

# PRAYAS NIOA/CIS





Name:	_
Counsellor:	
Course & Fees:	
Centre:	
Batch Start Date:	

# Why are we called THE PRAYAS?

 $1.01^{365} = 37.8$ 

 $0.99^{365} = 0.03$ 

Congratulations! If you are reading this then you probably are thinking of having a career that is demanding, fulfilling, respectful while being contributive towards the betterment of the society & our country. You have decided to be a part of the Defense Forces of our country. This means that you have high ambitions already!

If you remember a little bit of our history, you will know that every Chandragupta Maurya required a Chanakya and every Arjuna required a Dronacharya. Why? To be able to provide that one extra percentage of guidance, of experience, of wisdom to help you achieve your dreams. I love this poster because it teaches us the sheer power of consistent efforts, no matter

how small increment of improvement we do every day. In the end, it always adds up. We at The Prayas India would exactly do the same for you. To be that sharpening stone for you to hone your skills with, at every stage of the Examination. For sure it is your efforts that would bear fruit but we, in our capacity would be happy to serve you. The extra 1 per cent you seek every day that

would be a surefire way of

making it through one of the toughest Examinations in India, a test of not just mental aptitude but also physical endurance and strength.

I assure you that our faculty & staff share the exact same thought principles, the vision & the mission that you have imbibed in yourself. Our faculty are passionate teachers who teach because they have a flair for it. The quality of materials provided is indeed enough to help you gauge through the exhaustive syllabus of the Examination. If all of us do our part, the job becomes easier than ever. Our team hopes to serve you and help you bridge the gap between surefooted success and you. Good luck for your preparation & I pray that I see you emerge out as a successful officer in our esteemed armed

forces!

Amresh Kumar

Founder & CEO
The Prayas India

# CDS - THE EXAM



**Combined Defence Services** or CDS examination is conducted to recruit candidates in the Indian Armed Forces. Aspirants willing to become a part of Indian Military Academy, Indian Naval Academy, Officers Training Academy, and Indian Air Force Academy can apply for the CDS exam and chase their dream career. In general, the notification for CDS examination is released in the month of October and June, whereas the Exam is conducted in the month of February and November, each year.

Paper	Туре	No. of questions	Marks	Duration	Negative marks
English	Objective	120	100	2 hours	Yes
General Knowledge	Objective	120	100	2 hours	Yes
Elementary Mathematics	Objective	100	100	2 hours	Yes



- ✓ For IMA, INA and AFA the written test comprises three sections i.e., English, General Knowledge and Elementary Mathematics.
- ✓ For OTA there are two sections in the written exam i.e., English and General Knowledge.

#### Am I Eligible?

As per the latest notification, for CDS 1 Examination, the applicant must be born on or after 2nd Jan 1998 but not later than 1st Jan 2003. For the CDS 2 Examination, the applicant must be born on or after 2nd July 1998 but not later than 1st July 2003.

Academy	Eligibility Age Window		
Indian Naval Academy (INA)	19 years to 22 years		
Air Force Academy	19 years to 23 years		
Indian Military Academy (IMA)	19 years to 24 years		
Officers' Training Academy (Female & Male)	19 years to 25 years		

Academy	Minimum Educational Qualification			
Indian Naval Academy (INA)	Bachelors' in Engineering from any recognized University			
Air Force Academy	Graduation in any discipline (with Physics & Maths in Class XII) or Bachelors' in Engineering from any recognized University			
Indian Military Academy (IMA)				
Officers' Training Academy (Female & Male)	Bachelors' Degree from any recognized University			

#### **ROUND 2: SSB INTERVIEW**

Candidates who qualify in the CDS written examination will have to appear for SSB Interview. The examination of CDS is conducted by the **Union Public Service Commission** but the interview is held by the Service Selection Board – SSB.

The SSB Interview is conducted in **two stages** over a period of 4 days

Stage I – comprises Officer Intelligence Rating (OIR) tests and Picture Perception Description Test (PP&DT)

**Stage II** – consists of Interview, Group Testing Officer Tasks, Psychology Tests and Conference. Only the candidates shortlisted in Stage I of SSB Interview are called for this stage.

#### **English**

Antonyms, Sentence improvement, Comprehension, Synonyms, Word substitution, ordering of sentences, Spotting Errors, Selecting Words, Ordering of words in a sentence, Parts of speech, Idioms and phrases, Spelling Mistakes, Transformation of Sentences.

#### **General Knowledge**

Current Awareness, Economics, Physics, Biology, Sociology, Chemistry, Award and honours, books and authors, History, Politics, Geography, Environment, Defence, Sport and Culture.

### **Elementary Mathematics**

Number System,
Percentage, Profit Loss,
Time Speed and
Distance, Time and
Work, Elementary,
Number Theory, Algebra,
Trigonometry, Geometry,
Mensuration, Statistics.







# NDA - THE EXAM



**NDA** is a Defence entrance exam conducted to recruit eligible personnel to Indian Army, Navy and Air Force Wing of the National Defence Academy and Indian Naval Academy Course –INAC. In general, the notification for NDA examination is released in the month of December and June, whereas the exam is conducted in the month of April and September.

Paper	Туре	No. of questions	Marks	Duration	Negative marks
Mathematics	Objective	120	300	2.5 hours	Yes
GAT (English & GK)	Objective	150	600	2.5 hours	Yes
Total	Objective	270	100	5 hours	Yes



#### Am I Eligible?



Age & minimum educational qualification are the ONLY CRITERIA for determining eligibility of a candidate.

As per the latest notification, for the NDA 1 Examination, the applicant must be born on or after 2nd July 2002 but not later than 1st July 2005. For the NDA 2 Examination, the applicant must be born on or after 2nd Jan 2003, but not later than 1st Jan 2006.

#### **Minimum Educational Qualification**

The Army wing of NDA

Passed Class 12 or equivalent examination from a recognized board.

Air Force and Naval wings of NDA and 10+2 Cadet entry scheme at INA

Passed Class 12 or equivalent examination with Physics and Mathematics.

#### **ROUND 2: SSB INTERVIEW**

Candidates who qualify in the NDA written examination will have to appear for SSB Interview. The examination of NDA is conducted by the **Union Public Service Commission**, but the interview is held by the Service Selection Board – SSB.

The SSB Interview is conducted in two stages over a period of 4 days

Stage I - comprises Officer Intelligence Rating (OIR) tests and Picture Perception Description Test (PP&DT)

**Stage II** – consists of Interview, Group Testing Officer Tasks, Psychology Tests and Conference. Only the candidates shortlisted in Stage I of SSB Interview are called for this stage.

#### **English**

Antonyms, Sentence improvement, Comprehension, Synonyms, Word substitution, ordering of sentences, Spotting Errors, Selecting Words, Ordering of words in a sentence, Parts of speech, Idioms and phrases, Spelling Mistakes, Transformation of Sentences.

#### **General Knowledge**

Current Awareness, Economics, Physics, Biology, Sociology, Chemistry, Award and honours, books and authors, History, Politics, Geography, Environment, Defence, Sport and Culture.

#### Mathematics

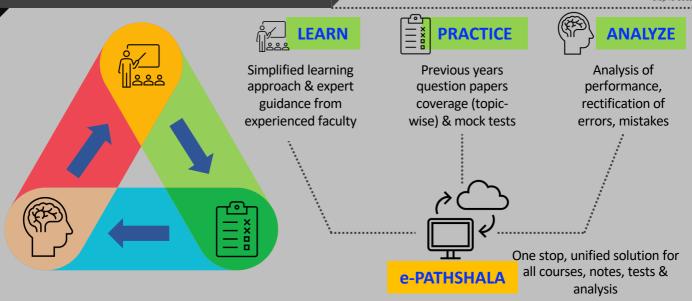
Algebra, Calculus. Matrices and Determinants. Integral Calculus and Differential Equations, Trigonometry, Vector Algebra, Analytical Geometry of Two and Three Dimension, **Statistics** and Probability.





# THE PRAYAS STRATEGY





A comprehensive strategy that will help you clear all the stages of the Examinations, that has been tried, tested & improved for you. All our faculty work in tandem to help you achieve your dream. Be it preparation for the Examination or mock Interviews **The Prayas India** will be there to guide you.



500+ hours of classroom teaching & concept coaching – live streaming & recorded lectures



Study Material &
Reference Material – all
included in our Study
package



Regular doubt solving & one-on-one mentoring sessions to provide better clarity



Time-to-time discussion & guidance on the right 'individual' preparation strategy



Support throughout the entire journey to Academy with regular PI sessions



E-portal & Android App access with full-length mock tests & unlimited practice questions on all topics



Special Sessions &
Mock Tests focused on
NDA / CDS



Seminars/webinars with officers serving in various capacity in the Army, Navy & Air Force



#### QUESTIONS FROM 2020 NDA 1 & 2



Q. Name the scientist who first used a glass prism to obtain the spectrum of sunlight

(a) C. V. Raman

(b) Lord Rayleigh

(c) Isaac Newton

(d) S. Chandrasekhar

#### PRAYAS EXPLAINS

Isaac Newton was the first to use a glass prism to obtain the spectrum of sunlight. The tried to split the colours of the spectrum of white light further by using another similar prism. However, he could not get any more colours. He then placed a second identical prism in an inverted position with respect to the first prism, as shown in Fig. 11.6. This



Figure 11.6R

Screenshot of the note of our Faculty as derived from NCERT book on Science. Option c) is the right answer. Direct Question

Q. A lemon kept in water in a glass tumbler appears to be larger than its actual size. It is because of

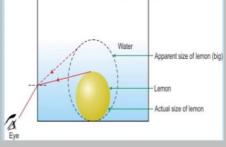
- (a) Reflection of light
- (b) scattering of light
- (c) Refraction of light
- (d) Polarization of light

#### PRAYAS EXPLAINS

#### 10.3 REFRACTION OF LIGHT

Light seems to travel along straight-line paths in a transparent medium. What happens when light enters from one transparent medium to another? Does it still move along a straight-line path or change its direction? We shall recall some of our day-to-day experiences.

You might have observed that the bottom of a tank or a pond containing water appears to be raised. Similarly, when a thick glass slab is placed over some printed matter, the letters appear raised when viewed through the glass slab. Why does it happen? Have you seen a pencil partly immersed in water in a glass tumbler? It appears to be displaced at the interface of air and water You might have observed that a lemon kept in water in a glass tumbler appears to be bigger than its actual size, when viewed from the sides. Frow can you account for such experiences:



**Direct Question** from NCERT **Book & our Faculty slide notes** 

Q. Light enters the eye through a thin membrane called

- (a) retina
- (b) cornea
- (c) pupil
- (d) iris

#### PRAYAS EXPLAINS

The human eye is like a camera. Its lens system forms an image on a light-sensitive screen called the retina. Light enters the eye through a thin membrane called the cornea. It forms the transparent bulge on the front surface of the eyeball as shown in Fig. 11.1. The eyeball is approximately spherical in shape with a diameter of about 2.3 cm. Most of the refraction for the light rays entering the eve



**Direct Question** from NCERT **Book & our Faculty slide notes** 

Q. In an incandescent electric bulb, the filament of the bulb is made up of which metal?

(a) Aluminium

#### PRAYAS EXPLAINS

(b) Copper

(c) Tungsten

(d) Silver

Table 12.2 reveals that the resistivity of an alloy is generally higher than that of its constituent metals. Alloys do not oxidise (burn) readily at high temperatures. For this reason, they are commonly used in electrical heating devices, like electric iron, toasters etc Tungsten is used almost exclusively for filaments of electric bulbs, whereas copper and aluminium are generally used for electrical transmission lines.

**Direct Question** from **NCERT Book** 

Q. The part of the human eye on which the image is formed is

- (a) Pupil
- PRAYAS EXPLAINS

(b) Cornea

(c) Retina

The human eye is like a camera. Its lens system forms an image on a light-sensitive screen called the retina. Light enters the eye

info@theprayasindia.com

**Direct Question** from **NCERT Book** 

(d) Iris







## 🖊 JOURNEY SO FAR



It is an **ISO 9001:2015** institution to prepare for UPSC Civil Service Examination. The innovation and technology driven platform of **The Prayas India** makes the exams preparation simplified.

Because of consistent performance, excellent results and selections, **The Prayas India** has emerged as a leader in its domain and continuously receiving appreciation and love of many aspirants.

#### **Certificate and Achievements:**

- Prime Time Global Education Excellence Award 2017
- The Most Innovative Institute Award 2017 by APS Research Media
- Students Choice Award 2017 & 2018
- The GOAL Award 2017
- The Best institute in Maharashtra by Xel Research Media
- The Rising Leadership Award
- Ranked #1 Institute in Maharashtra Award 2018



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# 🤞 REACH US



#### **THANE Centre**

The Prayas India, COSMOS AVENUE Building, Office No: 202, 2<sup>nd</sup> floor, Above Kumar Cloth Shop, Near Hotel Shiv Sagar, Station Road, Thane (W)

#### **BORIVALI Centre**

The Prayas India, Orchid Plaza, 205, Swami Vivekananda Road, Behind Gokul Shopping Complex, Borivali (W), Mumbai

#### **BHANDUP Centre**

**The Prayas India**, L-300, Dreams Mall, **Bhandup (W)**, Mumbai

#### **NAVI MUMBAI Centre**

The Prayas India, Nerul (W) Station Complex, Navi Mumbai

info@theprayasindia.com

#### **DADAR Centre**

The Prayas India, 15, Bismillah Building, Infront of Suvidha, Opp. Dadar (W) Station, Mumbai

#### **ANDHERI Centre**

The Prayas India, 517, Pearl Plaza, Near McDonalds Restaurant, Andheri (W), Mumbai

#### **VASAI** Centre

The Prayas India, 501, North Lane Building, Vasai (W)

#### **CORPORATE OFFICE**

The Prayas India, D-212, Neptune Magnet Mall, Bhandup (W)