
- Tenses
- Synonyms
- Vocabulary
- Articles
- Verb
- Fill in the Blanks
- Adverb
- Comprehension
- Sentence Rearrangement
- Direct or Indirect Speech
- Grammar
- Active & Passive Voice
- Transformation of Sentences
- Antonyms

Indian Coast Guard Yantrik Syllabus for Aptitude:

- Probability
- Time & Distance
- Quadratic Equations
- Races & Games
- Numbers & Ages



- Averages
- Mensuration
- Profit & Loss
- Problems on Numbers
- Simple Equations
- Permutations & Combinations
- Compound Interest
- Boats & Streams
- Simplification & Approximation
- Mixtures & Allegations
- Simple Interest
- Problems on LCM & HCF
- Time & Work Partnership
- Problems on Trains
- Ratio & Proportion
- Areas
- Volumes
- Percentages

Indian Coast Guard (ICG) Yantrik Syllabus for Electrical Engineering:

- Non-conventional Energy sources such as solar, wind, biomass
- Measurement of Electrical Power
- Current Power Sector scenario in India & others Electrical
- Power Engineering
- Distribution Network Installation and load studies
- Functions of capacitors and reactors
- Low Voltage constraints and resolving thereof
- Analysis of Dist. Transformers
- Meters and Testing
- Engineering topics
- Switchgear and protection (MC/LV)
- LT Switchgear design and testing
- Distribution HT/LT Line parameters
- Performance of line fault analysis.

Indian Coast Guard Yantrik Syllabus for Mechanical:

- Engineering Mechanics
- Energy conservation
- Engineering Materials



- The Strength of Materials
- Management Information System
- Machining & Machine Tool Operations
- Thermodynamics
- Meteorology & Inspection
- Product Design & Development
- Fluid Machines
- Heat Transfer
- Fluid Mechanics
- Theory of Machines
- Operations Research
- Machine Design
- Industry Safety
- Inventory Control
- Machining & Machine Tool Operations
- Metal Casting
- Production Planning & Control
- Computer Integrated Manufacturing Design
- Inventory Control

Indian Coast Guard Yantrik Syllabus for Electronics and Telecommunication Engineering:

- Analog & Digital Communication Systems
- Control Systems
- Computer Organization & Architecture
- Electro Magnetics
- Advanced Electronics Topics
- Basic Electrical Engineering
- Materials Science
- Advanced Communication Topics
- Basic Electronics Engineering
- Electronic Measurements & Instrumentation
- Network Theory
- Analog & Digital Circuits

Indian Coast Guard Navik Syllabus (Section-1)

Indian Coast Guard Navik Syllabus for Mathematics:

Mathematical Simplification



- Ratio & Proportion
- Algebraic Identities
- Linear Equations & Polynomials
- Simultaneous Equations
- Basic Trigonometry
- Simple Mensuration

Indian Coast Guard Navik Syllabus for English:

- Passage
- Preposition
- Correction of sentences
- Change active to passive voice or vice-versa
- Change direct to indirect or indirect to direct
- Verbs or Tense or Non-Finite
- Punctuations
- Phrasal verbs & expressions
- Antonyms & Synonyms
- Use of Adjectives
- Compounds & Prepositions
- Use of pronouns

Indian Coast Guard Navik Syllabus for General Science

- Nature of Matter
- Universe (Planets or Earth or Satellites or Sun)
- Electricity & its application
- Carbon & its Compounds
- Measurements in Science
- Sound & Wave Motion
- Atomic Structure

Indian Coast Guard Navik Syllabus for Reasoning:

- Spatial Reasoning
- Coding & Decoding
- Numerical Reasoning
- Sequence & Spelling

Indian Coast Guard Navik Syllabus for General Awareness:

Geography



- History
- Sports
- Current Affairs
- Capital and Currency
- Awards and Honour
- Appointments and Resignations
- Obituaries
- National Affairs
- Sports
- Business and Economy
- International Affairs
- Book and Authors
- National parks
- Wildlife Sanctuaries
- Defence
- Abbreviations
- Government Schemes and Policies

Indian Coast Guard Navik Syllabus (Section-2)

Indian Coast Guard Navik Syllabus for Mathematics:

- Statistics Algebraic Identities
- Linear Equations & polynomials
- Principle of Mathematical Induction
- Complex numbers & quadratic equations
- Matrices & Determinants
- Sequence & Series
- Limits & Derivatives
- Continuity & differentially
- differential equations
- Applications of integrals
- Relations & Functions
- Inverse trigonometric functions
- Simple Mensuration
- Measures of Central Tendency
- Geometry
- Linear programming
- Vectors
- Three-dimensional geometry



Indian Coast Guard Navik Syllabus for Physics:

- Physical World & measurement
- Energy
- Kinematics
- Newton's Law of Motions
- Electrostatics
- Thermodynamics
- Optics
- Atoms & Nuclei
- Electronic Devices
- Magnetic effects
- AC & DC
- Waves







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Detailed Study Plan

