

EMERGING CAREER HORIZONS

‘A TRAJECTORY TRAILSETTER’



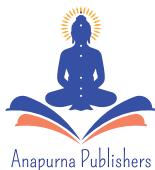
Dr. Ram Singh

Emerging Career Horizons

‘A TRAJECTORY TRAILSETTER’

by

Dr. Ram Singh



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PREFACE



“The roots of True Achievement lie in the Will to become the Best that You can become.”

In rapidly altering and evolving world like that of the present, it is consequential and quintessential for the students to forge informed decisions about their career-choices. In the general run of things, they remain disoriented and impuissant due to their nescience of the available career options. Sometimes confusion arises from overwhelming exposure and they remain in doldrums. Furthermore, the stereotypical perspective of the society at large and their narrow vision put undue pressure on the youth. Without appropriate analysis of their potential, they enter the arena and if the attempt misfires they not only acquire apathy and pessimism but also dwindle in gloom and dejection.

Appears paradoxical but true - challenges and opportunities go hand in hand. In my some odd three decades of interaction with students and exposure to educational leadership, time and again, I have felt the pressing obligation of acquainting students with the plethora of career opportunities that are tailored in harmony with their capabilities and orientations. It was this pressing obligation that served as an inducing impetus for the inception of this Career Counselling Booklet. And I am exultant and exhilarated to acknowledge that finally at the threshold of 2024, I am able to present the school going students this career trajectory trailsetter.

I radically comprehend how Career Counselling is in alignment with interests and strengths of students, how it intensifies their potential, aids them in setting realistic and achievable goals and manage time and resources. This guidance would significantly impact students' educational and professional ambitions. Vision behind this pioneering stride is to dispense a clearer picture of the career paths available and expand the horizons for students. Making even my last student shine is de facto goal of this endeavour.

This 'Treasure trove' offers 30+ on the cutting edge career choices that will help students curate a brilliant and magnificent career flight and shortlist their respective perfect career.

Each student is in a class by itself as he/she has his/her own individuality. Hence, that distinctiveness shall be taken into account while determining a career path for him/her. Furthermore, each student shall remember that in order to achieve goal one must not only know one's strengths but should also get clear on one's boundaries.

This prelude will reach consummation only when due credit is given to all my contributing colleagues without whose cooperation and support this Herculean project would not have culminated. I sincerely extend my heartfelt thanks to each one of them.

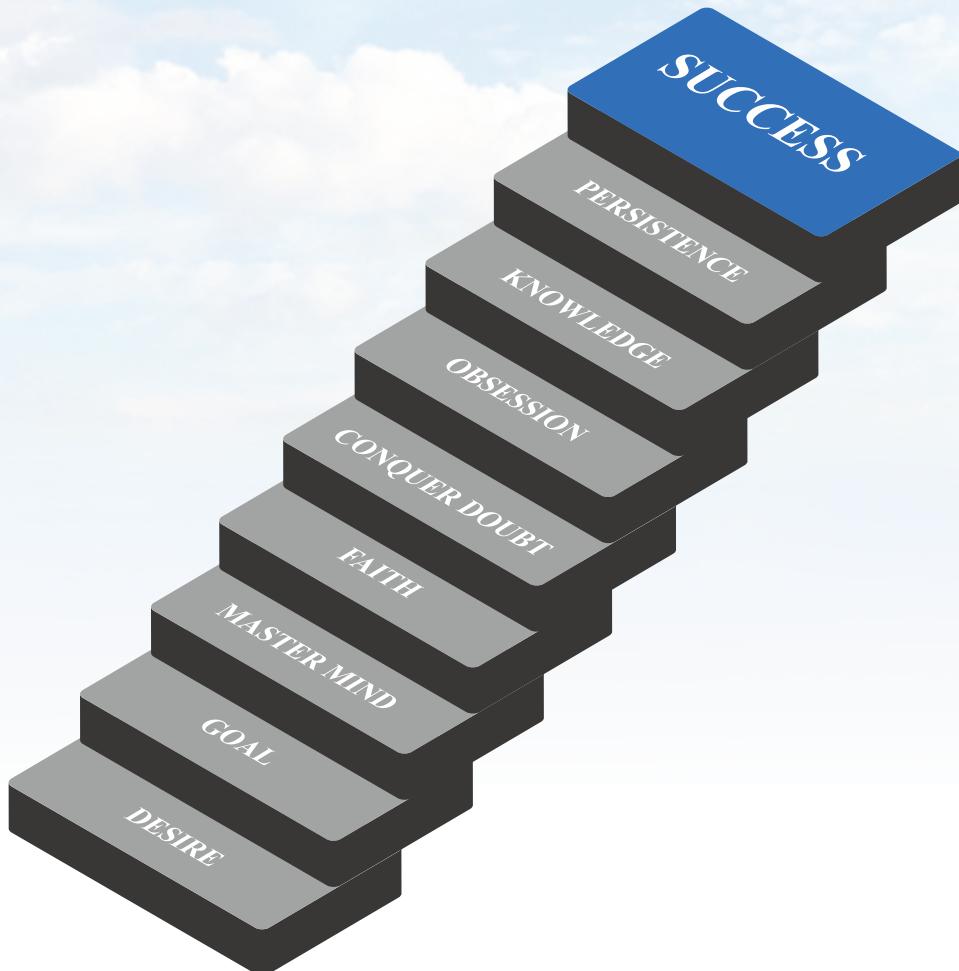
“It's not what you achieve, it's what you overcome. That's what defines your career.”

- Carlton Fisk

With lots of love and blessings

DR RAM SINGH

STEPS TO **SUCCESS**



Every Accomplishment Begins With the First Step!

Disclaimer - The compiled content of this book is meant to guide and facilitate students in making career choices. However, it is advisable to check the official websites of all examinations/ universities/ colleges, etc, to avoid any confusion. Furthermore, it is asserted that recent updates must be cross examined. All information put together in has been picked up from various authentic websites.

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ENGINEERING JEE (JOINT ENTRANCE EXAMINATION) (National Level Entrance Exam)

JEE MAIN AND ADVANCED are "High Priority Zone" exams for all engineering or IIT aspirants. *JEE MAIN is a prerequisite for the JEE ADVANCED exam.* Despite similarities and interconnections between them, we shed light on the JEE MAIN EXAM vs JEE ADVANCED EXAM.

ASPECTS	JEE MAIN	JEE ADVANCED
<i>Open Gates for Premier Institutes</i>	NIT (National Institute of Technology) IIIT (Indian Institute of Information Technology) GFTI (Government Funded Technical Institute) Other States/Centre Funded Institutions.	IIT (Indian Institute of Technology) IISc (Indian Institute of Science, Bengaluru) IISER (Indian Institute of Science Education and Research) IIST (Indian Institute of Space Technology) RGIFT (Rajeev Gandhi Institute of Petroleum Technology) (GFTI)

Top 10 Engineering Entrance Exams

1. JEE MAIN : Admission Offered into 31 NITs, 25 IIITs and 28 GFTIs
2. JEE ADVANCED : Admission Offered in 23 IITs
3. BITSAT : BITS Pilani Hyderabad –Goa
4. WBJEE : West Bengal Joint Entrance Examination Board
5. COMEDK UGET : Consortium of Medical Engineering and Dental Colleges of Karnataka (COMEDK)
6. VIT : Vellore Institute of Technology.
7. MET : Manipal Academy of Higher Education
8. SRMJEEE-SRM : Institute of Science and Technology (Earlier known as SRM University)
9. KIITEE : Kalinga Institute of Industrial Technology
10. CUSAT : Cochin University of Science and Technology

EMERGING CAREER HORIZONS

JEE Main Exam Pattern

National Testing Agency (NTA) conducts the Joint Entrance Examination (JEE) Main in two phases January and April. JEE Main is held in Computer Based Mode (except the drawing section of Paper 2 (B. Arch) which is a Pen and Paper based exam). The duration of the exam is 3 hours long and is multiple choice in nature. The examination is divided into two papers – Paper 1 is for B. Tech/B.E and Paper 2 is for B. Arch or B. Planning.

According to the paper pattern, NTA JEE MAIN exam has 90 questions of 300 marks. Qualifying for ADVANCED is based on percentile obtained in JEE MAIN.

JEE MAIN:- Total questions are 90 (30 Questions each from Physics, Chemistry and Maths.)

- MATHEMATICS:** 30 (20+10) 20 compulsory MCQ type questions and 10 Questions with answers as a numerical value. Out of which 5 questions are compulsory.
- PHYSICS:** 30 (20+10) 20 compulsory MCQ type questions and 10 questions with answers as a numerical value. Out of which 5 questions are compulsory.
- CHEMISTRY:** 30 (20+10) 20 compulsory MCQ type questions and 10 questions with answers as a numerical value. Out of which 5 questions are compulsory.

Marking Pattern : Four marks are awarded for each correct answer and there is a negative marking of one mark on each wrong answer.

PAPER - 2 A : B. ARCH

Part -I - Mathematics

Objective Type - Multiple Choice Questions (MCQs), Numerical Value Questions

Part-II: Aptitude Test - Objective Type - Multiple Choice Questions (MCQs)

Part-III: Drawing Test - Questions to test drawing aptitude

PAPER 2 B : B. PLAN

Part-I: Mathematics

Objective Type - Multiple Choice Questions (MCQs), Numerical Value Questions.

Part-II: Aptitude Test

Objective Type - Multiple Choice Questions (MCQs)

Part-III: Planning-Based Questions

Objective Type - Multiple Choice Questions (MCQs)

JEE ADVANCED Exam Pattern

The JEE ADVANCED exam is conducted as a Computer-Based Exam. Candidates have 3 hours to complete each paper (4 hours for PwD candidates). Passing each paper (Paper 1 and Paper 2) is mandatory. Based on average score of paper – 1 and paper – 2, Rank is calculated.

JEE ADVANCED Paper 1 Pattern (Expected)

Here is the Paper 1 pattern of JEE ADVANCED for Physics, Chemistry and Mathematics:

Section	Question Type	Marks	No. of Questions
Section 1	MCQs with Single Correct Option	18	6
Section 2	MSQs (Multiple Select Question)	24	6
Section 3	Numerical Value Answer	24	6

JEE ADVANCED Paper 2 Pattern (Expected)

Here is the Paper 2 pattern of JEE ADVANCED for Physics, Chemistry and Mathematics:

Section	Question Type	Marks	No. of Questions
Section 1	MCQs With One or More Than One Correct Answer	24	6
Section 2	Numerical Value Answer Type Questions	24	6
Section 3	Single-digit Integer Answer (0-9)	18	6

Top Global Companies that Hire B.Tech. Graduates

Amazon, Microsoft, Apple, Capgemini, Google, Cognizant, Goldman Sachs, Deloitte, Bosch

Top Indian Companies that hire B.Tech. Graduates

Wipro, Infosys, Tech Mahindra, TCS, Paytm, Byju's, Mindtree, Swiggy, Flipkart

Work Profiles And Approximate Annual Salary After B.Tech. In Mechanical Engineering

Job Profile	Average Annual Salary Range (In Rupees)*
Systems Engineer, Power Engineer, Plant Engineer, Renewable Energy Consultant, Manufacturing Engineer, Packaging Engineer, Mechanical Device Engineer, Mechatronics Engineer, Process Development Engineer, Design Engineer	3.6 Lakhs - 6.36 Lakhs

Electronics and Communications Engineering

A job as an Electronic and Communication Engineer is not only gratifying professionally, but it also contributes to society's overall growth. With their in-depth knowledge and fundamental abilities, ECE engineers have a plethora of employment alternatives to choose from, with new work opportunities appearing on a daily basis. Electronics and Communication Engineers, as creative thinkers and quick learners, have the capacity to improve, change, and even entirely remodel the technical face of today's and tomorrow's worlds.

Work Profiles And Approximate Annual Salary after B.Tech. in Electronics and Communications Engineering

Job Profiles	Average Annual Salary Range (In Rupees)*
Design Engineer, ASIC Engineer, Embedded Engineer, Network Support Engineer, Software Engineer, Quality Analyst, Technician, Chief Technical Officers, ECE Engineering Consultant, Data Analyst	3 Lakhs - 20 Lakhs

Civil Engineering

Civil Engineering is a fast paced industry that witnesses growth and development in literal terms. From undertaking the construction, designing, as well as monitoring of the physical structures to digging into the more complex aspects of it, B.Tech.. Civil Engineering is a diverse field with a perfect blend of technical and creative input.

Civil Engineering is a career path that is not only beneficial professionally but also financially. As more profitable projects emerge, numerous technologies have forged alliances with Civil Engineers, expanding the pool of options accessible to them. As a result, there are several employment alternatives after completing a B.Tech in Civil Engineering, each of which is quite valuable.

EMERGING CAREER HORIZONS

Work Profiles and Approximate Annual Salary after B.Tech. in Civil Engineering

Job Profiles	Average Annual Salary Range (In Rupees)*
Architectural Engineer, Aerospace Engineer, Structural Engineer, Geotechnical Engineer, Project Site Inspectors / Construction Engineers, Transportation Engineer, Project Managers, Chief Technical Officers, Engineering Consultant, Analyst	4 Lakhs - 20 Lakhs

Electrical Engineering

The demand for all types of Engineers, including Electrical Engineers, is on the rise as a result of technological advancements and rapidly expanding infrastructure. Electrical Engineering is expanding in critical areas such as Wireless Communications and Mobile Technology, as well as cross-field areas such as Nanotechnology and Biomedical Engineering; thus, these are the disciplines to keep an eye on and specialize in, since they have a lot of potential. Multinational firms are looking for power generating specialists as the world moves toward renewable energy sources such as hydro, solar, and wind power. This is another path you could choose to make a living.

Work Profiles and Approximate Annual Salary after B.Tech.. in Electrical Engineering

Job Profiles	Annual Average Salary Range (In Rupees)*
Telecommunication Engineer, Systems Engineer, Aerospace Engineer, Micro Electrical Engineer, Control And Instrumentation Engineer, Quality Control Engineer, Broadcast Engineer, Test Engineer, Electrical Design Engineer, Nuclear Engineer	3.8 Lakhs - 10 Lakhs

Computer Science Engineering

CSE is emerging as the most widely pursued branch of engineering due to its growing popularity. People have realised the potential of algorithms, computing systems, and the power of cutting-edge technology is facilitating profitable growth. Thus, professionals who have ample domain knowledge are needed more than ever in this ever booming and futuristic industry. IT is regarded as one of the highest-paying professions, with a diverse range of work and job prospects. Non-IT firms, such as universities, research, private and public enterprises, government agencies, corporate entities, commercial organisations, and the manufacturing sector, can all employ IT Engineers. Job security is just one of the many benefits that B.Tech.. Computer Science Engineering (CSE) Professionals hold. They can work as Developers, Programmers, Network Administrators, etc.

Work Profiles And Approximate Annual Salary after B.Tech. in Computer Science Engineering

Job Profiles	Annual Average Salary Range (In Rupees)*
Data Science Analyst, Machine Learning Engineer, Computer Animations And UI/ UX Design, Software Developer, Blockchain Developer And Engineer, Computer Network Architect, Database Administrator And Manager, Security Analyst, Cloud Computing And Dev Ops, Game Developer	4.88 Lakhs - 7.3 Lakhs

Chemical Engineering

Job Profiles	Annual Average Salary Range (In Rupees)*
Biomolecular Engineering, Materials Engineering, Process Engineering	6.35 Lakhs - 7.3 Lakhs

Mechanical Engineering

Job Profiles	Annual Average Salary Range (In Rupees)*
Acoustics Engineering, Manufacturing Engineering, Optomechanical Engineering, Thermal Engineering, Sports Engineering, Vehicle Engineering, Power Plant Engineering, Industrial Plant Engineering, Energy Engineering	6.35 Lakhs - 7 Lakhs

Interdisciplinary Engineering

Job Profiles	Annual Average Salary Range (In Rupees)*
Agricultural Engineering, Applied Engineering, Biomedical Engineering, Biomedical Nano-Engineering, Biological Engineering, Building Services Engineering, Energy Engineering, Information Engineering, Industrial Engineering, Mechatronics Engineering, Engineering Management, Military Engineering, Mining Engineering, Nanoengineering, Quantum Engineering, Nuclear Engineering, Petroleum Engineering, Textile Engineering, Supply Chain Engineering, Railway Engineering	6.35 Lakhs - 7.3 Lakhs

NIRF, JEE ADVANCED Rank Vs Marks Analysis etc of last few years.

Link as under : <https://www.nirfindia.org/2023/Engineering%20Ranking.html>

Aspirants must be in regular practice of CBE (Computer Based Examination).

REGISTRATION DATES :

1. JEE MAIN - For Session I - November to December.
Session II - February to March.
2. JEE ADVANCED - Last week of April.

OFFICIAL WEBSITE :

jeemain.nta.ac.in

jeeadv.ac.in

*as per sixth pay commission

EMERGING CAREER HORIZONS



NEET, VETERINARIAN (BVSc & AH), BAMS (BACHELOR OF AYURVEDIC MEDICINE AND SURGERY), BIOTECHNOLOGY & BIO-ENGINEERING, AGRO SCIENCE [ICAR], BIO-CHEMISTRY, PHARMACY AND FORENSIC SCIENCE

INTRODUCTION

Welcome to the exciting world of Biology! For students in grades VI to XII, the field of Biology opens up a multitude of opportunities and possibilities. Biology, as a subject, not only unveils the secrets of life but also plays a pivotal role in addressing some of the most pressing global challenges, such as Healthcare, Food Security, Environmental Conservation, Engineering, R&D etc. There are vibrant career scopes of Biology, which offer insights into various disciplines like **Medical Science [NEET]**, **Veterinarian (BVSc & AH)**, **BAMS (Bachelor of Ayurvedic Medicine and Surgery)**, **Biotechnology & Bio-engineering**, **Agro Science [ICAR]**, **Bio-chemistry**, **Pharmacy**, **Forensic Science** and more, which will help you to become a medical professional, a Biotechnologist, a Biochemist, a Pharmacist, or simply wish to embark on a journey of scientific discovery.

Diverse Career Opportunities

- Provide insights into various career options within biological sciences.
- Source information for Medical Science:
 - (i) NEET [National Eligibility Cum Entrance Test] \Rightarrow MBBS [Bachelor of Medicine and Bachelor of Surgery], BDS (Bachelor of Dental Surgery), BAMS [Bachelor of Ayurvedic Medicine and Surgery]
 - (ii) All India Pre-Veterinary Test (AIPVT) \Rightarrow For Veterinary Doctor[DVM], B.V.Sc & AH.
 - (iii) Pharmacy Common Entrance Test (Pharma CET) \Rightarrow TS EAMCET, GPAT by NTA,
 - (iv) Doctor of Pharmacy (Pharm.D.)
 - (v) National Institute of Criminology and Forensic Science (NICFS)
 - (vi) Bio-engineering & Biotechnology (UG) \Rightarrow with PCMB-JEE, CET, National Entrance Screening Test (NEST)

⇒ With PCB- SRM-EEE, VIT-EEE etc.

⇒ United States: SAT/ACT scores

(vii) Agricultural Science/ Agro-engineering: ⇒ With PCMB/PCB ⇒ ICAR

ELIGIBILITY FOR NEET-UG

Age Limit:

Minimum Age Limit : Candidates must have completed 17 years as on December 31 of the year.

Maximum Age Limit : There is no upper age limit for the exam as per NMC letter no. U-11022-2-2022-UGMEB.

Educational Qualification:

Candidates must have completed 10+2 or its equivalent with Physics, Chemistry, Biology/Biotechnology, and English as core subjects.

The minimum aggregate marks in Physics, Chemistry, and Biology/Biotechnology required for unreserved (General) category candidates is typically 50%, while for SC/ST/OBC-NCL candidates, it is usually 40%. However, these percentages may vary by state and institution, so it's essential to check the specific eligibility criteria of the colleges one is interested in.

Nationality:

Indian citizens, Non-Resident Indians (NRIs), Overseas Citizens of India (OCIs), Persons of Indian Origin (PIOs), and foreign nationals are eligible to apply for NEET-UG.

GENERAL INFORMATION

Starting Date to Apply NEET Application Form	1st week of March*
Closing Date to Apply NEET Application Form	1st week of April*
Closing Date for the online payment of the Application	1st week of April*
Correction Date of the Online Application Form	3rd week of April*
NEET Entrance Exam Date	First week of May*
NEET Result Date	2nd week of June*

NEET Syllabus Class wise Physics

CLASS-11	CLASS-12
Physical World and Measurement	Electrostatics
Kinematics	Current Electricity
Laws of Motion	Magnetic Effects of Current and Magnetism
Work, Energy and Power	Electromagnetic Induction and Alternating Currents
Motion of System of Particles and Rigid Body	Electromagnetic Waves
Gravitation	Optics
Properties of Bulk Matter	Dual Nature of Matter and Radiation
Thermodynamics, Oscillations and Waves	Atoms and Nuclei
Behaviour of Perfect Gas and Kinetic Theory	Electronic Devices

* Tentative

EMERGING CAREER HORIZONS

NEET Syllabus Class wise Chemistry:

CLASS-11	CLASS-12
Basic Concepts of Chemistry	Solid State
Structure of Atom	Solutions
Classification of Elements and Periodicity in Properties	Electrochemistry
Chemical Bonding and Molecular Structure	Chemical Kinetics
States of Matter- Gases and Liquids	Surface Chemistry
Thermodynamics	General Principles and Processes of Isolation of Elements
Equilibrium	p-block Elements
Redox Reaction	d and f Block Elements
Hydrogen	Coordination Compounds
s-Block Element	Haloalkanes and Haloarenes
Some p-block Elements	Alcohols, Phenols and Ethers
Organic Chemistry- Some Basic Principles and Techniques	Aldehydes, Ketones and Carboxylic Acids
Hydrocarbons	Organic Compounds Containing Nitrogen
Environmental Chemistry	Biomolecules, Polymers and Chemistry in Everyday Life

NEET Syllabus Class wise Biology

CLASS-11	CLASS-12
Diversity in Living World	Reproduction
Structural Organization in Animals and Plants	Genetics and Evolution
Cell Structure and Function	Biology and Human Welfare
Plant Physiology	Biotechnology and Its Applications
Human Physiology	Ecology and Environment

QUESTION PAPER DESIGN/ MODE OF EXAM/ EXAM DURATION/ EXAM DATE/ MODE OF REGISTRATION

Factors in Exam Pattern	Details
Mode of NEET Question Paper	Pen and Paper-based. Candidates will be given an OMR sheet to mark the answers with a black or blue ballpoint pen
Duration of the NEET Exam	3 hours and 20 minutes
Language/Medium	English, Hindi, Assamese, Bengali, Gujarati, Marathi, Tamil, Telugu, Oriya, Malayalam, Kannada, Punjabi and Urdu
Question Type	Multiple Choice Questions
Total Number of Questions Asked in NEET	A total of 200 questions will be asked out of which candidates will have to answer 180 questions

NEET Marking Scheme	<ul style="list-style-type: none"> • 4 marks will be awarded for each correct answer • One mark will be deducted for each wrong attempt • No marks for unanswered question
---------------------	---

NEET Marks Distribution - Subject-wise

Subject-Physics, Chemistry & Biology [Botany + Zoology]

Subject	Section	Number of Questions	Section-wise marks
Physics	Section-A	35	140
	Section-B	15	40
Chemistry	Section -A	35	140
	Section-B	15	40
Botany	Section-A	35	140
	Section-B	15	40
Zoology	Section-A	35	140
	Section-B	15	40
Total Marks			720

The NEET exam for undergraduate Medical and Dental courses in India consists of 200 Multiple-Choice Questions (MCQs) out of which candidates need to attend 180 only. These questions are divided into three sections:

Physics: 50 questions

Chemistry: 50 questions

Biology (Botany and Zoology combined): 100 questions

FREQUENCY OF EXAM

ANNUALLY (Once)

Attempts Limit:

There is no limit on the number of attempts for the NEET-UG examination, provided the candidate meets the age and educational qualification criteria.

MODE OF EXAM - Pen and Paper Mode

MODE OF REGISTRATION : Online

OFFICIAL WEBSITES AND INFORMATION SOURCES FOR MEDICAL ASPIRANTS IN INDIA

- Here are the official websites and information sources for medical aspirants in India:
- NEET (National Eligibility cum Entrance Test) UG:
 - Official Website: <https://neet.nta.nic.in>
 - The official website provides information about NEET-UG, including exam notifications, application details, syllabus, and results.

EMERGING CAREER HORIZONS

- **NTA (National Testing Agency):**
 - Official Website: <https://nta.ac.in>
 - The NTA conducts various entrance examinations, including NEET-UG. Their website offers information about all NTA exams, schedules, and application procedures.
- **NIMS (National Institute of Medical Sciences):**
 - Official Website: <https://www.nims.edu.in>
 - NIMS is a prominent medical institution in India. Their website provides information about courses, admissions, and academic activities.
- **MCC (Medical Counseling Committee):**
 - Official Website: <https://mcc.nic.in>
 - MCC is responsible for conducting the counselling process for All India Quota seats in government medical colleges. Their website provides information on counselling schedules, seat allotment, and NEET counselling-related updates.
- **AIIMS (All India Institute of Medical Sciences):**
 - Official Website: <https://www.aiimsexams.ac.in>
 - AIIMS is a prestigious medical institute in India. Their website offers information about AIIMS entrance exams, admissions, and academic programs.
- **JIPMER (Jawaharlal Institute of Postgraduate Medical Education & Research):**
 - Official Website: <https://jipmer.edu.in>
 - JIPMER is another renowned medical institute in India. Their website provides details about JIPMER entrance exams, courses, and admissions.
- **DGHS (Directorate General of Health Services):**
 - Official Website: <https://dghs.gov.in>
 - DGHS is responsible for conducting counselling for various medical and dental seats in government colleges. Their website offers information on counselling procedures and regulations.
- **MOHFW (Ministry of Health and Family Welfare, Government of India):**
 - Official Website: www.mohfw.gov.in
 - The Ministry of Health and Family Welfare oversees healthcare policies in India. Their website provides updates on medical education and health-related matters.

SEARCHING FOR BEST COLLEGES

- To obtain the most up-to-date and accurate information regarding the All India Rankings of government medical colleges for MBBS courses, the following reputable sources are suggested :
- **National Institutional Ranking Framework (NIRF):** The Government of India's NIRF releases annual rankings for various institutions, including medical colleges. Aspirants can visit the NIRF official website for the latest rankings.
- **Medical Council of India (MCI):** The MCI, now known as the National Medical Commission (NMC), may provide information on recognized medical colleges, although it may not rank them. Aspirants can visit their official website for information on medical colleges in India.

EMERGING CAREER HORIZONS

- **Educational Magazines and Websites:** Various educational magazines and websites in India, such as India Today, The Week, and Careers360, often publish annual rankings of medical colleges.
- **Government Medical College Websites:** Aspirants can also check the official websites of specific government medical colleges for information about their rankings and admission procedures.
- Please note that these websites are valuable sources of information for medical aspirants. It's essential to regularly check these official websites for the latest updates, notifications, and guidelines related to medical entrance exams, admissions, and counselling processes.

TOTAL NO. OF COLLEGES AND SEATS

Criteria	Details
Total Number of MBBS Colleges	681
Total No. of Seats	1,04,333
Total No. of Seats in Govt. Medical Colleges	54,278
Total No. of Seats in Private Medical Colleges	50,315
Increase in MBBS Colleges	29
Total Increase in No. of Seats	3,550
Increase in MBBS Seats in Govt Medical Colleges	1,500
Total Increase in Private MBBS Seats	2,025

*As per data of 2023-24

NEET CUTOFF - USUAL

Category	NEET-CUTOFF Percentile	CUTOFF-Marks
General	50	720-137
SC/ST /OBC	40	136-107
General PwD	45	136-121
SC/OBC PwD	40	120-107
ST-PwD	40	120-108

AIR OF TOP 15 MEDICAL COLLEGES

Sl.No.	NAME OF COLLEGE	CITY	STATE	RANK
1.	All India Institute of Medical Science	Delhi	Delhi	1
2.	Post Graduate Institute of Medical Education And Research	Chandigarh	Chandigarh	2
3.	Christian Medical College	Vellore	Tamil Nadu	3
4.	National Institute of Mental Health & Neuro Science	Bangalore	Karnataka	4
5.	Jawaharlal Institute of Post Graduate Medical Education & Research	Pondicherry	Pondicherry	5
6.	Amrita Vishwa Vidyapeetham	Coimbatore	Tamil Nadu	6

EMERGING CAREER HORIZONS

SL.No.	NAME OF COLLEGE	CITY	STATE	RANK
7.	Sanjay Gandhi Post Graduate Institute of Medical Science	Lucknow	Uttar Pradesh	7
8.	Banaras Hindu University	Varanasi	Uttar Pradesh	8
9.	Kasturba Medical College, Manipal	Manipal	Karnataka	9
10.	Sree Chitra Tirunal Institute of Medical Science & Technology	Thiruvanantha Puram	Kerala	10
11.	Madras Medical College & Govt. General Hospital	Chennai	Tamilnadu	11
12.	King George's Medical University	Lucknow	Uttar Pradesh	12
13.	All India Institute of Medical Science	Jodhpur	Rajasthan	13
14.	Vardhaman Mahavir Medical College & Safdarjung Hospital	New Delhi	Delhi	14
15.	DR.D.Y.Patil Vidyapeeth	Pune	Maharashtra	15

Top 10 Private Medical Colleges in India :

- | | |
|--|--|
| 1. Christian Medical College, Vellore | 6. Amrita Vishwa Vidyapeetham, Coimbatore |
| 2. KMC (Kasturba Medical College), Manipal | 7. KMC (Kasturba Medical College), Mangalore |
| 3. Amrita School of Medicine, Kochi | 8. D.Y. Patil Vidyapeeth, Pune |
| 4. St. John's Medical College, Bangalore | 9. M.S. Ramaiah Medical College |
| 5. JSS Medical College, Mysore | 10. CMC, Ludhiana |

NEET AIQ CUTOFF FOR SOME GOVERNMENT MEDICAL COLLEGES

MIND SET UP FOR RANK AND DREAM COLLEGE

Medical College	NEET-2022-Closing Rank [Gen]	NEET-2021-Cut Off For Gov.college	NEET-2020-Closing Cut Off Rank	NEET-2019-Closing Rank	NEET-2018-Closing Rank
Maulana Azad Medical College, New Delhi	107	1179	90	32	58
VMMC & Safdarjung Hospital, New Delhi	129	143	163	157	107
University College of Medical Science, New Delhi	217	215	324	171	165
Lady Hardinge Medical College, New Delhi	550	414	571	489	314
Govt. Medical College Chandigarh	313	720	776	360	254
King George's Medical College, Lucknow	1457	1623	1800	908	703

*As per data of obtained in 2023



COMMON UNIVERSITY ENTRANCE TEST (CUET)

BRIEF INTRODUCTION

The Common University Entrance Test (CUET), earlier known as Central Universities Common Entrance Test (CUCET) is an all-India test being organized by National Testing Agency for admission to various Doctorate, Postgraduate, Undergraduate, Integrated Postgraduate, Diploma, Certification courses and Research Programmes in 45 Central Universities of India. It is also accepted by number of other State Universities and Deemed universities in India.

CUCET was first conducted to admission for seven central universities for 1,500 seats in 41 undergraduate, postgraduate and integrated courses from 2010. The application form was filled up through CUCET-2010 which was held on 19 and 20 June 2010 in about 30 examination centres spread across the country. From its inception in 2010 till 2020, the CUCET was conducted by the Central University of Rajasthan for 12 Central Universities. The National Testing Agency took over the conduct of these exams in 2021. In 2022, as a part of National Education Policy 2020, CUET is introduced as revamped version of CUCET making it compulsory for all 43 central universities to adopt it.

ELIGIBILITY CRITERIA : For UG Programmes candidate must have completed Class XII from any recognized Board. For General category, cutoff of percentage marks is 50% whereas for SC/ST category it is 45%.

SYLLABUS : Comprehensive syllabus available on the official website of NTA (National Testing Agency) , i.e., <https://cuet.nta.nic.in/syllabus/>

QUESTION PAPER DESIGN : CUET Question Paper is divided into three sections- Part 1A & 1B (Language Test), Part 2 (Domain-specific), and Part 3 (General Test). The questions are based on NCERT Class 11 th and 12 th and in line with the National Education Policy.

FREQUENCY OF EXAM : Conducted Annually

MODE OF EXAM : Online/CBT (Computer Based Exam)

EXAM DATE : Month of May

EXAM DURATION : Slot 1 – 3 Hours 15 Minutes

EMERGING CAREER HORIZONS

Slot 2 – 3 Hours 45 Minutes

MODE OF REGISTRATION : Online

DEADLINE FOR REGISTRATION : Second Week of April

OFFICIAL WEBSITE : <https://cuet.nta.nic.in>

BRIEF INTRODUCTION OF NTA (NATIONAL TESTING AGENCY)

National Testing Agency (NTA) has been established as a premier, specialist, autonomous and self-sustained testing organization to conduct entrance examinations for admission/fellowship in higher educational institutions.

CUET Preparation Tips: Best Books

Opting for the right book is very important to understand the concepts in-depth and score good marks in the upcoming exam.

The following are some of the best CUET Preparation Books one can include during one's preparation.

- Arihant's English Grammar & Composition by S.C. Gupta
- Quantitative Aptitude by R.S. Aggarwal
- Fundamental Methods of Mathematical Economics by Chiang A.C. and K. Wainwright
- Concept of Physics Vol 1 & 2 by H.C. Verma

Significance of Solving Mock Tests for CUET

According to the CUET preparation tips, attempting mock tests is one of the best methods to improve one's speed and accuracy in the final exam.

With the help of mock tests, one can know the difficulty level of the paper and the type of question asked in the exam.

Also, one can test one's preparation levels for the upcoming exam.

Most importantly, it can help improve one's confidence.



CHARTERED ACCOUNTANCY (CA)

BRIEF INTRODUCTION

A Chartered Accountant or CA is a person who has a career as a financial controller in business companies and other sectors. The top different positions acquired by a CA includes :

- Tax Accountant
- Management Accountant
- Financial Accountant
- Financial Analyst
- Auditor etc.

ELIGIBILITY CRITERIA

One can become a CA after class 12th or graduation.

Syllabus for CA Foundation

Paper 1: Principles and Practices of Accounting

Objective: To develop an understanding of the basic concepts and principles of Accounting and acquire the ability to apply the same in preparing financial statements and simple problem-solving.

Chapter	Topics
1	Theoretical Framework
2	Accounting Process
3	Bank Reconciliation Statement
4	Inventories
5	Concept and Accounting of Depreciation
6	Accounting for Special Transactions
7	Final Accounts of Sole Proprietors

EMERGING CAREER HORIZONS

Chapter	Topics
8	Partnership Accounts
9	Financial Statements of Not-for-Profit Organizations
10	Introduction to Company Accounts

Paper 2: Business Laws and Business Correspondence and Reporting Section A: Business Laws (60 marks)

Objective: To develop an understanding of significant provisions of select business laws and acquire the ability to address basic application-oriented issues.

This paper consists of 2 sections:

Section A: Business Law (60 Marks)

Chapter	Topics
1	The Indian Contract Act,1872
2	The Sale of Goods Act,1930
3	The Indian Partnership Act,1932
4	The Limited Liability Partnership Act, 2008
5	The Companies Act, 2013

Section B: Business Correspondence and Reporting (Marks 40)

Objective: To acquire and develop good communication skills required for business correspondence and reporting.

Part/Section	Topics
Part-I: Communication	<ul style="list-style-type: none"> Communication
Part-II: Sentence Types and Word Power	<ul style="list-style-type: none"> Sentence Types (Direct-Indirect, Active -Passive Speech) Vocabulary (Root Words, Synonyms, Antonyms, Prefixes, Suffixes), Phrasal Verbs, Collocations and Idioms.
Part – III: Comprehension Passages and Note Making	<ul style="list-style-type: none"> Comprehension Passages Note Making
Part – IV: Developing Writing Skills	<ul style="list-style-type: none"> Introduction to Basic Writing Précis Writing Article Writing Report Writing Writing Formal Letters Writing Formal Mails Resume Writing Meetings

Paper 3: Business Mathematics, Logical Reasoning and Statistics

Objective: To develop an understanding of the basic mathematical and statistical tools and their application in Business, Finance and to develop logical reasoning skills and apply the same in simple problem

Part – A: Business Mathematics (40 Marks)

Sl.No	Topics
1	Ratio and Proportion, Indices and Logarithms
2	Equations and Matrices
3	Linear Inequalities with Objective Functions and Optimization w.r.t. objective function
4	Time Value of Money
5	Permutations and Combinations
6	Sequence and Series
7	Sets, Relations, and Functions

Part –B: Logical Reasoning (20 Marks)

Sl.No	Topics
1	Number Series, Coding and Decoding and the Odd Man Out
2	Direction Tests
3	Seating Arrangements
4	Blood Relations
5	Syllogism

Part –C: Statistics (40 Marks)

Sl.No	Topics
1	The Statistical Description of Data
2	Measures of Central Tendency and Dispersion
3	Probability
4	Theoretical Distributions
5	Correlation and Regression
6	Index Numbers and Time Series

Paper 4: Business Economics and Business and Commercial Knowledge

Part 1: Business Economics (60 Marks)

Objective: To develop an understanding of the concepts and theories in Business Economics and apply such concepts and theories in simple problem-solving.

EMERGING CAREER HORIZONS

Sl.No	Topics
1	Introduction to Business Economics
2	Theory of Demand and Supply
3	Theory of Production and Cost
4	Price Determination in Different Markets
5	Business Cycles

Part-II: Business and Commercial Knowledge (40 Marks):

Objective: To develop an understanding of common business and commercial concepts and to keep abreast with developments in the business and commercial world.

Sl.No	Topics
1	Business and Commercial Knowledge – An Introduction
2	Business Environment
3	Business Organizations
4	Government Policies for Business Growth
5	Organizations Facilitating Business
6	Common Business Terminologies

QUESTION PAPER DESIGN: Objective and Subjective both.

FREQUENCY OF EXAMINATION: Twice in a year (June and December).

MODE OF EXAMINATION: Offline.

EXAMINATION DATES: In the month of June and December (last week).

EXAMINATION DURATION: Three hours each paper.

MODE OF REGISTRATION: Online.

PROCESS FOR REGISTRATION: Throughout the year.

OFFICIAL WEB SITE: www.ccg.icai.org, www.icai.org

REGISTRATION FEES : INR 9,000/- (Nine thousand) inclusive of charges for Study Materials.

SCOPE: To become - Tax Accountant, Management Accountant, Financial Accountant, Financial Analyst, Auditor and many more.



COMPANY SECRETARY (CS)

A Company Secretary is a manager who is responsible for making sure that company is managed correctly and according to law. The C.S. may sign the official documents on behalf of the company, which are then legally binding.

At present there is a massive demand for displaying corporate transparency and credibility by organisations in managing their internal affairs. The top management is busy managing the company affairs. They hardly get time to mingle with stakeholders and retain the same to gain confidence. In order to tackle this issue, companies hire C.S. who can play a vital role in smooth functioning of a corporate entity. The position of C.S. is considered as one of the most significant managerial position.

C.S. course is offered by the Institute of Company Secretaries of India (ICSI) set up under the Company Secretary Act, 1980.

It is noted that earlier C.S. had three levels – Foundation, Executive and Professional but from 2021 onwards there are only two levels viz Executive and Professional.

UGC recently recognized the C.S. qualification as equivalent to a Post Graduate degree. Candidates can also apply for UGC-NET and Ph.D. Programmes.

CAREER OPTIONS

- Legal Advisor
- Corporate Policy Maker
- Corporate Planner
- Chief Administrative Officer

ELIGIBILITY CRITERIA

1. A citizen of India with lower age limit of 17 years who has passed higher secondary school examination is eligible to appear for CSEET examination.
2. The C.S. course duration can go from 3 to 5 years depending on the clearance of C.S. Executive and C.S. Professional exam.

EMERGING CAREER HORIZONS

SYLLABUS

Module 1 – Governance Risk Management, Compliances And Ethics, Advance Tax Laws, Drafting, Pleading
Module 2 – Secretarial Audit, Compliance, Management and Due Diligence.

Stage 1 – CSEET Exam

Stage 2 – C.S. Executive Course (8 Papers divided into 2 modules)

Stage 3 – C.S. Professional Course (9 Papers divided into 3 modules)

Stage 4 – Pre-Membership Training

Stage 5 – C.S. Membership

Stage 6 – Continuing Professional Development

FREQUENCY OF EXAM

- CSEET exam is conducted four times in an academic year in the months of May, July, November and January.

Examination fee : INR 1,000* for each CSEET.

- Examination fee for Executive and Professional courses- INR 1200* per module.

A candidate is declared to have passed the Executive/ Professional examination, if he/she secures at one sitting a minimum of 40% marks in each paper and aggregate of 50% of all subjects.

- Candidates qualifying in CSEET examination have to register for the C.S. Executive courses as per their preferences.
- Registration dates- June and December.
- Fee for C.S Executive programme INR 9000 for commerce graduates.
- INR 12,500 for CPT/Foundation passed of ICAI-CMA.
- INR 10,000 for non- commerce students.
- INR 8,500 for C.S. Foundation passed students.
- Candidates who have passed both the modules of C.S. Executive can register for C.S. Professional by paying 13,000 INR.
- Cut off dates for admission to C.S. course:- (28th February for appearing in both modules in December exams in the same year.
- 31st May for appearing in single module in December examination in the same year.
- 31st August for appearing in both modules in June exam in the next year.
- 30th November in June examination in the next year.

C.S. Registration Validity: 3 to 5 years

Compulsory Training for C.S. : 15 months.

Official Website: www.icsi.edu

SALARY PACKAGE

Company Secretary / Legal Advisor/ Principal Secretary – in the range of INR 30,00,00 P.A. which can go upto INR 12,00,000 as per competency and experience.

Company Registrar – INR 4,00,000 – 12,00,000

Chief Administrative Officer – INR 8,00,000 – 18,00,000

* Subject to change

REFERENCE BOOKS

- Company Secretarial
- Company Law and Practice
- ICSI CSEET, Companies Act 2013

TOP UNIVERSITIES

- ICSI Delhi
- Navakar Institute
- Elite IIT Bengaluru
- Academy Of Commerce Haryana
- University Of Madras
- Bhoj University
- SRM Institute Of Science And Technology

TOP PLACEMENT COMPANIES

- Indian Railways
- Finance Corporation
- Jaypee Group
- ONGC
- HCL Technology
- PNB
- Karu Vysya Bank
- Omaxe Ltd
- KPMG
- Deloitte

EMERGING CAREER HORIZONS



INVESTMENT BANKER

An Investment Banker is an expert who assists companies and clients in managing and growing their financial assets. They offer advice on making smart investment decisions to investment in Equities, Market trading, Merger and Acquisitions etc.

An Investment Banker is a professional who supports clients in raising funds through capital markets by issuing debt or selling equity for organizations. They work for companies to underwrite new debts, equity securities for various types of businesses. Investment Bankers assist in selling securities, facilitating merger, acquisitions, brokering trades etc.

The scope of Investment Bankers is very high due to the abundance of job opportunities and attractive salary packages. Their demand is expected to grow further as they are required to understand market trading activities because of the changing structure of economy after economic reform.

ELIGIBILITY CRITERIA

For Investment Banker student should opt for commerce as their stream in their class 12th board exams taking Mathematics and Accounts as subjects. It will facilitate in clearing entrance examinations for under Graduate and Postgraduate courses.

EXAMS REQUIRED TO BECOME INVESTMENT BANKERS IN INDIA

There are no specific exams however, candidates have to opt for certain degrees for Investment Banker. Students have to appear for entrance exams for admissions to these courses- B.com, BBA finance, MBA in finance, MS in finance by clearing following exams like -CUET, IPU-CET, NMIMS NPA, IP-MAT, CAT, MAT, XAT etc. Apart from that students can opt for CFA certification.

SKILLS REQUIRED

Mathematical proficiency, Analytical acumen, Finance etc.

CAREER OPTIONS

- Financial Planner
- Credit Manager
- Accountant
- Financial Advisor

- Certified Management Account etc.

SALARY

Average salary INR 6,00,000 – 13,00,000

List of colleges which provide courses to become Investment Banker:

- IIT Madras
- PGS College of Technology
- BIMS Kolkata
- PIBM Pune
- NGI (Nehru Group of Technology)
- NIT Trichy
- IIT Kharagpur etc.

TOP PLACEMENT COMPANIES

- Goldman Sachs
- Citi group
- Merrill Lynch
- Morgan Stanley
- JP Morgan
- HSBC
- Wells Fargo
- Citi, etc.



LAW – COMMON LAW ADMISSION TEST (CLAT)

A BRIEF INTRODUCTION

The Common Law Admission Test (CLAT) is a centralized national-level entrance test for admissions to the 25 out of 26 National Law Universities (NLU) except NLU Delhi and NLU Meghalaya. NLU Delhi takes admissions through its own test known as All India Law Entrance Test (AILET), whereas, NLU Meghalaya was established recently and conducts its own entrance exam. AILET is anticipated to be merged into CLAT in the coming years. CLAT was first introduced in 2008 as a centralized entrance examination for admission to the National Law Schools/Universities in India. A few private and self-financed law schools in India also use these scores for law admissions. Public sector undertakings in India like ONGC, Coal India, BHEL, Steel Authority of India, Oil India, Indian Army [For the recruitment of JAG officers] etc. use CLAT Post Graduation (CLAT PG) scores.

The test is taken after the Higher Secondary Examination or the 12th grade for admission to integrated undergraduate degree in Law (B.A./B.B.A./B.COM./B.Sc./B.S.W./L.L.B.) and after Graduation in Law for Master of Law (L.L.M) programs offered by these law schools. It is considered as one of the toughest entrance examinations in India with the acceptance rate being as low as 3 percent.

CAREER OPTIONS

- Corporate Legal Advisor :** There are many organisations, enterprises and multi-national companies that hire legal advisors. These legal advisors work as a legal arm in a company, where they cover clearance, compliance, merger and acquisitions, IPR, contract, corporate and many other aspects of business laws.
- LPO-Legal Process Outsourcing :** It is relatively more comfortable for young talent with excellent communication and writing skills to enter the LPO industry in India. The salaries are high in the LPO sector, and one gets to work for law agencies in the US, UK and Europe.
- Government and Judiciary :** There are many government jobs in a legal stream at various departments. Meanwhile, in the judiciary, you could start your career from a magistrate and eventually reach up to a Sub-Divisional Judge, High Court Judge or Supreme Court Judge level. Also, the perks and powers are added advantage with it that no career offers.
- Legal Analyst :** Works for corporate firms or law firms and analyses laws pertaining to the sphere of the company and its operation.

5. **Legal Journalist** : Covers crime beats, legal proceedings in courts, arbitration courts, international courts and arbitration events.
6. **Legal Advisor** : Offers consultancy to corporate firms regarding their legal obligations, duties, legal relations with other firms.
7. **Law Agency** : You could also join a law agency or firm as a fresher. There you may get to work with senior advocates. Though salaries can be a bit low, the learning experience is unmatched. Also, working hours are not set and easily extends up to 9-10 hours. Nevertheless, it will be stepping stone for you as a legal practitioner or advisor.
8. **Academics** : If a lawyer does not feel comfortable in courts or dealing with conventional and typical legal work, one can also enter academics and teach in a law college. This is something that can be done part-time as well in addition to their practice.
9. **Army** : Lawyers are also recruited as Commissioned Officers in the legal branches in Indian Army, Navy and Air Force to conduct court-martial proceedings.
10. **Indian Legal Service** : There is also an option of legal service in the Department of Legal Affairs and Legislative Council in Legislative Department. Law officers and legal advisors are appointed in almost all the ministries/department/undertakings of the government of India and State Government. All these posts are generally filled up by law graduates who have to qualify the Union Public Service Commission or State Public Service Commission examination.

Nomenclature	CLAT Exam Details
Date of Exam	To be notified
Eligibility	<p>A candidate should have passed 10+2 or an equivalent exam with the following percentage:</p> <p>45% marks for candidates belonging to the Unreserved/ OBC/ Specially abled Persons (SAP) category.</p> <p>40% marks for the candidates belonging to the SC/ST category.</p>
	<p>Any candidate who is appearing in the qualifying examination, i.e., 10+2 in the months of April/ May can also appear for this examination. However, they should be able to produce sufficient evidence to prove that they have passed 10+2 at the time of admission.</p>
Age Limit	There is no age limit to appear in the CLAT exam
Mode	Pen and Paper mode
Negative Marking	0.25 (1/4th) mark will be deducted for every wrong answer
Total Questions	150
Question type	Objective
Duration	2 hours (120 minutes)
Exam medium	English
Conducting Authority	NLU based on the system of rotation
Organizing Body	CLAT Committee
Participating Institutes	22 National Law Universities

EMERGING CAREER HORIZONS

Pattern		
Subjects	No. of questions	Marks allotted
English including Comprehension	28-32	20%
General knowledge and Current affairs	35-39	25%
Legal Reasoning	35-39	25%
Logical Reasoning	28-32	20%
Quantitative Techniques	13-17	10%

LAW SPECIALISATIONS

- Civil Law** : This subject deals with significant areas of litigation including damage suits, guardian disputes, deeds, wills, individual rights and conflicts etc. This specialisation has an excellent scope for private practice, although it also offers good job opportunities with government and private bodies.
- Criminal Law** : It involves interacting and interrogating the accused, witnesses, working around forensic reports, post-mortem reports, crime scenes etc. One might opt for private practice or work as a public prosecutor. Criminal law pays well but is not for everyone.
- Constitutional Law** : Lawyers who deal with constitutional cases, i.e. cases in which interpretation and application of statutes and official acts of government and questioning them for infringing on individual rights vested by the constitution. All laws and all actions of public officials and institutions are presumed to be constitutional.
- Administrative Law** : An Administrative Lawyer deals with issues regarding decisions or regulations of local, state or central government agencies. If a person feels that such an agency has passed regulations which affect their business negatively or if they think that a personal wrong had been done to them, an administrative attorney is the one to turn to.
- Human Rights Law** : Human Rights Lawyers investigate and defend people involved in cases such as those which include torture and abuse. Human Rights Lawyers often spend hours examining a case; studying domestic and international human right laws; and interviewing clients and witnesses.
- Family Law** : Issues relating to the family such as divorce or annulment, child custody and visitation rights, child support payments, and spousal support/alimony, adoption, guardianship, state child protection, and domestic violence etc. are included under family law.
- Taxation** : Specialisation in tax and banking law is becoming increasingly popular as banking, finance and corporate companies are hiring specialists to deal with their finance and tax matters.
- Corporate Law** : Corporate Law is currently one of the most sought-after specialisations in India that offer opportunities to work or consult for corporate giants regarding the legality of various transactions, framing and evaluating contracts, ordinances, assessing corporate privileges and more
- International Business Law** : This specialisation also has a good career-scope in the private sector, corporate houses nationally and international opportunities as well. It deals with laws related to international business and trade, including international trade, tax, arbitration, competition law, contracts and more.
- Labour Law** : Labour Laws mediate the relationship between workers, employing entities, trade unions and the government. Lawyers specialising in this field might deal with disputes arising out of protection scope of employees, employment contracts, wage regulation, pension, insurance, benefits, health and safety etc

- 11. Real Estate Law :** With realty business in a boom, the demand for real estate lawyers is high. Dealings of such lawyers include, but are not limited to, sale deeds, property mortgage and lease issues, property titles and property conveyance. You may set up your practice or work for a real estate company, either on their payroll or as a legal advisor.
- 12. Intellectual property /Patent Law :** This area of law specialisation is gaining much popularity. Companies and brands are putting in their efforts to protect their products using the patent and intellectual property rights law. This law deals into trademarks, copyrights and more.

ELIGIBILITY CRITERIA : UG/PG (NO UPPER CEILING)

UG (UNDER GRADUATE) ELIGIBILITY

- There is no upper age limit for candidates appearing for UG Programme through the CLAT.
- Candidates must secure the following minimum percentage of marks in their qualifying examination (i.e., 10+2 or an equivalent examination):
Forty five percent (45%) marks or its equivalent grade in case of candidates belonging to General / OBC / PWD / NRI / PIO / OCI categories.
Forty Percent (40%) marks or equivalent in case of candidates belonging to SC/ST categories.
- Candidates who may be appearing for their qualifying examination in March/ April, are also eligible to appear for the CLAT examination. However, they shall be required to produce an evidence of their passing the qualifying examination at the time of admission, failing which they shall lose their right to be considered for admission.
- The result of the qualifying examination (i.e., 10+2) shall be submitted by the candidate at the time of admission, failing which the candidate shall be ineligible for admission to the course they may have applied for.
- If more than one candidate secures an equal number of marks in the CLAT, the break of tie shall be by the following procedure and order as under:
 - Higher marks in the component/section on Legal Aptitude in the CLAT exam
 - Higher age
 - Computerised draw of lots

SYLLABUS

The UG-CLAT would focus on evaluating the comprehension and reasoning skills and abilities of candidates. Overall, it is designed to be a test of aptitude and skills that are necessary for a legal education rather than prior knowledge, though prior knowledge occasionally may be useful to respond to questions in the Current Affairs including General Knowledge section.

- The UG-CLAT shall be a 2-hour test, with 120 Multiple-Choice Questions carrying 1 mark each. There shall be negative marking of 0.25 marks for every wrong answer. These questions would be divided across the following 5 subjects:
 - English Language
 - Current Affairs, including General Knowledge
 - Logical Reasoning
 - Quantitative Technique

EMERGING CAREER HORIZONS

QUESTION PAPER DESIGN

- a. Maximum Marks : 120
- b. Duration of CLAT : 2 hours
- c. Multiple-Choice Questions : 120 questions for one mark each
- d. Negative Marking : 0.25 Mark for each wrong answer (approximate number of questions)

SUBJECT AREAS WITH WEIGHTAGE

- English Language : 22-26 questions, or roughly 20% of the paper
- Current Affairs, including
- General Knowledge : 28-32 questions, or roughly 25% of the paper
- Legal Reasoning : 28-32 questions, or roughly 25% of the paper
- Logical Reasoning : 22-26 questions, or roughly 20% of the paper
- Quantitative Techniques : 10-14 questions, or roughly 10% of the paper
- Frequency of Examination : Conducted ANNUALLY
- Mode of Examination : Offline, Pen and Paper Mode
- Exam Date : 1st week of December
- Exam Duration : 120 Minutes (2 Hours)
- Mode of Registration : Online
- Deadline for Registration : First week of November
- Official Website : <https://consortiumofnlus.ac.in>
- Brief Introduction of CNLU : The Consortium of National Law Universities was established on 19th August, 2017 with the aim of improving standards of legal education in the country and serving the justice system through legal education.

The Consortium aspires to facilitate better coordination amongst National Law Schools to achieve highest standards of legal education in the country. Twenty-two National Law Universities have joined the Consortium as members.



SCHOLASTIC ASSESSMENT TEST (SAT)

The purpose of the SAT (Scholastic Assessment Test) is to measure a high school student's readiness for college and provide colleges with one common data point that can be used to compare all applicants. It is a ticket that enables entry into colleges in the United States and a few colleges of the United Kingdom.

From March 2023 onwards, the SAT exam's conducting authority - the College Board has introduced the digital version of the exam. Initially, the SAT exam was a pencil-paper test until it became digital internationally in the year 2023. The USA is still conducting SAT exam in the pencil-paper format but it is set to switch to the SAT Digital testing from 2024 onwards. SAT exam upon being digitalised, has witnessed a couple of changes. Let us look at the following article and check out the proposed changes along with other prerequisites to appear for the SAT exam.

SAT Digital Exam Highlights

Exam Conducted	Digitally
App on which SAT is Conducted	Bluebook App
Applicants Tested on Devices	Laptops / iPads / Tabs
Duration	2 hours 14 minutes
Essay Section	Not tested anymore
SAT Digital Testing Sections	Reading + Writing (RW)] Mathematics
Total Questions per Section	SAT RW: 54 Questions SAT Mathematics: 44 Questions
SAT Score Range	$800 + 800 = 1600$
SAT Registration Fees for Indians	INR 8,540 (approx)

Everything About SAT Exam

SAT exam is conducted around the year and Indian students will be able to check the SAT exam dates, SAT exam centres and availability of SAT exam scores beforehand so that the students can make up their minds and plan accordingly. The following section discusses in detail each aspect related to the SAT exam. Applicants who are in high school will benefit from the information in this section.

EMERGING CAREER HORIZONS

SAT Exam Eligibility for Indians

There are no pre-defined SAT eligibility criteria for any set of students. Applicants who are in high school or in class X- XII can appear for the SAT exam. Students of age 17 and above on an average sit for the SAT exam usually. Thus, high school students who decide on studying abroad can also sit for SAT exam after passing out from school.

SAT Exam Pattern

The following is the new proposed exam pattern for SAT Digital, divided into the following sections and shorter in duration by almost one hour. Check out the latest SAT Digital exam pattern:

SAT Digital Parameters	SAT Digital Reading & Writing (RW) Section	SAT Digital Math Section
Format	Two-staged: one tests Reading and the other the Writing section. Both are administered across separately timed modules.	Two-staged: The math section is administered via two separately timed modules.
Test length (total operational and pretest questions)	1st module: <ul style="list-style-type: none">25 operational questions2 pretest questions 2nd module: <ul style="list-style-type: none">25 operational questions2 pretest questions	1st module: <ul style="list-style-type: none">20 operational questions2 pretest questions 2nd module: <ul style="list-style-type: none">20 operational questions2 pretest questions
Time Duration	1st module: 32 minutes 2nd module: 32 minutes	1st module: 35 minutes 2nd module: 35 minutes
Total Questions	54	44
Total Time Allocated	64 minutes	70 minutes
Scores Reported	Total Score Calculation: RW + Math Section Scores	
Question Type(s)	Discrete; MCQs with four options	MCQ (75%) and student-produced response (SPR) (25%)
Topics Tested	Literature, History / Social Studies, Humanities and Science	Science, Social Science and real-world related topics
Informational Graphics	Tested, includes - tables, bar graphs, line graphs	Also tested

SAT Exam Highlights

Exam Name	SAT (Digital)
SAT full form	Scholastic Assessment Test
Official Website	https://www.collegeboard.org/
SAT Exam Duration	2 hours 14 minutes
Most popular for	Undergraduate courses in the US and Canada



FOREIGN EDUCATION (USA AND UK)

The Top 10 Universities in The USA

The United States is home to some of the most prestigious universities in the world. There are plenty of options for students pursuing higher education in the US, from Ivy League schools to state universities.

Aspirants will find the top 10 universities to study in the USA below. These universities are known for their rigorous academic programs, world-class faculty, and state-of-the-art facilities.

- | | |
|-------------------------|---------------------------------------|
| 1. Harvard University | 5. Yale University |
| 2. Standford University | 6. Duke University |
| 3. MIT University | 7. California Institute of Technology |
| 4. Columbia University | 8. University of Washington |

Entrance Tests

In the US, the interested must appear for entrance tests like the SAT (Scholastic Assessment Test) and ACT (American College Test) to enrol in graduate programs. Specific tests like GMAT and GRE are conducted for admission in post-graduation programs and specific higher-level courses.

Admission Process

Getting admissions to US colleges is highly competitive, focusing on overall or complete assessment of applicants, including entrance test scores, essays, letters of recommendation and extracurricular activities. Some colleges and institutions even interview prospective students, personally or virtually.

Top Universities to Study in UK

When deciding which university to study in UK, it is crucial that one also looks at the world university rankings. This helps one to compare and understand where a university ranks and how one's desired institution fares on the global map. Here are the top UK universities according to QS World University Rankings 2023.

EMERGING CAREER HORIZONS

Sl.No.	Institution	QS Ranking 2023 (Globally)
1	University of Oxford	4
2	University of Cambridge	2
3	Imperial College London	6
4	UCL (University College London)	8
5	The University of Edinburgh	15
6	The University of Manchester	28
7	King's College London	37
8	London School of Economics and Political Science (LSE)	56
9	The University of Warwick	64
10	University of Bristol	61

Popular sectors with job opportunities in the UK

There are various career opportunities post-graduation for international students studying in UK. Here are the popular fields one can opt for higher education:

Technology and Telecom	Insurance	Financial Services
Law	Apps, Web, and e-commerce	Energy, Mining, Chemicals, Environmental
Pharmaceuticals & Biotech	Consumer Goods	Transportation and Logistics
Consulting and Professional Services	Retail and Trade	Media and Communication
Public Sector and Education	Service, Tourism, Restaurants	Health Care
Charity and Not Profit	Sports, Culture, and Recreation	Construction and Real Estate



FOREIGN EDUCATION (AUSTRALIA)

Australian universities offer a variety of globally recognized courses to the aspirants of different career options. Australia has over 40 universities, each offering a wide range of academic programs to choose from. Certain academic institutes also provide internships and paid employment options.

If one studies in Australia one may get many benefits such as:

- Scholarship for International Students
- A Wide Range of Courses Offered by
- Working Facility Available While Studying
- Incredible Opportunities
- Best Students-friendly Cities
- Quality Education
- Get Multicultural Lifestyle
- Global Exposure
- Low Cost of Education
- Students can easily get PR (Permanent Residence)
- No Discrimination While Providing Long Post Study Work Visas
- Highest Part-time Wages Across the World (for students to support themselves while studying)

CAREER OPPORTUNITIES

After completing a Bachelor's or Master's degree in Australia students have many opportunities to explore their knowledge, such as:

- Accounting
- Cyber Security
- Computer Science Engineering
- Agricultural Science
- Human Resource Management
- Medicine
- Finance
- Sports Management
- Architecture etc.

EMERGING CAREER HORIZONS

LIST OF UNIVERSITIES IN AUSTRALIA

- The University of Melbourne
- Monash University
- The University of Sydney
- Australian National University (ANU)
- The University of Queensland
- The University of New South Wales (UNSW Sydney)
- The University of Western Australia
- The University of Adelaide
- University of Technology Sydney
- Macquarie University Sydney
- Royal Melbourne Institute of Technology
- La Trobe University

These are the top 12 universities in Australia and each of these 12 is renowned across the world for several specific fields/courses.

TIMELINE

There are two intakes for international students in Australia- February and July. Time to apply for February intake is October- November and for July intake it's April- May.

Some universities have a rolling admission deadline, and hence deadlines should be checked for each university on the university website.

ELIGIBILITY FOR ADMISSION IN AUSTRALIAN UNIVERSITIES

- Admission to diploma-level courses requires applicants to have a minimum 60% in class XII.
- For bachelor's degree admission, students must have scored at least 65% and above marks in class XII.
- Candidates should have IELTS score of 6.5 bands.

APPLICATION REQUIREMENTS

There are certain requirements to study in Australia for international students. Applications should include following details of entrance, English language proficiency, previous academic performance and others given below:

- Secondary and higher secondary reports or certificates along with the transcripts (mark sheets or report cards) of the final exams.
- IELTS and GMAT exam scorecards (in case the student is applying for an MBA course) must be provided. The minimum scores in IELTS and GMAT exams may vary from education provider to provider.
- For applying for an MBA degree or a degree in higher education like doctoral programs; one may be required to provide work experience certificates or letters, mentioning the complete work details: key responsibilities and positions held. A detailed CV is also mandatory.
- A statement of purpose or personal essay mentioning career goals, interests, extracurricular activities, and why the student has chosen the particular stream and how he/she will manage financially during the stay in Australia needs to be provided.
- Letter of recommendation (two suggested) from the person who has taught the student or knows him/her professionally, highlighting the strengths and weaknesses of the student and why he/ she would excel in the chosen field, also needs to be provided.

A university may or may not require a Statement of Purpose/ Essays for the admission procedure, however the same will be required when applying for a student visa. Universities might also require candidates to sit for an Online Interview (either live or video recorded).

EMERGING CAREER HORIZONS

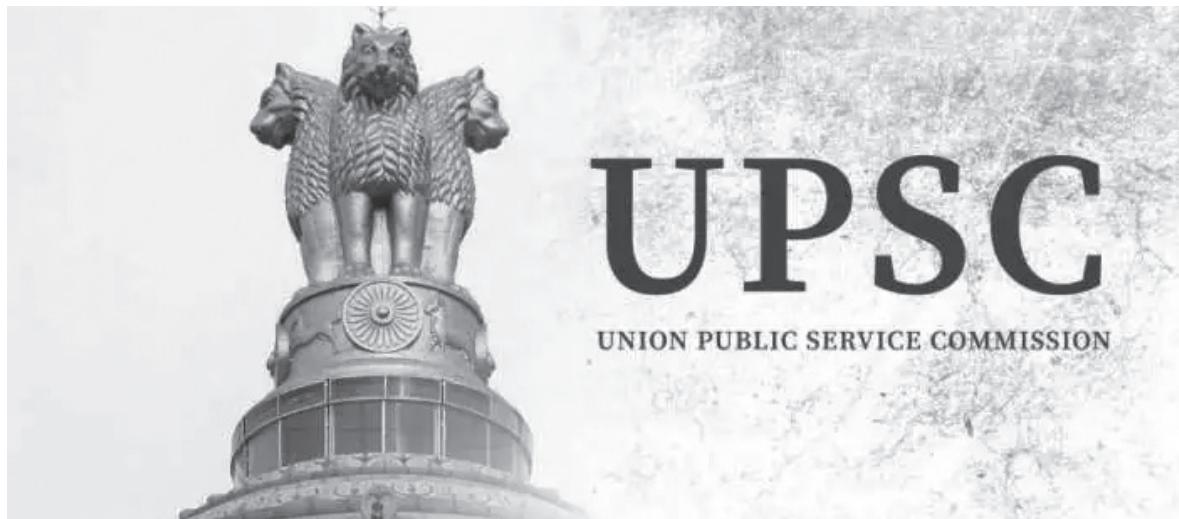
Inquiries regarding the application must be sent at least 12-15 months before the proposed date of admission. One can obtain the application forms through the following ways:

1. **Via email:** Request application forms from the university website. Universities usually have a form on their website through which you can request application material.
2. **Downloading from the University Website:** Most university websites provide downloadable and ready-to-print versions of their application forms. You can use these just as regular forms.
3. **Getting applications from University Representatives:** You can also obtain the application forms from various authorized representatives of Australian Universities in India.

Popular Sectors with Job Opportunities in the UK

There are various career opportunities post-graduation for international students studying in UK. Here are the popular fields one can opt for higher education:

Technology and Telecom	Insurance	Financial Services
Law	Apps, Web, and e-commerce	Energy, Mining, Chemicals, Environmental
Pharmaceuticals & Biotech	Consumer Goods	Transportation and Logistics
Consulting and Professional Services	Retail and Trade	Media and Communication
Public Sector and Education	Service, Tourism, Restaurants	Health Care
Charity and Not Profit	Sports, Culture, and Recreation	Construction and Real Estate



UNION PUBLIC SERVICE COMMISSION

A BRIEF INTRODUCTION

The Civil Services Examination is a national competitive examination in India conducted by the Union Public Service Commission for recruitment to higher Civil Services of the Government of India, including the Indian Administrative Service, Indian Foreign Service, and Indian Police Service.

Civil Service is a very prestigious job with which both power and responsibility are associated. Direct participation and contribution in execution of policies of national interest is the lucrative part of this job profile. It is considered to be the most difficult examination of the country.

These are the following services that come under UPSC :

- (i) Indian Administrative Service
- (ii) Indian Foreign Service
- (iii) Indian Police Service
- (iv) Indian Audit and Accounts Service, Group 'A'
- (v) Indian Civil Accounts Service, Group 'A'
- (vi) Indian Corporate Law Service, Group 'A'
- (vii) Indian Defence Accounts Service, Group 'A'
- (viii) Indian Defence Estates Service, Group 'A'
- (ix) Indian Information Service, Junior Grade Group 'A'
- (x) Indian Postal Service, Group 'A'
- (xi) Indian P&T Accounts and Finance Service, Group 'A'
- (xii) Indian Railway Protection Force Service, Group 'A'
- (xiii) Indian Revenue Service (Customs & Indirect Taxes) Group 'A'
- (xiv) Indian Revenue Service (Income Tax) Group 'A'
- (xv) Indian Trade Service, Group 'A' (Grade III)

- (xvi) Armed Forces Headquarters Civil Service, Group 'B' (Section Officer's Grade)
- (xvii) Delhi, Andaman and Nicobar Islands, Lakshadweep, Daman & Diu and Dadra & Nagar Havel Civil Service (DANICS), Group 'B'
- (xviii) Delhi, Andaman and Nicobar Islands, Lakshadweep, Daman & Diu and Dadra & Nagar Havel Police Service (DANIPS), Group 'B'
- (xix) Pondicherry Civil Service (PONDICS), Group 'B'

ELIGIBILITY CRITERIA FOR CIVIL SERVICES EXAMINATION

Graduation in any stream from a recognized university. Minimum Age- 21 years

21 to 32 years (General Candidates)

21 to 35 years (OBC Candidates)

21 to 37 years (ST/SC Candidates)

Although the eligibility for this examination is graduation, it is advised to begin its preparation right from Middle and Secondary classes as the syllabus of General Studies includes wide-ranging topics and NCERT books of Science and Social Science of classes 6 to 10 are the best source for that.

MODE OF REGISTRATION

Online Application through the official website of UPSC

1. www.upsconline.nic.in
2. www.upsc.gov.in

DEADLINE FOR REGISTRATION

Applications are open 3 months before Preliminary Test is to be conducted.

MODE OF EXAM & QUESTION PAPER DESIGN

Exams are conducted in offline mode (Pen and Paper)

Stage 1: Preliminary Test

The UPSC exam pattern for the Preliminary stage consists of **two papers of General Studies**, conducted on one day. Both the papers comprise **Objective Type Questions with Multiple Choice of Answers**. The Prelims Examination is a qualifying stage to filter candidates for the Mains Exam.

Stage 2: Mains Exam Pattern

The UPSC exam pattern for the Mains stage consists of **9 papers**.

These 9 papers are: 2 Compulsory Papers- Indian Language (qualifying) and English (qualifying), Essay Writing, 4 Papers of General Studies and 2 Papers of any one Optional Subject.

As per the exam pattern of UPSC Mains, all of the papers consist of **Descriptive Answer Type Questions**. It is an exhaustive phase and the total marks in UPSC Mains can directly affect the final scores. Thus, the UPSC exam marks for the Mains phase are extremely valuable as it acts as a key factor in merit declaration.

Stage 3: Interview

The total marks of the UPSC Interview Stage is 275. Marks of Mains Exam and Interview collectively decide the candidate's rank.

EMERGING CAREER HORIZONS

FREQUENCY OF EXAM

Conducted in three stages - Prelims, Mains and Interview- which take almost the entire year.

ATTEMPTS ALLOWED

General Category: 6 attempts till 32 years of age.

OBC: 9 attempts till 35 years of age.

SC/ST: unlimited attempts till 37 years of age.

EXAM DATE

Preliminary Test (Objective Type) is conducted on any one day in May/ June

- Those who qualify Preliminary Test are eligible for writing Mains which is conducted in September-October
- Interview is held in February-March next year for those who clear Mains exam. Dates are announced by UPSC every year a few months before examinations.

SYLLABUS

FOR PRELIMINARY TEST

General Studies - Paper I (200 marks - Merit Ranking nature) comprises

- Current Events of National and International Importance.
- History of India and Indian National Movement.
- Indian and World Geography-Physical, Social, Economic Geography of India and the World.
- Indian Polity and Governance-Constitution, Political System, Panchayati Raj, Public Policy, Rights Issues, etc.
- Economic and Social Development-Sustainable Development, Poverty, Inclusion, Demographics, Social Sector Initiatives, etc.
- General issues on Environmental Ecology, Bio-diversity and Climate Change - that do not require subject specialization.
- General Science.

General Studies - Paper II : CSAT (200 marks- Qualifying nature) comprises

- Comprehension; Interpersonal Skills including Communication Skills.
- Logical Reasoning and Analytical Ability.
- Decision Making and Problem Solving.
- General Mental Ability.
- Basic Numeracy (Numbers and their Relations, Orders of Magnitude, etc.) (Class X level).
- Data Interpretation (charts, graphs, tables, data sufficiency etc. - Class X level).

FOR MAINS EXAM

Candidates qualifying Preliminary Test will be eligible to appear for the Mains exam. Mains exam tests candidate's academic knowledge, analytical mind, problem solving skills and ability to present the understanding according to the requirements of the question in a time-bound manner. UPSC syllabus for Mains exam is given below:

There are a total of 48 Optional Subjects (covering different streams) in the UPSC Mains exam. The list includes 25 Core Subjects and 23 Literature Optional Subjects out of which candidates have to choose any one subject.

UPSC MAINS EXAM PATTERN

Qualifying Papers		Marks
Paper-A	One of the Indian Language to be selected by the candidate from the Languages included in the Eighth Schedule to the Constitution	300
Paper-B	English	300
Papers Counted for Merit		
Paper-I	Essay	250
Paper-II	General Studies-I (Indian Heritage and Culture, History and Geography of the World and Society)	250
Paper-III	General Studies-II (Governance, Constitution, Polity, Social Justice and International relations)	250
Paper-IV	General Studies-III (Technology, Economic Development, Bio-diversity, Environment, Security and Disaster Management)	250
Paper-V	General Studies-IV (Ethics, Integrity and Aptitude)	250
Paper-VI	Optional Subject – Paper 1	250
Paper-VII	Optional Subject – Paper 2	250
Sub Total (Written Test)		1750
Personality Test		275
Grand Total		2025

Important Points:

1. There are **two Qualifying** Papers in the Mains exam, Namely **“Paper A” and “Paper B”** of 300 marks each.
2. Two Qualifying Papers are **“Any Indian Language from Eighth Schedule”** and **“English Language Paper”**.
3. Candidates need to score 25% in both Qualifying Papers i.e, 75 marks each.
4. All other seven papers are scoring in nature their marks will be included in the final merit list.
5. Candidates can answer all the Scoring Subjects in English or any of the **eighth schedule** languages.
6. Candidates have to select any one subject from the table as their Optional subject for Paper VI and Paper VII.

EMERGING CAREER HORIZONS

UPSC Optional Subjects List for Mains Exam

Agriculture	Animal Husbandry and Veterinary Science	Anthropology	Botany	Chemistry
Civil Engineering	Commerce and Accountancy	Economics	Electrical Engineering	Geography
Statistics	Sociology	Physics	Philosophy	Medical Science
Political Science and International Relations	Public Administration	Psychology	Mechanical Engineering	Mathematics
Zoology	Geology	History	Management	Law

Literature of any one of the following languages: Assamese, Bengali, Bodo, Dogri, Gujarati, Hindi, Kannada, Kashmiri, Konkani, Maithili, Malayalam, Manipuri, Marathi, Nepali, Odia, Punjabi, Sanskrit, Santhali, Sindhi, Tamil, Telugu, Urdu and English.

Detailed syllabus of all the optional subjects can be found on the official website of UPSC.

UPSC IAS Syllabus for Mains Exam- Subject-wise

Structure of the Language Papers

The structure of Language Papers i.e., **“Paper A” and “Paper B”** has been discussed in the table given below. The candidates have to select any one language from the Eighth Schedule of the Indian Constitution which is given in the table below. The Second Language Paper is fixed i.e., English. Candidates have to use the corresponding script for the language as mentioned in the table below.

Languages And Script

Language	Script	Language	Script
Assamese	Assamese	Bengali	Bengali
Gujarati	Gujarati	Hindi	Devanagari
Kannada	Kannada	Kashmiri	Persian
Bodo	Devanagari	Konkani	Devanagari
Malayalam	Malayalam	Manipuri	Bengali
Marathi	Devanagari	Nepali	Devanagari
Odia	Odia	Punjabi	Gurumukhi
Sanskrit	Devanagari	Tamil	Tamil
Sindhi	Devanagari or Arabic	Telugu	Telugu
Urdu	Persian	Maithilli	Devanagari
Santhali	Devanagari or Olchiki	Dogri	Devanagari

Note: For the Santhali language, the question paper will be printed in the **Devanagari Script**, but the candidates are free to answer **either in the Devanagari Script or in Olchiki**.

Types of questions asked in both language papers are:

1. Essay – 100 marks
2. Reading Comprehension – 60 marks
3. Precis Writing – 60 marks
4. Translation:
 - (a) English to compulsory language (e.g. Hindi) – 20 marks
 - (b) Compulsory Language to English – 20 marks
5. Grammar and Basic Language Usage – 40 marks

Candidates can go through the **UPSC IAS General Studies Papers Syllabus** for each paper in the below section. The syllabus will help them to understand **what to study and what not to study for the UPSC exam**. The syllabus of all **four General Studies** papers is given below. **Each paper holds 250 marks out of 1750**. The total marks of **General Studies papers are 1000 marks**. Candidates must prepare well for these papers as they are holding **good marks in the final merit list**.

Civil Service Mains Syllabus

PAPER-I Essay: Candidates may be required to write essays on multiple topics. They will be expected to keep closely to the subject of the essay to arrange their ideas in orderly fashion, and to write concisely. Credit will be given for effective and exact expression.

PAPER-II General Studies-I: Indian Heritage and Culture, History and Geography of the World and Society.

- Indian Culture will cover the salient aspects of Art Forms, Literature and Architecture from ancient to modern times.
- Modern Indian History from about the middle of the eighteenth century until the present- significant events, personalities, issues.
- The Freedom Struggle — its various stages and important contributors/contributions from different parts of the country.
- Post-independence consolidation and reorganization within the country.
- History of the World will include events from 18th century such as Industrial Revolution, World Wars, Redrawal of National Boundaries, Colonization, Decolonization, Political Philosophies like Communism, Capitalism, Socialism etc.— their forms and effect on the society.
- Salient features of Indian Society, Diversity of India.
- Role of Women and women's organization, population and associated issues, poverty and developmental issues, urbanization, their problems and their remedies.
- Effects of globalization on Indian society.
- Social empowerment, communalism, regionalism & secularism.
- Salient features of World's Physical Geography.
- Distribution of key natural resources across the world (including South Asia and the Indian subcontinent); factors responsible for the location of primary, secondary, and tertiary sector industries in various parts of the world (including India).
- Important Geophysical phenomena such as earthquakes, Tsunami, Volcanic activity, cyclone etc., geographical features and their location-changes in critical geographical features (including water-bodies and ice-caps) and in flora and fauna and the effects of such changes.

EMERGING CAREER HORIZONS

PAPER-III General Studies- II: Governance, Constitution, Polity, Social Justice and International Relations.

- Indian Constitution—historical underpinnings, evolution, features, amendments, significant provisions and basic structure.
- Functions and Responsibilities of the Union and the States, issues and challenges pertaining to the federal structure, devolution of powers and finances up to local levels and challenges therein.
- Separation of powers between various organs dispute redressal mechanisms and institutions.
- Comparison of the Indian Constitutional Scheme with that of other countries.
- Parliament and State legislatures—structure, functioning, conduct of business, powers & privileges and issues arising out of these.
- Structure, organization and functioning of the Executive and the Judiciary—Ministries and Departments of the Government; pressure groups and formal/informal associations and their role in the Polity. 31 Government strives to have a workforce which reflects gender balance and women candidates are encouraged to apply.
- Salient features of the Representation of People's Act.
- Appointment to various Constitutional posts, powers, functions and responsibilities of various Constitutional Bodies.
- Statutory, regulatory and various quasi-judicial bodies.
- Government policies and interventions for development in various sectors and issues arising out of their design and implementation.
- Development processes and the development industry —the role of NGOs, SHGs, various groups and associations, donors, charities, institutional and other stakeholders.
- Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.
- Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.
- Issues relating to poverty and hunger.
- Important aspects of governance, transparency and accountability, e-governance- applications, models, successes, limitations, and potential; citizens charters, transparency & accountability and institutional and other measures.
- Role of civil services in a democracy.
- India and its neighborhood- relations.
- Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.
- Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.
- Important International Institutions, agencies and fora- their structure, mandate.

PAPER-IV General Studies-III: Technology, Economic Development, Bio diversity, Environment, Security and Disaster Management

- Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.
- Inclusive growth and issues arising from it.
- Government Budgeting.
- Major crops-cropping patterns in various parts of the country, - different types of irrigation and irrigation

systems storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.

- Issues related to direct and indirect farm subsidies and minimum support prices; Public Distribution System-objectives, functioning, limitations, revamping; issues of buffer stocks and food security; 32 Government strives to have a workforce which reflects gender balance and women candidates are encouraged to apply. technology missions; economics of animal-rearing.
- Food processing and related industries in India- scope and significance, location, upstream and downstream requirements, supply chain management.
- Land reforms in India.
- Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth.
- Infrastructure: Energy, Ports, Roads, Airports, Railways etc.
- Investment models.
- Science and Technology- developments and their applications and effects in everyday life.
- Achievements of Indians in science & technology; indigenization of technology and developing new technology.
- Awareness in the fields of IT, Space, Computers, Robotics, Nano-technology, Bio-technology and issues relating to Intellectual Property Rights.
- Conservation, environmental pollution and degradation, environmental impact assessment.
- Disaster and Disaster management.
- Linkages between development and spread of extremism.
- Role of external state and non-state actors in creating challenges to internal security.
- Challenges to internal security through communication networks, role of media and social networking sites in internal security challenges, basics of cyber security; money-laundering and its prevention.
- Security challenges and their management in border areas - linkages of organized crime with terrorism.
- Various Security forces and agencies and their mandate.

PAPER-V General Studies- IV: Ethics, Integrity and Aptitude

This paper will include questions to test the candidates' attitude and approach to issues relating to integrity, probity in public life and his problem solving approach to various issues and conflicts faced by him in dealing with society. Questions may utilise the case study approach to determine these aspects. The following broad areas will be covered :

- Ethics and Human Interface: Essence, determinants and consequences of Ethics in-human actions; dimensions of ethics; ethics - in private and public relationships. Human Values - lessons from the lives and teachings of great leaders, reformers and administrators; role of family society and educational institutions in inculcating values.
- Attitude: content, structure, function; its influence and relation with thought and behaviour; moral and political attitudes; social influence and persuasion.
- Aptitude and foundational values for Civil Service, integrity, impartiality and non-partisanship, objectivity, dedication to public service, empathy, tolerance and compassion towards the weaker-sections.
- Emotional intelligence-concepts, and their utilities and application in administration and governance. 33 Government strives to have a workforce which reflects gender balance and women candidates are encouraged to apply.
- Contributions of moral thinkers and philosophers from India and world.

EMERGING CAREER HORIZONS

- Public/Civil service values and Ethics in Public administration: Status and problems; ethical concerns and dilemmas in government and private institutions; laws, rules, regulations and conscience as sources of ethical guidance; accountability and ethical governance; strengthening of ethical and moral values in governance; ethical issues in international relations and funding; corporate governance.
- Probity in Governance: Concept of public service; Philosophical basis of governance and probity; Information sharing and transparency in government, Right to Information, Codes of Ethics, Codes of Conduct, Citizen's Charters, Work culture, Quality of service delivery, Utilization of public funds, challenges of corruption.
- Case Studies on above issues.

SCOPE

With time a newly inducted IAS officer gets to don a lot of different hats in terms of postings and promotions:

- * At first a newly recruited IAS trainee is sent to train at the LBSNAA at Mussoorie.
- * There the recruit is trained to handle the various facets of administrative work and the challenges of being an IAS officer.
- * Once the training is over, the trainee then formally takes charge as an IAS officer at the post of SDM or Sub-divisional Magistrate. Depending on his performance as an SDM, he's then given more responsibilities and further promoted to higher posts. The highest rank is that of Cabinet Secretary of India.

SALARY

Salary of Civil Servants starts from INR 56,000 (as per seventh pay commission) as the basic pay and goes upto INR 2,50,000 which is the salary of highest ranking IAS officer, the Cabinet Secretary of India which means that the salary and allowances of IAS officers increase with time, as they climb the administrative ladder to get promoted to the various high-ranking government posts.

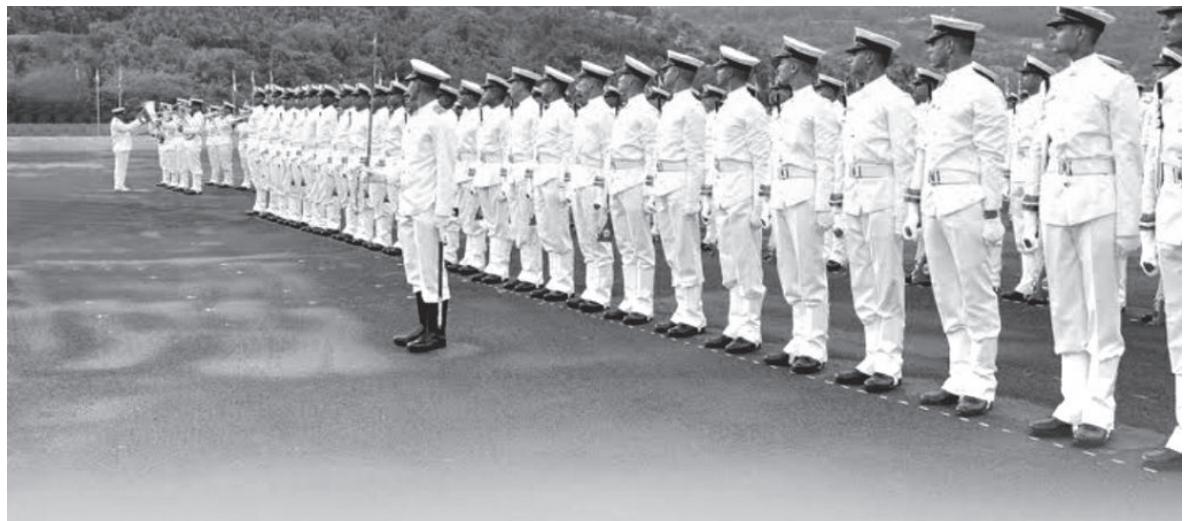
This salary is accompanied with a number of allowances and perks. House Rent Allowance, Travel Allowance and Dearness Allowance are also added. Apart from this, IAS officers are also provided a number of facilities like free residence, security, subsidized transport, trips, study leaves etc. There is strong job security in this field and substantial post retirement benefits are also attached.

SOURCES/WEBSITES FOR SAMPLE QUESTION PAPERS AND STUDY MATERIALS

It is always good to read from standard books and authentic sources rather than blindly following unverified material flooding in the market and widely available online stuff. Self- reading of important text books is necessary to develop a clear understanding of the basic concepts. Guidance of experts and mentors should be sought for choosing the books and right study material.

Previous year's question papers can be found on the official website of UPSC.

<https://upsc.gov.in>



NATIONAL DEFENCE ACADEMY AND NAVAL ACADEMY EXAM (NDA)

A BRIEF INTRODUCTION

National Defence Academy has emerged as an iconic Military Academy over years, attracting not only the finest young men from all corners of the country but also from friendly foreign countries. In the seven decades of its glorious existence, National Defence Academy has grown both in grace and grandeur. From its portals have graduated the '*Leaders of the men*', who have proved their worth and have demonstrated the essence of inter-services camaraderie and jointmanship, thereby vindicating the faith and vision of its founding fathers.

CAREER OPTIONS : Army, Navy & Air Force

ELIGIBILITY CRITERIA

- Age Limit 16.5 years to 19.5 years.
- The educational qualification for the Army Wing of NDA is a passing certificate in the 10+2 exam.
- Candidates must clear Class 12th with Physics, Chemistry and Maths to apply for the Air Force and Naval Wings of NDA.
- Candidates have to clear 12th Standard or its equivalent with Physics, Chemistry and Mathematics to qualify for the 10+2 Cadet Entry Scheme at the Naval Academy.
- **Minimum Percentage of marks:** 60% for NDA Exam Eligibility

QUESTION PAPER DESIGN

Paper I- Mathematics	
Total Marks	300 Marks
Total No. of Questions	120
Marks awarded for Correct answer	2.5 marks
Marks deducted for the wrong answer	-0.83
Exam Duration	2.5 Hours

EMERGING CAREER HORIZONS

Paper-II- General Ability Test (GAT)	
Total Marks	600 marks
Total No. of Questions	150
No. of Questions in English Section	50
No. of Questions in General Knowledge Section	100
Maximum Marks for English	200 marks
Maximum Marks for G.K.	400 marks
Marks for Correct Answer	4 marks in both sections
Marks for Incorrect Answer	-1.33 marks in both sections
Exam Duration	2.5 Hours

SYLLABUS

Mathematics

Topic	Questions
Calculus	20-25
Quadratic Equation	20-15
Matrices & Determinants	30
Probability	10
Trigonometry	30
Complex Number	10-15

English

Topic	No. of Questions	Marks
Spotting Errors	5	20
Comprehension	6	24
Selecting Words	10	40
Ordering of Words in a Sentence	9	36
Sentence Improvement	10	40
Antonyms	5	20
Synonyms	5	20
Total	50	200

General Knowledge

Topic	No. of Questions	Marks
Physics	23	92
Chemistry	16	64
General Science	11	44
History & Freedom Movement	16	64
Geography	17	68
Current Affairs	17	68
Total	100	400

FREQUENCY OF EXAM

NDA is conducted twice a year by UPSC for Armed Forces including the Indian Army, Indian Navy and Indian Air force. We are sharing a timeline of the NDA Exam.

NDA Important Events	NDA 1st Exam	NDA 2nd Exam
Notification Release	December	May
Admit Card Release	March	August
NDA Exam Date	April	September
Written Result	May	October – December

ATTEMPTS ALLOWED (IF APPLI.)

The number of attempts at the NDA entrance exam is unlimited. One can take this exam as many times as one wants until the age of 19.5 is reached.

MODE OF EXAM : Offline

EXAM DURATION : GAT: 2 ½ hours (10 am to 12.30 pm)

Mathematics: 2 ½ hours (2 pm to 4.30 pm)

MODE OF REGISTRATION : Online

DEADLINE FOR REGISTRATION : The NDA 1 application form is available in the month of December.

OFFICIAL WEBSITE : Official UPSC website. (<https://upsc.gov.in/>)

SCOPE

Minimum Service Required for Promotion	Indian Army	Indian Navy	Indian Air Force
On being Commissioned	Lieutenant	Sub Lieutenant	Flying Officer
After 2 Years of Service	Captain	Lieutenant	Flight Lieutenant
After 6 Years of Service	Major	Lt Commander	Squadron Leader
13 Years of Service	Lieutenant Colonel	Commander	Wing Commander
On Selection	Colonel (Selection)	Captain (Selection)	Group Captain (Selection)
26 Years of Service	Colonel (Time Scale)	Captain (Time Scale)	Group Captain (Time Scale)
On Selection	Brigadier	Commodore	Air Commodore
On Selection	Major General	Rear Admiral	Air Vice-Marshal
On Selection	Lieutenant General	Vice Admiral	Air Marshal
On Selection	General	Admiral	Air Chief Marshal

SALARY

Before getting commissioned, candidates get an NDA stipend during the cadet training, after qualifying NDA. After the application of the 7th Pay Commission, the NDA & NA salary has gone through various changes.

For Lieutenant Level 10 (INR 56,100- INR 1,77,500) + Grade Pay INR 5,400/-

Apart from the NDA salary, candidates are also entitled to various allowances:

- DA & TA (Dearness Allowances/Transport allowance)

EMERGING CAREER HORIZONS

- Highly Active Field Area Allowance (As per the post)
- Uniform allowance
- Compensatory Modified Field Area Allowance (As per post)
- Compensatory Field Area (As per post)
- Kit Maintenance Allowances
- Para Allowance
- Special Forces Allowance
- Para Jump Instructor Allowance
- Project Allowance
- Para Reserve Allowance
- Technical Allowance (Tier-I)
- Technical Allowance (Tier-II)

BRIEF INTRODUCTION OF ORGANISATION CONDUCTING THE EXAMINAION

The Union Public Service Commission (UPSC) is the government agency responsible for recruiting officers in the Indian Navy, Indian Army and Indian Air Force. It conducts the exam and selects candidates based on pre-selected criteria.

SOURCES/WEBSITES FOR SAMPLE

UPSC releases the NDA question papers in online mode after the exam is conducted. The NDA question paper is released for both the papers - Mathematics and GAT (General Ability Test). Candidates preparing for the exam must download the question papers of NDA and practice them right from the day to increase their chances of qualification in the NDA exam.

https://upsc.gov.in/examinations/previous-question-papers/archives?field_exam_name_value=National%20Defence%20Academy

QUESTION PAPERS AND STUDY MATERIALS

<https://prepp.in/nda-exam/study-material>

https://competition.careers360.com/articles/best-books-prepare-for-nda#toc_10

REFERENCE BOOKS

NDA Book Name	Author/Publisher
Pathfinder for NDA & NA National Defence Academy Naval Academy Entrance Examination	Arihant
Study Package for NDA/NA Entrance Exam	Tata McGraw-Hill Education India
Chapter wise-Section wise Solved Papers NDA & NA	Arihant
Study Package for NDA/NA Entrance Exam	Tata McGraw-Hill Education India

HOW TO JOIN ARMED FORCES

The **Combined Defence Services Examination** (abbreviated as **CDS Exam**) is conducted by the Union Public Service Commission for recruitment of Commissioned Officers in the **Indian Military Academy, Officers Training Academy, Indian Naval Academy and Indian Air Force Academy**.

Department	Age Limit	Gender	Educational Qualification
Indian Military Academy	19 to 24 years	Male	Candidates should have a Graduation from a recognized University or equivalent.
Indian Naval Academy	19 to 22 years	Male	Candidates should have a degree in Engineering from a recognized University of equivalent.

Department	Age Limit	Gender	Educational Qualification
Air Force Academy	20 to 24 years	Male	Candidates should have a degree from a recognized University (with Physics and Mathematics at 10+2 level) or a Bachelor of Engineering.
Officers' Training Academy	10 to 25 years	Male	Candidates should have a Graduation from a recognized University or equivalent.
Officers' Training Academy (SSC Women Non-Technical Course)	19 to 25 years	Female	Candidates should have a Graduation from a recognized University or equivalent.

THE TECHNICAL ENTRY SCHEME (TES)

TES is a direct entry. Candidates can Join the Technical Entry Scheme after completion of class 12th only non-medical students are eligible for applying in the same. Moreover, Candidates will be eligible for the Engineering branch in the Indian Army.

There is no written examination available for the **TES entry**. Eligible candidates can get direct entry into the Permanent commission. Nevertheless, candidates must have qualified JEE Mains Examination with at least 60 percent of the Marks for TES Entry.

The Selection Process is Carried Out in Three Stages:

Stage 1: Shortlisting of Candidates

Stage 2: SSB conducts interview

Stage 3: Medical Test

Selected candidates are directly permitted for engineering course. They are hired for the Rank of Lieutenant.

ELIGIBILITY FOR TES

The candidate who has completed 10 +2 with Physics, Chemistry, and Mathematics with at least 60 % marks. Also, the candidate must have qualified JEE MAIN.

Age limit: The age limit is between 16.5 to 19.5 years.

TECHNICAL GRADUATE COURSE (TGC) ENTRY

TGC Entry Scheme is a type of entry through which an engineering graduate can join the Indian Army as an officer.

This entry is open to only male candidates who are pursuing an engineering degree from a recognized university.

ELIGIBILITY

Age Limit:

20 to 27 years.

Educational Qualifications:

All those who have already completed their B.E./B.Tech. graduate or are in the last semester of the following Engineering streams are eligible to apply.

EMERGING CAREER HORIZONS

NCC SPECIAL ENTRY SCHEME

The NCC Special Entrance Program is one approach to recognize the contributions that the former NCC cadets have made to society and to express gratitude for their significant time. NCC cadets can join the Indian Armed Forces as an officer through a direct selection process known as SSB.

NCC Special Entry: Selection Process

- Application shortlisting
- SSB Interview
- Medical Exam

The Officers Training Academy (OTA) in Chennai provides 49 weeks of NCC Special Entry training. Candidates who meet all eligibility conditions will be detailed for Pre-Commission training at OTA, Chennai depending on their position in the final order of merit, up to the number of vacancies.

ELIGIBILITY

Age Limit:

- Minimum age of the applicants – 19 years
- Maximum age of the applicants- 25 years

Educational Qualification:

- Degree from an accredited university or an institution equivalent, with a minimum cumulative grade point average of 50%.
- NCC ‘C’ certificate required for both male and female candidate.

JAG (JUDGE ADVOCATE GENERAL) ENTRY SCHEME

The Indian Army conducts recruitment for Judge Advocate General (JAG) every year.

Unmarried male and female law graduates who meet the eligibility criteria can appear in the recruitment process. The position of Judge Advocate General (JAG) in the Indian Army is held by a Major General who is the legal and judicial chief of the army. The Judge Advocate General is assisted by a separate JAG branch which consists of legally qualified army officers. The recruitment is done for a period of 14 years which can be extended.

ELIGIBILITY

Age Limit: 21 years to 27 years

Educational Qualification: LLB degree with 55% marks can apply for this entry.

Candidates should get themselves registered in the Bar Council of India to apply for the Indian Army JAG position. Male and female both can apply.

TRAINING AND PERIOD OF PROBATION FOR JAG

- Duration of training is 49 weeks at OTA, Chennai.
- Selected candidates will be detailed for Pre-Commission training at OTA, Chennai according to their position in the final order of merit and number of available vacancies.

SSC TECH ENTRY SCHEME

SSC Tech entry is a technical entry in Army meant for engineers.

This recruitment procedure occurs twice in a particular year.

ELIGIBILITY

Age limit:

20 to 27yrs

Educational Qualification:

Candidates who have an engineering degree or are in the final year of engineering can apply for the recruitment.

SELECTION PROCESS

Candidates applying for the Indian Army SSC Tech recruitment are expected to be shortlisted on the basis of eligibility and then will be called for an SSB Interview. The SSB Interview will be conducted in two stages i.e. Stage I and Stage II. After clearing both stages, candidates will be shortlisted based on their performance in the SSB Interview. A merit list will be prepared for candidates who are recommended by the SSB and are medically fit will be issued a joining letter for training.

INDIAN NAVY 10+2 (B.TECH.) CADET ENTRY SCHEME

The Indian Navy has opened its doors to young aspirants with the (10+2) B.Tech. Cadet Entry. If you dream of serving the nation while working with state-of-the-art technology, this is the opportunity you have been waiting for. This prestigious program lets you earn a degree and serve the country at the same time.

The Indian Navy (10+2) B.Tech. Cadet Entry scheme is a perfect blend of academics and military training. The comprehensive program provides aspirants with a solid academic foundation and practical training, preparing them for a challenging career in the Navy. Joining the Indian Navy not only ensures a secure future but also gives the satisfaction of serving the nation.

ELIGIBILITY

Age limit:

16.5 to 19 Years

Educational Qualification:

Passed Senior Secondary Examination (10+2 Pattern) or its equivalent examinations from any Board with at least 70% aggregate marks in Physics, Chemistry and Mathematics (PCM) and at least 50% marks in English



B.Sc. IN AVIATION

A BRIEF INTRODUCTION

B.Sc. in Aviation is also known as Bachelor in Aviation which is an undergraduate degree course that deals with the field of Aviation Science. It is also related to the Aircraft Maintenance, Air Traffic Control, Design and Operation of Aircraft, Airport and Airline Management, Line Technician, Diver Dispatch/Load Planner, and Flight Attendants. Aviation is a glamorous world with well-paid job.

It is a three-year undergraduate program with six semesters of six months each. During three years, the students will cover various subjects like Aircraft Building, Aircraft Maintenance, Navigation, Aviation Security, Flying Aircraft, etc. B.Sc. Aviation graduates have job opportunities in the various public and private aviation organizations. Students who are interested to make a career in B.Sc. in Aviation are recruited by various Private Civil and Cargo Aviation Companies that are based in India and other countries.

CAREER OPTIONS

- a) Flight Attendant
- b) Air Traffic Controller
- c) Aircraft Maintenance Professional
- d) Cargo Manager
- e) Airport Ground Duty Manager

ELIGIBILITY CRITERIA

- a) Students must be appearing or have passed 10+2 or equivalent from a recognized board with Physics, Chemistry, and Mathematics.
- b) The candidates who have pursued three-year Engineering Diploma course with Mathematics and Physics as their subjects are also eligible.
- c) Students who are searching for one of the top most institutes of B.Sc. Aviation in India can apply for the AME CET.

SYLLABUS

- a) General Awareness
- b) English
- c) Mathematics
- d) Physics
- e) Chemistry

QUESTION PAPER DESIGN

Sl. No.	Subjects	Questions	Marks
1	General Awareness	15	60
2	English	15	60
3	Mathematics	20	80
4	Physics	20	80
5	Chemistry	20	80
Total		90	360

FREQUENCY OF EXAM

: Conducted Annually

MODE OF EXAM

: Online and Offline Both

EXAM DATE

: Second week of May

EXAM DURATION

: 90 Minutes

MODE OF REGISTRATION

: Online

DEADLINE FOR REGISTRATION: 31st March**OFFICIAL WEBSITE**: www.amecet.in**SCOPE**

: Flight Attendant

Air Traffic Controller

Aircraft Maintenance Professional

Cargo Manager

Airport Ground Duty Manager

SALARY

: 10 to 20 Lakh Per Annum

BRIEF INTRODUCTION OF ORGANISATION/ INSTITUTION/ AGENCY CONDUCTING THE EXAM

AMECET stands for Aircraft Maintenance Engineering Common Entrance Test. Basically it is a common entrance exam of national level for pursuing aviation courses. It offers admission in India's top most institute/university for pursuing aviation courses in India. It is the platform where participants choose any institution according to their All India Rank of AMECET. It offers to the participants to take admission in license, diploma, certificate & graduation courses of the aviation sector. It offers upto 100% scholarship to all qualified students.

SOURCES/WEBSITES FOR SAMPLE QUESTION PAPERS AND STUDY MATERIALS

<https://www.amecet.in/previous-year-question-papers.php>

REFERENCE BOOKS

General Awareness and English: S. Chand Advanced Objective General Knowledge

Quantitative Aptitude and Reasoning: Arihant Publication

Physics: S.Chand's Principle of Physics, SL Arora New Simplified Physics, NCERT Physics Textbook, Arihant CBSE Physics chemistry

EMERGING CAREER HORIZONS

Chemistry: Pradeep of Chemistry, Textbook of OP Tandon, NCERT Chemistry Textbook

Mathematics: Comprehensive Mathematics, Complete Mathematics, Textbook of K.C Sinha, NCERT Mathematics Textbook

TOP UNIVERSITIES

- a) NIMS University, Jaipur
- b) VELS Institute of Science, Technology and Advanced Studies, Chennai
- c) Garware Institute of Career Education and Development, Mumbai
- d) Indira Gandhi Rashtriya Uran Academy, Rae Bareli
- e) Indira Institute of Aircraft Engineering, Pune
- f) Pune Institute of Aviation Engineering, Pune
- g) Hindustan Institute of Technology and Science, Chennai
- h) Sir Sitaram and Lady Shantabai Patkar College of Arts and Science, Mumbai

TOP PLACEMENT COMPANIES

- | | | |
|--------------------------|-------------------------|----------------------|
| • Air India | • Air Ports | • Alliance Air |
| • IndiGo | • Logistics Departments | • Luwong Air |
| • SpiceJet | • GoAir | • Air Deccan |
| • Academic Institutes | • AirAsia India | • Blue Dart Aviation |
| • Customer Care Services | • Vistara | • Pinnacle Air |

Commercial Pilot License

Commercial Pilot License (CPL) is a license offered by DGCA that allows students to act as a Pilot in Command of any aircraft and get paid for that. A CPL holder can perform flying work in single and multi-engine airplanes, and fly aircraft and even act as a co-pilot in aircraft. CPL course is all about operating the aircraft in the air that includes general flying, aircraft testing, skill tests as per DGCA requirement. CPL training has become very popular among the students who have the desire to fly an aircraft and learn every discipline of the CPL course which has increased the number of aviation schools and flight clubs in India. An aspiring candidate can enroll in the course by appearing in various exams or sometimes it can be merit-based for some institutions. After the completion of the CPL course, the candidates have to complete a minimum of 6 months and a maximum of one-year training, to further apply for a job in government and private airlines where they are paid to fly as a pilot, transporting cargo and passengers, and perform other operations that include aerial surveying and search and rescue.

Commercial Pilot License Eligibility

CPL is the most demanding career in the field of aviation. To join this program, the student must have fulfilled the following eligibility criteria:-

- The candidates appearing or passed his/ her 12th examination in Science stream with PCM/ 3 years Engineering Diploma from a recognized board/university.
- The age limit must be minimum 17 years or above.
- Students must be medically fit as per the Medical standards of DGCA.

Commercial Pilot License Course Duration

CPL course duration is of 8-10 months that includes 80 hours for academic sessions on ground and 200 hours on flying training. There are three stages in training: Ground Training, Simulator Training, and Flying Training. The Commercial Pilot License (CPL) course is related to operating aircraft and providing a successful journey to their passengers. CPL offers a tremendous career opportunity in aviation and today CPL graduates earn handsome salary in India and abroad as well.

CPL Course Syllabus

CPL course serves a deep knowledge of aircraft functions and operating systems of the aircraft. There are various subjects that are covered in the CPL syllabus which are decided by DGCA, with the main purpose of emphasizing the understanding of all the concepts. Some of them are as follow:-

- Air Regulations
- Aviation Meteorology
- Air Navigation
- Technical General
- Technical Specific
- Radio Telephony

CPL Career Opportunities

Indian Aviation Industry is showing excellent growth rapidly. Airlines is the company which provides air transport for the passengers. Commercial Pilot License (CPL) holders are hired by airlines to fly aircrafts. Today, Indian airlines have the best options available after a candidate gets a license. The Pilot student can apply for a job in the following airlines:-

Top National Recruiting Airlines

- Air India
- Jet Airways
- IndiGo
- SpiceJet
- GoAir
- AirAsia India
- Vistara
- Alliance Air
- Luwang Air
- Air Deccan
- Blue Dart Aviation
- Pinnacle Air
- Spirit Air
- Supreme Airlines
- TajAir
- Titan Aviation
- Ventura Air Connect
- And many more...

There are various job profiles. However, each profile has infinite opportunities and an excellent lifestyle. After the completion of CPL, the students can make their career on the following job profiles:-

- Co-Pilot
- Chief Pilot
- Commercial Pilot
- Airline Pilot
- Captain
- Commuter Pilot
- First Officer
- Experimental Test Pilot

CPL Course Admission Process

To get admission to Commercial Pilot License Course, the candidate has to follow the CPL Admission Process:-

- To join CPL Course, a candidate should fill the form of Aircraft Maintenance Engineering Common Entrance Test (AME CET).
- After qualifying AME CET Exam, students can get admission to top flying schools or institutions based upon his/her All India Rank(AIR) scored in AME CET.

Commercial Pilot License Fee Structure

The commercial Pilot License course fee is based on institutes infrastructure, training facilities, faculty, and other facilities. The fee structure varies from institute to institute. The average fee for a CPL aviation course ranges from 20 Lakhs to 50 Lakhs depending on the institutes.

EMERGING CAREER HORIZONS

Commercial Pilot Licence Holder Salary

Commercial Pilot License holder salaries vary from company to company and also depend upon the skill sets including the experience one holds as a CPL. Commercial Pilot License holder's salary is tentatively INR 10 Lakhs to 15 Lakhs per annum depending upon skillsets. There are following facilities provided to pilot apart from salary:-

- Commercial License Holder works 1000 hours in a year
- Free pick up from home and free drop
- Free food
- Free stay in 5-star hotels.
- Buying things in a duty-free shop.
- Free tickets to travel any place in the world
- Prestige in society- at least in India
- And many more.

Website References

<https://www.dgca.gov.in>

<https://www.amecet.in>



THE NATIONAL INSTITUTE OF FASHION TECHNOLOGY (NIFT)

Brief Description of NIFT - Shaping Future Fashion Leaders

The National Institute of Fashion Technology (NIFT) is a premier fashion design institute in India. Established in 1986, it is known for offering undergraduate and postgraduate programs in Fashion and Design. NIFT plays a significant role in nurturing and developing talent in the Fashion Industry, offering courses in areas such as Fashion Design, Textile Design, Fashion Management, and more. It has multiple campuses across India and is renowned for its contribution to the Fashion and Apparel Sector.

ELIGIBILITY CRITERIA

The eligibility criteria for admission to NIFT may vary slightly from year to year, so it's important to check the official NIFT website or prospectus for the most up-to-date information.

FOR BACHELOR'S PROGRAMS (B.DES. AND B.FTECH.)

1. Age Limit: The maximum age limit is 23 years as of October 1 of the admission year (relaxation for SC/ST/PWD candidates is 5 years).
2. Educational Qualification: Applicants should have passed 10+2 or equivalent examination from a recognized board.

FOR MASTER'S PROGRAMS (M.DES. AND M.F.M)

1. Age Limit: There is no specific age limit for master's programs.
2. Educational Qualification: A bachelor's degree from any recognized university or institute.

NIFT also conducts an entrance exam called the NIFT Entrance Exam, which is the primary basis for selection. The specific requirements, such as the number of seats, test patterns, and other details, can change, so always refer to the official NIFT website or prospectus for the most current information when applying for admission.

MODE OF EXAM

The NIFT Entrance Exam is typically conducted in a written test format

1. **Paper-Based Test** for all undergraduate and postgraduate programs.
2. **Computer-Based Test (CBT)** component as well.

EMERGING CAREER HORIZONS

DESIGN OF QUESTION PAPER

The NIFT Entrance Exam typically consists of two papers for both Bachelor's and Master's programs. These papers are:

1. **Creative Ability Test (CAT):** This test assesses the candidate's creative and design abilities. It often involves tasks such as sketching, drawing, and innovative thinking. The CAT is meant to evaluate artistic and design skills.
2. **General Ability Test (GAT):** This test includes Multiple-Choice Questions and evaluates various aspects such as Quantitative Ability, Communication Ability, English Comprehension, Analytical Ability, General Knowledge, and Current Affairs. GAT is common for both Bachelor's and Master's programs.
- **Situation Test (for B.Des.):** This test assesses a candidate's hands-on skills and creativity in handling materials. Students are given a design problem and are expected to create a 3D model or prototype.
- **Group Discussion (GD) or Group Activity (for M.Des and M.FTech):** For Master's programs, instead of a Situation Test, candidates may participate in group discussions or group activities. This evaluates their ability to collaborate, communicate, and work as a team.
- **Personal Interview (PI):** After the above stages, candidates usually face a personal interview. This interview aims to evaluate a candidate's creativity, subject knowledge, general awareness, communication skills, and their passion for the field.
- **Portfolio Presentation:** For some design programs, candidates may be required to present their portfolio, showcasing their previous design work and projects. This allows the panel to assess their design skills and creativity.
- **Analytical Ability:** Logical Reasoning and Critical Thinking
- **General Knowledge and Current Affairs:** Awareness of Current Events, Fashion, and General Knowledge topics

SCOPE

- **Fashion Designing:** Fashion Designers create clothing and accessories. There is a substantial demand for creative designers who can develop unique and trendy designs for clothing lines, haute couture and more.
- **Textile Design:** Textile Designers focus on creating fabrics and patterns for clothing, home furnishings and more. They play a vital role in the fashion and textile industries.
- **Fashion Designer:** Entry-level Fashion Designers can earn anywhere from INR 3 to INR 6 lakhs per year in India. Experienced designers with a strong portfolio and established brands can earn significantly higher.
- **Textile Designer:** Textile designers typically earn salaries in a similar range to fashion designers. Entry-level salaries can be around INR 3 to INR 6 lakhs per year.
- **Merchandiser:** Fashion Merchandisers can earn salaries ranging from INR 2.5 to INR 5 lakhs for entry-level positions. With experience, these salaries can increase.
- **Fashion Retail:** Salaries in Fashion Retail can vary widely from around INR 2.5 to INR 5 lakhs for Store Managers and entry-level positions to significantly higher incomes for Regional or National Managers.
- **Fashion Journalist:** Entry-level Fashion Journalists can earn around INR 2.5 to INR 4 lakhs per year, with potential for higher earnings as they gain experience and recognition.
- **Accessory and Footwear Designer:** Salary levels for Accessory and Footwear Designers are similar to those of Fashion and Textile Designers, with entry-level positions typically starting around 3 to 6 lakhs.
- **Fashion Technology and Innovation:** Salaries in this field can vary depending on the specific role, but experienced professionals in Fashion Technology, such as those working with wearable tech or 3D printing, can command higher salaries.

- **Entrepreneurship:** Entrepreneurial income can vary greatly, as it depends on the success of the fashion brand or business. Some Fashion Entrepreneurs earn substantial incomes, while others may face challenges in the highly competitive industry.

ADMISSION

Online Registration: Candidates are required to visit the official NIFT website and register online by filling out the application form. You will need to provide personal details, educational qualifications, choice of program, and other relevant information.

Uploading Documents: During the online registration process, you will be asked to upload scanned copies of documents such as your photograph, signature, and other required documents.

Payment of Application Fee: After completing the online registration, candidates need to pay the application fee. The fee can usually be paid online through various payment methods like credit/debit cards or net banking.

Choice of Exam Center: Candidates will have the option to choose their preferred exam centres during the registration process.

Confirmation: After successfully completing the registration and fee payment, they will receive a confirmation of their application.

EMBARKING ON A CAREER AT NIFT

Unleash Your Creativity: NIFT is the canvas for one's imagination. It's a place where one can transform one's creative ideas into stunning Fashion Designs Industry.

Relevant Education: NIFT offers cutting-edge programs that align with the latest trends and technologies in the Fashion Industry.

Endless Career Opportunities: From Fashion Design and Merchandising to Marketing, Retail, and more, NIFT opens doors to diverse career paths.

Networking and Collaboration: One will have the chance to collaborate with fellow Fashion Enthusiasts, Industry Professionals and renowned Designers.

International Exposure: In the world of Fashion, the possibilities are global. NIFT often offers opportunities for international exchanges and collaborations.

Innovation and Sustainability: Today's Fashion Industry values innovation and sustainability. NIFT can equip one with the skills to drive positive change in the fashion world.

Self-Expression: Fashion is not just about clothing; it's a way to express one's identity and tell one's unique story.

STRIVING FOR A CAREER

The top NIFT campuses in the country:

NIFT Delhi: The Delhi campus is one of the oldest and most renowned. It offers a wide range of Fashion and Design programs.

NIFT Mumbai: Mumbai campus is known for its vibrant fashion scene and offers various undergraduate and postgraduate courses in Fashion.

NIFT Bangalore: The Bangalore campus is recognized for its focus on Technology in Fashion and Design Education.

EMERGING CAREER HORIZONS

NIFT Chennai: campus offers a diverse range of fashion courses and is known for its creative environment.

NIFT Kolkata : Kolkata's NIFT is known for its emphasis on Design and Fashion.

NIFT Hyderabad: The Hyderabad campus is known for its emerging fashion scene and contemporary Design Programs.

NIFT Gandhinagar : Located in Gujarat, this campus is known for its Design and Technology courses.

NIFT Patna : The Patna campus offers various programs in the field of Fashion and Design.

NIFT Jaipur : It is known for its Fashion Communication and Management programs.

NIFT Shillong : This north-eastern campus offers a unique perspective on Fashion and Design.

These NIFT campuses are known for their quality education, expert faculty and a strong alumni network. Each campus may have its own specialties and strengths, so consider your interests and program preferences when choosing a location. Admission to NIFT is highly competitive and the institution is respected for producing some of India's top fashion professionals.

NIFT often provides past question papers as part of their exam preparation resources. Here's how aspirant can typically access them:

1. Visit the official NIFT website.
2. Look for the “Admissions” section on the website. This section usually contains information related to the NIFT Entrance Exam.
3. Within the admissions section, search for “Sample Question Papers” or “Previous Year Question Papers.”
4. One should find links to download or access the previous year’s question papers in PDF format.

NIFT OFFICIAL WEBSITE

www.nift.ac.in



TATA INSTITUTE OF FUNDAMENTAL RESEARCH (TIFR)

Tata Institute of Fundamental Research (TIFR) is a premier institution having various centers across the country that offers Ph.D. and Integrated M.Sc.- Ph.D. and M.Sc. programs in various disciplines including Mathematics, Physics, Chemistry, Biology, Computer and Systems Sciences (including Communications and Applied Probability) and Science Education. Admission to TIFR is offered through the entrance test conducted by the institute or through the NET, JRF, JEST, or GATE Scores. Tata Institute of Fundamental Research conducts the TIFR Exam to offer admission to Ph.D., Integrated M.Sc. and pure M.Sc. courses in various specializations.

OVERVIEW	
Exam Name	TIFR Exam
Conducting Authority	Tata Institute of Fundamental Research
Purpose of Exam	Offers admission to Ph.D., Integrated M.Sc. and pure M.Sc. courses
Level	National
Mode of Exam	Online
Score Accepted	NET, GATE, JRF, or JEST
TIFR Official Website	www.tifr.res.in

TIFR Important Dates

Events	Dates (Tentative)
TIFR Notification Release	January
TIFR Application Form Start	January
Closing date of Application Form	February
Availability of Admit Card	March
TIFR Exam	March

EMERGING CAREER HORIZONS

Events	Dates (Tentative)
TIFR Entrance Result	April
TIFR Interview	May
TIFR Admission Counselling Start	May-June

COURSES at TIFR

Mathematics	Ph.D. and Integrated M.Sc.-Ph.D. Program	<ol style="list-style-type: none"> 1) School of Mathematics, TIFR Mumbai 2) Centre for Applicable Mathematics (CAM), Bengaluru 3) International Centre for Theoretical Sciences (ICTS), Bengaluru (Only Ph.D. program).
Physics	Ph.D. and Integrated M.Sc.-Ph.D. Program	<ol style="list-style-type: none"> 1) Department of Astronomy & Astrophysics 2) Department of Condensed Matter Physics & Materials Science 3) Department of High Energy Physics 4) Department of Nuclear & Atomic Physics 5) Department of Theoretical Physics 6) National Centre for Radio Astrophysics (NCRA), Pune 7) TIFR Centre for Interdisciplinary Sciences, Hyderabad 8) International Centre for Theoretical Sciences
Chemistry	Ph.D. and Integrated M.Sc.-Ph.D. Programs	<ol style="list-style-type: none"> 1) Department of Chemical Sciences, TIFR, Mumbai 2) TIFR Centre for Interdisciplinary Sciences, Hyderabad
Biology	Ph.D., Integrated M.Sc.-Ph.D. and M.Sc. Program	<ol style="list-style-type: none"> 1) Department of Biological Sciences, TIFR, Mumbai 2) National Centre for Biological Sciences (NCBS), Bengaluru – Ph.D., Integrated M.Sc.-Ph.D., and M.Sc. (Wildlife Biology & Conservation) program. 3) TIFR Centre for Interdisciplinary Sciences (TCIS), Hyderabad – Ph.D. and Integrated M.Sc.-Ph.D. programs only.
Computer & Systems Sciences (including Communications and Applied Probability)	Ph.D. Program only	School of Technology & Computer Science (STCS) – TIFR, Mumbai
Science Education	Ph.D. Program	Homi Bhabha Centre for Science Education (HBCSE), Mumbai

TIFR Application Fees

Category	Amount
Male Candidates (All Categories)	INR 1200/-
Female Candidates (All Categories)	INR 900/-

TIFR Education Qualifications

Subject	Program	Educational Qualification
Mathematics	Ph.D.	M.A./ M. Sc/ M. Tech.
	Integrated M.Sc. Ph.D.	B.A./ B.Sc./ B.E./ B.Tech..
Physics	Ph.D.	M.Sc./ M.S. in Physics or an equivalent
	Integrated M.Sc. Ph.D.	M.E./ M.Tech./ B.Sc./ B.S./ B.E./ B.Tech./ B.Sc. in Chemistry Physics, or equivalent
Chemistry	Ph.D.	M.Sc./ B.E./B.Tech../ M.Pharm or equivalent degree
	Integrated M.Sc. Ph.D.	B.Sc./ B.Pharm/ B.S. degree or equivalent degree
Biology	Ph.D.	M.Sc. Physics/ Chemistry/ Any branch of biology) or any professional Master's degree (M.Pharma/ M.Tech.), or a 4-year degree program (e.g. M.B.B.S., B.D.S.)
	Integrated M.Sc. Ph.D.	Bachelors in any Basic Science (Physics/ Chemistry/ Any branch of Biology) or any 4-year bachelor's degree program including B. Tech, B.E, B.V.Sc., B. Pharma.
Computer & Systems Sciences (including Communications and Applied Probability)	Ph.D.	Candidate must have B.Tech./ B.E./ M.Tech./ M.E/ M.C.A./ M.Sc. or equivalent degree in Computer Science/ an equivalent Communications Engineering/ E.E. or related branches.
	Integrated M.Sc. Ph.D.	Exceptionally well-qualified students with a three-year degree in related subjects may be considered for I-Ph.D.

TIFR GS Exam Pattern Highlights

Particulars	Details
Mode of the Examination	Computer-Based Test (CBT)/Lan-based/Online
Medium/ Language	English
Duration of the Examination	Three Hours
Frequency of Exam in a Year	Once a year
Type of Questions	Multiple Choice Questions (MCQs), Subjective Questions, True- False Statements
Total Number of Questions	Differs from subject to subject
Total Marks	80-100 marks

EMERGING CAREER HORIZONS

Particulars	Details
Negative marking	Yes
Marking Scheme	+2 for correct answer / -1 for an incorrect answer
Total Sections in the Question Paper	2
Name of the Section and Number of Questions Asked from It	Stage 1: Online Test Stage 2: Interview Round depending upon score achieved

TIFR GS Exam Pattern Mathematics

TIFR GS exam pattern for Mathematics is such that the paper will be divided into two parts. **Part A** consists of **20 MCQs** (Multiple Choice Questions). Each question from this part has four options, of which exactly one is correct. **Part B** consists of **20 True/False Questions**. The total duration of the exam is three hours.

Part	Type of Questions	Number of Questions	Duration
I	MCQs (Multiple Choice Questions)	20	1.5 Hours
II	True/ False Questions	20	1.5 Hours
Total		40	3 Hours

Marking Scheme:

Part I: Each correct answer in the exam will be awarded two marks. There will be a negative marking of one mark for each incorrect answer.

Part II: The official website informs that full marks will be given to correct answers in the exam. Also, partial marks will be given to partially correct answers in the exam.

Selection Process for Mathematics

The selection process for admission to the various programs in Mathematics at the TIFR centres – namely, the Ph.D. and Integrated Ph.D. programs at TIFR, Mumbai as well as the programs conducted by CAM-TIFR, Bengaluru and ICTS-TIFR, Bengaluru, will have two stages.

Stage I: A nationwide test is conducted in various centres during December. Performance in this test is used to decide whether a student progresses to the second stage of the evaluation process. The cut-off marks for a particular program is decided by the TIFR centre handling that program. The score in the written test may also be used in Stage II.

Stage II: The second stage of the selection process varies according to the program and the centre. More details about this stage is provided at a later date.

TIFR GS Exam Pattern (Physics)

TIFR GS exam pattern for Physics is such that the paper is divided into two parts. Part I is an objective test containing **25 Multiple Choice Questions**. These questions are on basic topics. Part II also is MCQ type but this part is somewhat more knowledge based. The total duration of the exam is three hours. For further clarification, candidates can refer to the table below:

Part	Type of Questions	Number of Questions	Duration
I	Multiple Choice Questions	25	1.5 Hours
II	Multiple Choice Questions	15	1.5 Hours
Total		40	3 Hours

Section A: +3 marks if correct; -1 mark if incorrect; 0 marks if not attempted.

Section B: +5 marks if correct; 0 marks if incorrect or not attempted, i.e. NO negative marks.

Selection Process for Physics Course

The Physics entrance test consists of two stages.

1. The first stage of the entrance test is the Screening test (December). The Screening test features Multiple-Choice Type Questions.
2. The second stage consists of Interviews/Written tests for the candidates who clear the screening test.

TIFR GS Exam (Chemistry)

TIFR GS exam pattern for Chemistry is such that the paper has only **one part**. **Part A** consists of **40 MCQs** (Multiple Choice Questions). Each question from this part has four options, of which only one is correct. The total duration of the exam is three hours. For further clarification, candidates can refer to the table below:

Part	Type of Questions	Number of Questions	Duration
I	MCQs (Multiple Choice Questions)	40	3 Hours
Total		40	3 Hours

Marking Scheme:

Part I: Each correct answer in the exam is awarded **3 marks**. There is a negative marking of **one mark** for each incorrect answer.

TIFR GS Exam Pattern (Computer & Systems Sciences)

TIFR GS exam pattern for Computer & Systems Sciences is such that the paper contains Multiple-Choice Questions that candidates need to attempt in a duration of three hours. The paper is divided into three parts as shown in the table below:

Part	Subject	Number of Questions	Duration
A	Common	15	3 Hours
B	Computer Science	15	
C	Learning Information & Data Science/Systems Science	15	

The total time allotted is Three (3) hours. There are no separate limits on the time allowed for 15 each part. Each part consists of Fifteen (15) questions. Part A is common and attempted by all the candidates.

NOTE:

- To be considered for entrance into Computer Science, Part B: Computer Science must be attempted. If one does not wish to be considered for entrance into Computer Science, one can skip all questions in Part B: Computer Science.
- To be considered for entrance into LIDS (formerly SS), Part C: LIDS (formerly SS) must be attempted. If one does not wish to be considered for entrance into LIDS (formerly SS), one can skip all questions in Part C: LIDS (formerly SS).
- Candidates may attempt both Part-B: Computer Science and Part-C: LIDS (formerly SS); however, no extra time is given. Candidates who attempt both Part B: Computer Science and Part C: LIDS (formerly SS) is considered for entrance into both Computer Science and LIDS (formerly SS).

Marking Scheme: There is negative marking in the exam for incorrect answers.

Correct Answers: +4 is awarded

Incorrect Answers: -1 is awarded

EMERGING CAREER HORIZONS

TIFR GS Exam Pattern (Science Education)

TIFR GS exam pattern for Science Education is such that the paper is divided into two parts. **Part A** consists of **80 MCQs** (Multiple Choice Questions). Each question from this part has four options, of which exactly one is correct. **Part B consists of 3 Descriptive Questions containing 50 marks.** The total duration of the exam is three hours. For further clarification, candidates can refer to the table below:

Part	Type of Questions	Number of Questions	Duration
I	MCQ (Multiple Choice Questions)	80	1.5 Hours
II	Critical Reasoning- Descriptive	3	1.5 Hours
Total		83	3 Hours

Section I

Subject	Number of Questions	To be Attempted
Quantitative Reasoning, Scientific Literacy and Technical Comprehension.	25	
Social and Cognitive Sciences and Education.	15	
Same No. of Questions on Biology, Physics, Mathematics, Chemistry	40	Any 50 questions are to be attempted from 80 Questions

TIFR GS Exam Syllabus – Subject Wise

Mathematics:

- Algebra
- Analysis
- Geometry/ Topology
- General

Physics:

The questions in the Written Test (Multiple Choice Type) and the Interviews are distributed over the following areas: Classical Mechanics; Mathematics relevant to Physics; Electricity and Magnetism; Quantum Mechanics; Heat, Thermodynamics, and Statistical Physics; General Physics; Modern Physics; Electronics and Experimental Physics.

Chemistry:

The questions are aimed at testing the basic understanding and knowledge in the areas of Physical, Organic, Inorganic, Analytical, Electro and Quantum Chemistry, Biophysics, Thermodynamics, Spectroscopy (NMR, Fluorescence, IR, UV, and X-ray), Logic, and Statistics and Mathematical methods.

Biology:

The test consists of Multiple Choice Questions covering basic topics only.

Computer Science:

1. Discrete Mathematics: Sets and Relations, Combinatorics (Counting) and Elementary Probability Theory, Graph Theory, Propositional and Predicate Logic.
2. Formal Languages, Automata Theory and Computability.
3. Data Structures and Algorithms: Arrays, Lists, and Trees, Sorting and Searching, Graph algorithms, Complexity of problems, and NP-completeness.

4. Fundamentals of Programming Languages and Compilers: Control structures, Parameter passing Mechanisms, Recursion, Parsing and Type Checking, Memory Management.
5. Operating Systems and Concurrency
6. Switching Theory and Digital Circuits
7. Theory of Databases

SYSTEMS SCIENCE

1. **Engineering Mathematics:** Complex Analysis, Linear Algebra, Elementary Numerical Analysis, Basic Optimization Theory and Algorithms, Introduction to Probability Theory and Statistics.
2. **Electrical and Computer Sciences:** Introduction to Signals and Linear Systems Analysis, Control Systems, Digital Signal Processing, Basic Circuit Theory, Introduction to Digital Communications, Digital Computer Fundamentals, Introduction to Computer Programming.

SCIENCE EDUCATION

The **First Section** will contain a total of 80 Multiple-Choice Questions distributed among several subjects as follows:

- 25 questions to test Scientific Literacy, Technical Comprehension, Quantitative and Logical Reasoning.
- 15 Questions on Education, Social Sciences and Cognitive Sciences.
- 10 questions each on Biology, Chemistry, Physics and Mathematics. The 10 questions in each subject will test the candidate's ability to apply concepts and reason with concepts in these subjects. The subject content covered by the questions is up to the level of CBSE Std. XII.

The candidate is expected to answer a maximum of 50 questions from section one. There is no negative marking. However, in case more than 50 questions are attempted, the score obtained is normalized (i.e., proportionally decreased) to a score corresponding to 50 questions.

The **Second Section** will have the following questions:

- Describe briefly (in 300 words or less) any research topic of your interest related to Science, Mathematics, or Design and Technology Education. Provide arguments for why that research is important and outline the possible educational outcomes of the research you have described.
- Write short essays (about 250 words each) on any of the topics given. (Topics are given in the question paper)

EMERGING CAREER HORIZONS



CHENNAI MATHEMATICAL INSTITUTE (CMI)

ABOUT

Chennai Mathematical Institute (CMI) is a prestigious institution that offers undergraduate (UG) and post graduate (PG) programs in mathematics and its related fields. Founded with the aim of promoting mathematical and scientific research in India, CMI is renowned for its rigorous academic standards and a tradition of producing exceptional talents in the field of Mathematics and Computer Science.

UNDERGRADUATE PROGRAMS

Courses Offered

CMI currently offers two undergraduate programs:

B.Sc. (Honours) Mathematics and Computer Science: This program combines a deep understanding of mathematics with the practical applications of Computer Science. Students learn advanced mathematical concepts and develop programming skills to solve complex problems.

B.Sc. (Honours) Mathematics and Physics: This program integrates Mathematics and Physics, providing students with a strong foundation in both disciplines. It prepares students for careers in Theoretical Physics, Research, and other related fields.

Program Duration

As of now, both undergraduate programs are three years in duration. However, there have been discussions about converting these programs into four-year courses to provide students with a more comprehensive and in-depth education.

Admission Procedure

CMI conducts a rigorous admission process to select candidates for its undergraduate programs. Prospective students can gain admission through two primary channels:

Admission Test: CMI conducts an admission test that assesses the mathematical aptitude and knowledge of candidates. The test typically takes place in May, with registration opening around February. The examination comprises two sections:

Objective Section: This section includes Multiple-Choice Questions (MCQs) and fill-in-the-blanks questions that test candidates' mathematical abilities.

Subjective Section: In this part of the test, candidates are required to provide detailed, written answers to mathematical problems.

SPECIAL CASES

- Students with exceptionally good performance in the National Olympiads in Mathematics, Physics and Informatics are exempted from writing the B.Sc. entrance examination.
- For CMI's Ph.D. programmes, you can also qualify for the interview by writing national level exams such as JEST and NBHM.

The topics required are Olympiad-esque problems with Pre-College Calculus and Mathematics.

SCHOLARSHIP PROGRAM

CMI offers a scholarship program to exceptional students who perform exceptionally well in the admission test. The scholarship includes:

- Full waiver of tuition fees of Rs 1,25,000 per semester.
- A monthly fellowship of Rs 5000.
- There are 35 scholarship spots available each year, providing a significant incentive for high-achieving students to pursue their education at CMI.

Academic programmes offered at CMI

Admission will be made to the following programmes: -

- B.Sc. (Hons.) in Mathematics and Computer Science (3 years course). • M.Sc. in Computer Science.
- B.Sc. (Hons.) in Mathematics and Physics (3 years course). • M.Sc. in Data Science.
- M.Sc. in Mathematics. • Ph.D. in Mathematics.
- Ph.D. in Computer Science.
- Ph.D. in Physics.

Notes:

- There is a Common Entrance Examination for both the B.Sc. (Hons.) programmes. *Candidates need not select their course at the time of applying. The choice can be made after admission.*
- For Ph.D. in Physics, candidates should write the Joint Entrance Screening Test (JEST).

Eligibility for Admission

- B.Sc. (Hons.) Mathematics and Computer Science: 12th standard or equivalent.
- B.Sc. (Hons.) Mathematics and Physics: 12th standard or equivalent.
- M.Sc. in Mathematics: Undergraduate degree (B.A., B.Sc., B.E., B.Tech..) with a strong background in mathematics.
- M.Sc. in Computer Science: Undergraduate degree (B.A., B.Sc., B.E., B.Tech..) with a strong background in Computer Science.
- M.Sc. in Data Science: Undergraduate degree (B.A., B.Sc., B.E., B.Tech..) with a background in mathematics/statistics/computer science.
- Ph.D. in Mathematics: B.E./B.Tech../B.Sc.(Math)/M.Sc.(Math).

EMERGING CAREER HORIZONS

- Ph.D. in Computer Science: B.E./B.Tech./M.Sc.(C.S.)/M.C.A.
- Ph.D. in Physics: M.Sc.(Physics)

Direct Admission to B.Sc. Through Olympiads

Students with exceptionally good performance in the National Olympiads in Mathematics and Physics conducted by HBSCE and the Indian Computing Olympiad conducted by IARCS are exempted from writing the B.Sc entrance examination.

Typically, the following categories of students qualify for direct admission:

- Students who have qualified for the International Mathematical Olympiad Training Camp (IMOTC) or European Girls Mathematical Olympiad Training Camp (EGMOOTC) in Class 11 or Class 12.
- Students who have qualified for the Orientation Cum Selection Camp (OCSC) in Physics in Class 11 or Class 12.
- Students who have qualified for the International Olympiad in Informatics Training Camp (IOITC), or have received a gold or silver medal at the Indian National Olympiad in Informatics (INOI) in Class 11 or Class 12.

CMI Entrance Exam Pattern Highlights

Features	Details
Exam Mode	Pen-Paper Based Test
Test Duration	Three Hours
Exam Medium	English only
Type of Questions	Objective as well as Subjective Questions
Total Questions	16 questions for UG 17 questions for M.Sc./ Ph.D. Computer Science 20 questions for M.Sc./ Ph.D. Mathematics 36 questions for M.Sc. Data Science
Total Marks	For UG total marks is 100 marks For PG it ranges from 90 to 100 marks

CMI Entrance Exam UG Pattern

B.Sc. (Hons.) Mathematics and Computer Science: The entrance exam will test a candidate's aptitude for Mathematics at the Class 12 level. The exam will have both objective questions and problems drawn mostly from the following topics: Arithmetic, Algebra, Geometry, Trigonometry, and Calculus.

B.Sc. (Hons.) Mathematics and Physics: The entrance exam for this will be the same as BSc (Hons) Mathematics and Computer Science. The exam will test a candidate's aptitude for Mathematics at the Class 12 level.

Tuition Fees

- M.Sc. in Mathematics and M.Sc. in Computer Science Rs 1,25,000/- per semester (two semesters in a year).
- M.Sc. in Data Science Rs 2,50,000/- per semester (two semesters in a year).

Scholarships and Fellowships

For M.Sc. in Mathematics and M.Sc. in Computer Science, a substantial number of scholarships are available, which include a full waiver of tuition fees. The number of scholarships roughly corresponds to the number of students admitted in recent batches of each of these M.Sc. programs. Additionally, a limited number of fellowships are available, providing a monthly allowance of INR 6,000. Eligibility for scholarships and fellowships is subject to regular review and depends on satisfactory academic performance.

Career Opportunities

Students who complete their graduate degrees from CMI have access to diverse career opportunities. CMI facilitates job placements in reputed companies such as JP Morgan & Chase, Wells Fargo, American Express, Bank of America, and PayPal. These companies offer roles in departments like Data Science, Machine Learning, and Risk Analysis, reflecting the strong industry relevance of CMI's programs.

Other Information

International Opportunities

CMI provides international exposure through various programs:

Indo-French Exchange Program: Third-year undergraduate and first-year postgraduate students have the opportunity to participate in a Research Internship in France, enhancing their research and global experience.

MoU with Institutes: CMI has Memoranda of Understanding (MoUs) with prestigious institutes like IIT Madras and the Institute of Mathematical Sciences (IMSc), allowing students to take elective courses at these institutions, broadening their academic horizons.

These initiatives enrich the academic experience at CMI and provide students with a well-rounded education that extends beyond the classroom.



ACTUARIAL SCIENCE

A BRIEF INTRODUCTION: ACTUARIAL SCIENCE, CAREER PATH

The “Institute of Actuaries of India” (IAI) is a statutory body established by the Actuaries Act, 2006 passed by the Parliament in India for regulating the profession of actuaries in India. The erstwhile Actuarial Society of India was established in 1944. Since 1979, ASI has been a full member of International Actuarial Association (an umbrella association to all actuarial bodies across the globe). The nodal ministry for IAI is the Department of Financial Services, Ministry of Finance. The affairs related to IAI is managed by a council of 12 elected fellow members and 3 nominated members by central government. The head office of IAI is at Seawoods, Navi Mumbai.

Career Options and Description: -

Job Position	Job Description
Actuary	Their job is to analyse risk possibilities of financial activity and solve the involved risks. They are most needed in the insurance sector and pension programs so that they can foresee the future risks.
Accountants and Auditors	They are in charge of financial records. They ensure that financial records are accurate and the taxes are being paid properly and timely. Auditors ensure that organizations run efficiently.
Budget Analysts	Their role is to help public and private institutions manage their finances. They prepare a budget and look through annual spending.
Cost Estimators	They collect data in order to estimate the time, money, materials, and man force needed for product manufacturing, construct a building, or provide a service. They generally have specialization in a particular industry.
Economists	They study the production and distribution of resources, goods, and services by analysing data, researching trends, and evaluating economic issues.

Job Position	Job Description
Financial Analyst	They guide businesses and individuals in investment decisions based on the performance of stocks, bonds, and other types of investments.
Underwriter	Underwriters decide whether the insurance company should provide insurance to a certain individual or business and if yes, then under what terms, they also determine coverage amounts and premiums.
Mathematicians	They research and develop mathematical principles. They also analyse data and apply mathematical techniques to deal with real-world problems.
Postsecondary Teachers	They teach students a variety of technical and academic subjects along with conducting research and publishing of scholarly papers and books.

Actuarial Science Eligibility Criteria (UG and PG Courses)

UG	<ul style="list-style-type: none"> Candidates must have completed Class 12 with Commerce stream. Candidates who haven't studied with the Commerce stream should have Mathematics as a compulsory subject at 10+2 level. Some Actuarial Science colleges might have minimum score criteria of 50 per cent in Class 12.
PG	<ul style="list-style-type: none"> Candidates passing B.Sc. or B.Com with 50 per cent are eligible for Actuarial Science PG courses. In addition to the above criteria, candidates must have studied Mathematics and Statistics as two of the core subjects at the bachelor's level.

SYLLABUS

- Mathematics
- Statistics
- Data Interpretation
- Logical Reasoning
- English

QUESTION PAPER DESIGN

ACET is a 3 hours, 100 marks online exam which has 70 Multiple Choice Questions with one correct answer for each question.

The distribution of questions will be:

- 45 questions – 1 mark each.
- 20 questions – 2 marks each.
- 05 questions – 3 marks each.

The Allocation of Marks will be as under:

- Mathematics - 30 marks.
 - Statistics - 30 marks.
 - Data Interpretation - 15 marks.
 - English - 15 marks.
 - Logical Reasoning - 10 marks.
- ACET will be conducted in a single day with one slot.

EMERGING CAREER HORIZONS

- There will not be any negative marking for incorrect answers.
- Pass mark for ACET Examination is 50%.

PART-I-

MATHEMATICS, STATISTICS, DATA INTERPRETATION

PART -II-

ENGLISH

LOGICAL REASONING

- 55% of total score-Part-I
- 45% of total score- Part -II
- No negative marking
- Mathematics-30
- Statistics-30
- Data Interpretation-15
- English-15
- Logical Reasoning-10

The ACET examination is worth 100 points consisting of 70 questions divided into two parts.

- 45 Questions of 1 mark each
- 20 Questions of 2 marks each
- 5 Questions of 3 marks each

FREQUENCY OF EXAM

: Twice a Year

ATTEMPTS ALLOWED (IF APPLI.)

: No Limit in Number of Attempts

MODE OF EXAM

: Online (CBT)

EXAM DATE

: June and December

EXAM DURATION

: 3 Hours

MODE OF REGISTRATION

: Online

DEADLINE FOR REGISTRATION

: For June Examination, Last Week of May. For December Examination, Last Week of November.

OFFICIAL WEBSITE

: www.actuariesindia.org, acet@actuariesindia.org

SCOPE

: Actuaries are hired in Wealth Management Companies, Financial Services, Banking, Stock Exchanges and Investment Consultancies, BPOs, Academics, Risk Management and Insurance Companies.

SALARY

: The average salary of an actuary in India is INR 10.11LPA which can go up to 50 LPA. Actuaries are highly paid abroad.

BRIEF INTRODUCTION OF ORGANISATION / INSTITUTION CONDUCTING THE EXAMINATION

The 'INSTITUTE OF ACTUARIES OF INDIA', has been conducting the prestigious ACET Exam biannually since 2012. The nodal ministry for IAI is the Ministry of Finance.

QUESTION PAPERS AND STUDY MATERIALS : acet@actuariesindia.org

www.actuariesindia.org

REFERENCE BOOKS

- Quantitative Aptitude by Abhijit Guha
- High School English Grammar and Composition- Wren and Martin
- The Pearson and Guide to Verbal Ability
- Logical Reasoning-Nishit K Sinha
- Word Power Made Easy Editor-Norman Lewis

- Acted Study Material -Facts and Stats

TOP UNIVERSITIES

- Boston University
- Columbia University
- University of Illinois, Urbana
- University of Pennsylvania, United States
- New York University
- B.H.U. India
- Christ University, Bengaluru
- Amity Global, Noida
- IBS, Hyderabad

TOP PLACEMENT COMPANIES

- WNS
- Swiss Re
- Towers Watson
- Max Bupa Health Insurance
- Future Generalli
- IDBI
- HDFC Life
- PWC Actuarial Services
- MC Kinsey Advanced Health Care Analytics



DATA SCIENCE/ARTIFICIAL INTELLIGENCE/WEB DESIGNING/ CLOUD COMPUTING/CODING AND OTHERS

A BRIEF INTRODUCTION

Data Science

Data Science careers involve collecting, processing, and analyzing vast data sets to derive valuable insights. Data Scientists, Analysts, and Engineers are in high demand across industries like finance, healthcare, and e-commerce. These professionals use statistical techniques, machine learning, and data visualization tools to solve complex problems and make data-driven decisions. With strong analytical skills and proficiency in programming languages like Python and R, Data Scientists can earn competitive salaries and have a significant impact on business strategies.

Artificial Intelligence (AI)

AI careers focus on creating intelligent systems that can perform tasks requiring human-like intelligence. Machine Learning Engineers, AI Researchers, and Data Scientists in the AI field develop algorithms and models to solve problems in natural language processing, computer vision, and more. AI Professionals often work on groundbreaking projects such as self-driving cars and chatbots. Proficiency in machine learning libraries like TensorFlow or PyTorch and a deep understanding of Mathematics are essential for success in AI careers.

Web Designing

Web designers are responsible for creating visually appealing and user-friendly websites. They combine design skills with an understanding of User Experience (UX) principles to craft engaging online experiences. Web Designers work in various industries, including web development agencies, marketing firms, and as freelancers. Proficiency in design software like Adobe XD and HTML and CSS coding knowledge can enhance career prospects. Web Design offers creative opportunities and is essential for businesses establishing their online presence.

Cloud Computing

Cloud Computing careers involve managing and utilizing cloud-based infrastructure and services provided by companies like AWS, Azure, and Google Cloud. Cloud architects, engineers, and administrators design, deploy, and maintain cloud solutions for organizations. Cloud Professionals must be familiar with cloud platforms,

networking, and security. The field is continuously evolving, offering numerous career opportunities and the chance to work on cutting-edge technology projects.

Programming/Coding

Programming careers encompass software development roles where professionals write code to create applications, websites, and software solutions. Software Developers, Engineers, and Programmers work with various programming languages like Python, Java, and JavaScript. They also play crucial roles in designing algorithms, debugging, and optimizing code. Programming offers versatility, with opportunities in diverse industries and specialties, making it a foundation for many tech careers. Continuous learning and staying updated with industry trends are vital for Programmers to remain competitive.

These Tech Fields provide diverse career opportunities, with each requiring a unique skill set and offering the chance to work on innovative projects that drive technological advancements and solve real-world problems.

CAREER OPTIONS

- B.Tech. (CSE)
- Bachelor of Science in Computer Science
- Bachelor of Computer Applications (BCA)
- Bachelor of Information Technology (B.IT)
- Integrated Master of Technology (M.Sc.) in Computer Science
- Bachelor of Science (B.Sc) in Data Science
- Bachelor of Science (B.Sc) in Cybersecurity
- Bachelor of Science (B.Sc) in Artificial Intelligence
- Professional Certificate Course in Data Science etc.

ELIGIBILITY CRITERIA

- The candidate must have passed 12th with a strong background in Mathematics and Science.
- The candidate may be required to pass an entrance examination, such as JEE (Joint Entrance Examination) for engineering programs in India or SAT/ACT for international students.
- Some institutions may have additional eligibility requirements, including minimum scores in standardized tests or specific subjects in high school curriculum.

SYLLABUS: Students can pursue these career options through JEE ADVANCED, JEE MAIN, or other college entrance examinations.

The JEE ADVANCED syllabus is quite extensive and covers a wide range of topics. Here's a general overview of the subjects and topics covered in the JEE ADVANCED syllabus:

Physics

- General Physics
- Mechanics
- Thermal Physics
- Electricity and Magnetism
- Optics
- Modern Physics

Chemistry

1. Physical Chemistry

- General Concepts
- Gaseous and Liquid States
- Atomic Structure and Chemical Bonding
- Energetics
- Chemical Equilibria
- Electrochemistry
- Chemical Kinetics
- Solid State
- Solutions
- Surface Chemistry

EMERGING CAREER HORIZONS

2. Inorganic Chemistry

- Isolation/ Preparation and Properties of Non-metals
- Transition Elements
- Coordination Chemistry
- Ores and Minerals
- Extractive Metallurgy
- Principles of Qualitative Analysis

3. Organic Chemistry

- Basic Concepts
- Preparation, Properties, and Reactions of Alkanes, Alkenes, Alkynes
- Reactions of Benzene
- Phenols
- Carboxylic Acids
- Alkyl Halides
- Alcohols
- Ethers
- Aldehydes and Ketones
- Nitrogen Compounds
- Polymers
- Biomolecules
- Chemistry in Everyday Life

Mathematics

1. Algebra

- Complex Numbers
- Quadratic Equations
- Sequences and Series
- Permutations and Combinations
- Binomial Theorem
- Mathematical Induction
- Logarithms
- Matrices and Determinants
- Probability

2. Trigonometry

- Trigonometric Functions
- Trigonometric Equations
- Properties of Triangles

3. Coordinate Geometry

- Straight Lines
- Circles
- Conic Sections

4. Calculus

- Limits
- Continuity and Differentiability
- Application of Derivatives
- Integrals
- Application of Integrals
- Differential Equations

5. Vectors

6. Statistics

7. Probability

Question Paper Design

Particulars	Details
Mode of Examination	Computer-based Examination (CBT)
Medium of Examination	English and Hindi
Number of Papers	Two compulsory papers- Paper 1 and Paper 2
Total Time Duration	3 hours for each paper (4 hours for PwD candidates)

Particulars	Details	
Number of Sections	Both papers include 3 sections-	
	Paper 1- <ul style="list-style-type: none"> • Physics • Chemistry • Mathematics 	Paper 2- <ul style="list-style-type: none"> • Physics • Chemistry • Mathematics
Number of Questions	54 (18 questions in each subject)	
Marking Scheme	The exam has a concept of full, partial and zero marks.	

FREQUENCY OF EXAM	: Annual
ATTEMPTS ALLOWED (IF APPLI.)	: An aspirant can attempt the JEE ADVANCED Exam twice in two consecutive years.
MODE OF EXAM	: Online/Offline
EXAM DATE	: Between January to June
EXAM DURATION	: 3 Hours
MODE OF REGISTRATION	: Online
DEADLINE FOR REGISTRATION	: Depending upon the institution
OFFICIAL WEBSITE	: www.jeeadv.ac.in

SCOPE

- Data Scientist
- Data Analyst
- Machine Learning Engineer
- Data Engineer
- Business Intelligence (BI) Analyst
- Data Consultant
- Statistician
- Quantitative Analyst (Quant)
- AI Researcher/Scientist
- Machine Learning Engineer
- Robotics Engineer
- AI Ethicist
- AI Product Manager
- Computer Vision Engineer
- Natural Language Processing (NLP) Engineer
- AI Consultant
- Cloud Architect
- Cloud Engineer
- Cloud Developer
- Cloud Security Specialist
- DevOps Engineer
- Cloud Solutions Architect
- Cloud Consultant
- Cloud Administrator
- Software Developer/Engineer
- Full-Stack Developer
- Front-End Developer
- Back-End Developer
- Game Developer
- Mobile App Developer
- Systems Programmer
- Embedded Systems Developer
- Web Designer
- UI/UX Designer
- Front-End Developer
- Web Accessibility Specialist
- Interaction Designer
- Graphic Designer
- E-commerce Designer etc.

SALARY

A fresher can expect a starting salary package of 3 LPA to 30 LPA.

EMERGING CAREER HORIZONS

BRIEF INTRODUCTION OF ORGANISATION/INSTITUTION/AGENCY CONDUCTING THE ORGANISATION

The Indian Institutes of Technology (IITs) are a group of premier engineering and technology universities in India. They conduct the JEE ADVANCED examination for admission to their undergraduate programs. IITs are known for their academic excellence, research contributions, and success of their alumni.

SOURCES/WEBSITES FOR SAMPLE QUESTION PAPERS AND STUDY MATERIALS

When preparing for JEE ADVANCED, it's essential to have access to high-quality study materials and sample question papers. Here are some sources and websites where you can find these resources:

OFFICIAL JEE ADVANCED WEBSITE

<https://www.jeadv.ac.in>

The **NCERT textbooks** for Physics, Chemistry, and Mathematics are highly recommended for JEE ADVANCED preparation. They form the foundation for your understanding of the subjects.

Apart from **NCERT books**, several reference books are highly regarded for JEE ADVANCED preparation. Some popular ones are:

- “Concepts of Physics” by H.C. Verma (Part 1 and Part 2)
- “Problems in General Physics” by I.E. Irodov
- “Understanding Physics” by D.C. Pandey
- “Physical Chemistry” by O.P. Tandon
- “Organic Chemistry” by Morrison and Boyd
- “Inorganic Chemistry” by J.D. Lee
- “Mathematics” by R.D. Sharma (for both Objective and Subjective)
- “Advanced Problems in Mathematics for JEE (Main & Advanced)” by Vikas Gupta and Pankaj Joshi

Students may learn Data Science/AI/Coding etc from the following websites:-

- www.codecademy.com
- www.udacity.com
- www.kaggle.com
- www.edx.org

TOP UNIVERSITIES

Top Colleges for Computer Science and Information System Around the World:

- Massachusetts Institute of Technology (MIT) - Cambridge, United States
- Carnegie Mellon University - Pittsburgh, United States
- Stanford University - Stanford, United States
- University of California, Berkeley (UCB) - Berkeley, United States
- University of Oxford - Oxford, United Kingdom
- National University of Singapore (NUS) – Singapore
- University of Cambridge – Cambridge, United Kingdom
- Harvard University – Cambridge, United States
- ETH Zurich – Switzerland
- EPFL – Lausanne, Switzerland

Top Colleges/Universities/Institutes for Computer Science and Information System in India:

- Indian Institute of Technology Bombay (IIT Bombay) - Mumbai, Maharashtra
- Indian Institute of Technology Delhi (IIT Delhi) - New Delhi
- Indian Institute of Technology Kanpur (IIT Kanpur) - Kanpur, Uttar Pradesh
- Indian Institute of Technology Madras (IIT Madras) - Chennai, Tamil Nadu
- Indian Institute of Technology Kharagpur (IIT Kharagpur) - Kharagpur, West Bengal
- Indian Institute of Technology Roorkee (IIT Roorkee) - Roorkee, Uttarakhand
- Indian Institute of Technology Guwahati (IIT Guwahati) - Guwahati, Assam
- Indian Statistical Institute (ISI) - Kolkata, West Bengal
- National Institute of Technology (NIT) Trichy - Tiruchirappalli, Tamil Nadu
- Birla Institute of Technology and Science (BITS) Pilani - Pilani, Rajasthan

Top Placement Companies

Big Tech Companies

- 1) **Google** : Known for its competitive hiring process and opportunities in Software Engineering, AI, and other fields.
- 2) **Apple** : Offers positions in Software Engineering, Hardware Engineering, and Design.
- 3) **Amazon** : Hires for various roles, including Software Development, Cloud Computing, and AI.
- 4) **Microsoft** : Offers positions in Software Engineering, Research, and Cloud Computing.
- 5) **Alphabet Inc.** : The parent company of Google, which encompasses various subsidiaries, including Waymo (self-driving cars) and DeepMind (AI research).

Technology Consulting and Services

- 6) **Accenture** : Offers consulting and technology services, including software development and IT consulting.
- 7) **IBM** : Known for its work in AI, Cloud Computing, and Data Science.
- 8) **Deloitte** : Offers technology consulting and services, including Cybersecurity and Analytics.
- 9) **Capgemini** : Provides IT services and consulting, including Software Development and Digital Transformation.

Financial Services and Investment Banks

- 10) **Goldman Sachs** : Hires for technology and engineering roles, including Software Development and Data Analytics.
- 11) **JPMorgan Chase** : Offers positions in Software Engineering, Data Science, and Cybersecurity.
- 12) **Morgan Stanley** : Known for recruiting Software Developers, Data Scientists, and Engineers.

Automotive and Aerospace

- 13) **Tesla** : Offers opportunities in Software Development and Engineering for electric vehicles.
- 14) **Boeing** : Hires Engineers for Aerospace and Defence Projects.

EMERGING CAREER HORIZONS

Social Media and Internet

- 15) **Facebook (now Meta Platforms, Inc.)** : Offers positions in Software Engineering, Data Science, and Research.
- 16) **Twitter** : Hires Software Engineers and Data Scientists.
- 17) **Netflix** : Offers roles in Software Development and Data Engineering.

Startups and Tech Unicorns

Companies like Uber, Airbnb, Palantir, SpaceX, and Stripe often hire Computer Science and Engineering Talent.

Healthcare and Biotechnology

Google Health, Pfizer, Genentech, and Roche offer opportunities in Healthcare Technology and Biotech.

Gaming and Entertainment

Electronic Arts (EA), Blizzard Entertainment, and Ubisoft hire Game Developers, Engineers, and Designers.

E-commerce and Retail

Alibaba, Tencent, and JD.com are significant players in the e-commerce and technology sectors.



UNDERGRADUATE COMMON ENTRANCE EXAMINATION FOR DESIGN (UCEED)

A BRIEF INTRODUCTION

UCEED stands for **Undergraduate Common Entrance Examination for Design**.

It is a national-level entrance exam conducted by IIT Bombay for admission to the Bachelor of Design (B.Des.) programs at IIT Bombay, IIT Delhi, IIT Guwahati, IIT Hyderabad, and IIITDM Jabalpur.

CAREER OPTIONS

After completing the UCEED exam, you can pursue a Bachelor of Design (B.Des.) program at IIT Bombay, IIT Delhi, IIT Guwahati, IIT Hyderabad, and IIITDM Jabalpur.

A B.Des. degree is a professional degree that prepares students for a career in the design field. Those with a B.Des. are also well-suited for roles in the public sector, such as museum curators and urban planners.

Here are some prominent sectors you can choose as a career after the B.Des. course:

- **Product Designer:** Product Designers are professionals who design the shape, size, and material content of every product which is manufactured such as toothpaste, conditioner, a bar of soap, and other products. They are responsible for the aesthetic appearance of the product and its user experience.
- **Furniture Designer:** Furniture Designers create furniture pieces that are both functional and aesthetically pleasing. They work with different materials such as wood, metal, glass etc. to create unique designs.
- **Clothing and Textile Technologist:** Clothing and Textile Technologists work on developing new fabrics and textiles for use in clothing and other products. They also work on improving existing fabrics to make them more durable or comfortable.
- **Interior Designer:** Interior Designers create functional and aesthetically pleasing spaces for clients. They work on everything from color schemes

EMERGING CAREER HORIZONS

- **Automotive Design:** to furniture selection to lighting design. Automotive Designers create designs for cars, trucks, motorcycles etc.
- **Graphic Designer:** These professionals create designs for market collateral, brand identities, product illustrations, and websites using computer software like Adobe Creative Suite. They can merge technical skills with artistic ability to create a design that communicates with their desired audience.
- **Fashion Designer:** A career in Fashion Designing is a comprehensive industry where you learn new things daily. Fashion Designers are inextricably associated with the Fashion Designing business, a career that needs no introduction. A skilled Fashion Designer handles everything from drawings to textures and patterns, from outfit styling to looks.
- **User Experience (UX) Designer:** UX Designers make Websites, Mobile Applications, Software, and Video Games easier to navigate and more intuitive for users to interact with. They also study and evaluate how users feel about a particular system and design their products to cater to the user's needs.
- **Other possible career options include** Design Director, Fashion Director, Textile and Surface Developer, Apparel Designer, Entrepreneur, Stylist, Quality Controller for Fabric and Apparel, Art Director, Set Director, Fashion Photographer, Brand Manager etc.

ELIGIBILITY CRITERIA

The exam is open to students who have passed Class XII (or equivalent) or are appearing in any stream (Science, Commerce, or Arts & Humanities).

SYLLABUS

Part-A will have questions from the following topics:

- **Visualization and Spatial Ability:** Pictorial and Diagrammatic questions to test understanding of transformation and/or manipulation of 2D shapes and 3D objects and their spatial relationships, knowledge of practical and everyday mechanical and scientific concepts.
- **Observation and Design Sensitivity:** Ability to detect concealed properties in ordinary things, people, situations, and events, and thinking critically about them. Applying attention to certain details, analysing, reasoning, classifying, inferring and predicting. Ability to discern subtle differences in visual properties and aesthetic outcomes.
- **Environmental and Social Awareness:** General awareness of environmental factors such as climate, population, water, vegetation, pollution, weather, natural resources etc., and their implications on the design of products, images, infrastructure and environment. Awareness of social and cultural connection with design, history of the designed artefact, and socially responsible and environmentally sustainable design responses. History of Art, Sculpture and Literature.
- **Analytical and Logical Reasoning:** Ability to look at information, be it qualitative or quantitative in nature, and discern patterns within the information. Ability to weigh opinions, arguments or solutions against appropriate criteria. Ability to check for hidden bias or hidden assumptions and whether evidence and argument support conclusions. Ability to use logic and structured thinking to deduce from a short passage, which of a number of statements is the most accurate response to a posed question. Data

Interpretation, Brainteasers, and Patterns.

- **Language and Creativity:** Ability to understand and use Standard English. Reading comprehension, knowledge of English grammar. Ability to think creatively in terms of alternatives, ability to distinguish innovative options and to think out-of-the-box.
- **Design Thinking and Problem Solving:** Ability to use visual analogies, metaphors, signs and symbols. Ability to understand complexity, identify problems, generate alternatives, evaluate options and select solutions.

Part-B will have ONE question from the following topic:

- **Drawing:** Ability to draw products, people or scenes in proportion with good line quality, composition, proportion, perspective and shading.

Note: The topics given above are exhaustive and indicative of the nature of questions.

The evaluation of Part-B is done manually by at least two expert evaluators separately and independently.

QUESTION PAPER DESIGN

One question paper of total three hours duration of total 300 marks.

Part-A (Total marks: 240; Maximum time: 2 hours 30 minutes)

- This part is administered through a Computer-Based Test (CBT).
- This part consists of three sections.

Section 1: NAT (Numerical Answer Type): 18 questions (4 marks each; no negative marks).

For these questions, the answer is a number that needs to be entered using a virtual keyboard in the computer screen. No choices will be shown for these questions.

Section 2: MSQ (Multiple Select Question): 18 questions. Each MSQ may have one or more than one correct choice(s) out of the four given. The following is the marking scheme:

Full Marks: + 4 If only (all) the correct option(s) is (are) chosen and NONE of the incorrect options is chosen.
Partial Marks: + 3 If all the four options are correct but ONLY three options are chosen and NONE of the incorrect options is chosen.

Partial Marks: + 2 If three or more options are correct but ONLY two options are chosen, both of which are correct and NONE of the incorrect options is chosen.

Partial Marks: + 1 If two or more options are correct but ONLY one option is chosen and it is a correct option and NONE of the incorrect options is chosen. **Zero Marks:** 0 If NONE of the options is chosen (i.e., the question is unanswered). **Negative Marks:** -1 In all other cases.

Section 3: MCQ (Multiple Choice Question): 32 questions (3 marks each for the correct answer; 0.71 negative marks for incorrect answers). Each MCQ will have four choices, out of which only one is the correct answer.

Part-B (Total marks: 60; Maximum time: 30 minutes)

- Part-B consists of ONE question that is aimed at testing the candidate's drawing skills, which will require subjective evaluation.

The question in Part-B will be displayed on the computer screen and the answer has to be written/drawn in the answer book provided by the invigilator only.

In case of PwD candidates availing the use of a scribe, assistance in attempting Part-B is not permitted, as

EMERGING CAREER HORIZONS

the question is aimed to evaluate the candidate's drawing skill.

- Part-B answer booklets will be collected at the end of the examination.
- Part-B question is mandatory.
- The entire paper (both Part-A and Part-B) must be finished within the time stipulated for each part.

FREQUENCY OF EXAM

UCEED is conducted once every year

ATTEMPTS ALLOWED (IF APPLI.)

A candidate can attempt the exam a maximum of **two times** and that too in consecutive years.

MODE OF EXAM

UCEED is a Computer-Based entrance exam that consists of two parts: Part A and Part B. **Part A** is conducted in online mode, while **Part B** is conducted in Pen and Paper mode. The question booklet for Part A contains a total of three sections, with a total of 57 questions as follows:

Numerical Answer-Type Questions

Multiple Select Questions (MSQs)

Multiple Choice Questions (MCQs)

The medium of the language for the UCEED question paper is English. The duration of the exam is 3 hours.

Candidates must bring their own drawing material like pens, pencils, sketch pens and colours for the examination.

EXAM DATE

3rd week of January from 9:00 am to 12:00 noon (generally).

EXAM DURATION

The exam is a test centre-based examination of 3 hours duration.

MODE OF REGISTRATION

To register for UCEED, one needs to visit the official registration portal. The registration process is completely online, and detailed instructions for the same are provided on the portal.

DEADLINE FOR REGISTRATION

The registration process starts in the month of October. Candidates should simultaneously satisfy all three eligibility criteria to register for UCEED.

OFFICIAL WEBSITE

<https://www.uceed.iitb.ac.in>

One can download the information brochure for UCEED from the website.

SALARY

INR 7 to 30 Lakhs / year

Please note that the salary range may vary depending on factors such as experience, location, company, and industry

SOURCES/WEBSITES FOR SAMPLE QUESTION PAPERS AND STUDY MATERIALS

[https://www.uceed.iitb.ac.in/2024/downloads.html*](https://www.uceed.iitb.ac.in/2024/downloads.html)

* year in the link is subject to change

REFERENCE BOOKS

- **UCEED (B.Des.) Entrance Books and Test Series of AFA India:** This book is authored by AFA India and is a comprehensive guide for UCEED aspirants. It includes previous years' question papers, mock tests, and practice exercises.
- **NIFT NID/IIFT Admission Test by Surendra Kavimandan:** This book is authored by Surendra Kavimandan and is a popular choice among UCEED aspirants. It covers all the topics in the UCEED syllabus and includes previous years' question papers.
- **Analytical Reasoning, Mental Aptitude, Verbal Aptitude (UCEED Guide) of Institute Of Creative Sciences:** This book is authored by Institute Of Creative Sciences and is a comprehensive guide for UCEED aspirants. It includes previous years' question papers, mock tests, and practice exercises.
- **Quantitative Aptitude by RS Aggarwal:** This book is authored by RS Aggarwal and is a popular choice among UCEED aspirants. It covers all the topics in the UCEED syllabus and includes previous years' question papers.
- **NID DAT book by R.S. Aggarwal:** This book is authored by R.S. Aggarwal and is a popular choice among NID aspirants. It covers all the topics in the NID syllabus and includes previous years' question papers.
- **NID Workbook Design drawing by Francis D.K.Ching:** This book is authored by Francis D.K.Ching and is a comprehensive guide for NID aspirants. It includes practice exercises and design drawing techniques.
- **Basic Rendering from Robert W.Gill:** This book is authored by Robert W.Gill and is a popular choice among NID aspirants. It covers all the topics in the NID syllabus and includes previous years' question papers.
- **Guide for NID:** This book is authored by Arihant Experts and is a comprehensive guide for NID aspirants. It includes previous years' question papers, mock tests, and practice exercises.
- **NIFT, NID & IIFT Entrance Exam Guide by D. Mittal:** This book is authored by D. Mittal and is a comprehensive guide for NIFT aspirants. It includes previous years' question papers, mock tests, and practice exercises.
- **NIFT NID/ IIFT Admission Test (With Special Colour Supplement) by Surendra Kavimandan:** This book is authored by Surendra Kavimandan and is a popular choice among NIFT aspirants. It covers all the topics in the NIFT syllabus and includes previous years' question papers.
- **Guide To NIFT/ NID For Groups A, B And C by R. P. Datson:** This book is authored by R. P. Datson and is a comprehensive guide for NIFT aspirants. It includes previous years' question papers, mock tests, and practice exercises.
- **NIFT Entrance Examination Preparation Course by Prashant Kumar:** This book is authored by Prashant Kumar and is a popular choice among NIFT aspirants. It covers all the topics in the NIFT syllabus and includes previous years' question papers.

TOP INSTITUTIONS

- Indian Institute of Technology (IIT) Delhi
- Indian Institute of Technology (IIT) Bombay
- Indian Institute of Technology (IIT) Guwahati
- Indian Institute of Technology (IIT) Hyderabad
- IIITDM Jabalpur
- World University of Design: Sonepat, Haryana

EMERGING CAREER HORIZONS

TOP PLACEMENT COMPANIES

Wipro Technologies	Mafatlal Denim	Toyata	RIL Textiles
Philips	Lakshmi Mills	Accenture	Acme Interiors
VIP Industries Ltd.	Bhilwara Group	Deloitte	Brawn Globus
Pentagram	De Panache	Tata Consultancy Services	General Motors
Dell Technologies	Carafina	Whirlpool of India Ltd.	Honda
Design Rush	Spacewood	Freshworks	Tata Consultancy Services
Freshworks	Space Matrix	TechBehemoths	or work as freelancer
Dell Technologies	Monnaie	Design Rush	
Tech Behemoths	Ford	JCT Mills	
Bombay Dyeing	Chrysler		



NID (NATIONAL INSTITUTE OF DESIGN) & OTHER DESIGN COLLEGES

A BRIEF INTRODUCTION

The National Institute of Design (NID) is internationally acclaimed as one of the finest educational and research institutions for Industrial, Communication, Textile, and IT Integrated (Experiential) Design. It is a statutory institute under the DPIIT, Ministry of Commerce and Industry, Government of India. It has been recognised as an 'Institution of National Importance' by the Act of Parliament, by virtue of the National Institute of Design Act 2014. It is also recognised by the Department of Scientific and Industrial Research, Government of India as a Scientific and Industrial Research Organisation.

CAREER OPTIONS

Product Design, Textile Design, Furniture and Interior Design, Ceramic and Glass Design, Graphics Design, Animation Design, Film and Video Communication Design, Exhibition Design.

ELIGIBILITY CRITERIA

Age Limit: Candidates up to 20 years of age (relaxable by three years for reserved categories) are eligible.

Educational Qualification: Candidates must have passed or appearing for their 10+2 (or equivalent) qualifying examinations from any recognized board such as CBSE, ICSE, IB or state boards. Aspirants who have passed or currently appearing in the class 12 examination in any discipline (Science, Arts, Commerce, Humanities etc)

SYLLABUS

The syllabus for the entrance exam of B.Des. programme comprises the basic concepts of design, based on which subjective and objective type questions can be asked. NID DAT Syllabus for B.Des. is given below. Candidates can make a note of the same as NID aptitude test syllabus.

Design Outline for Beginners	Creative Thinking & Writing	Optical Illusion
Colour Terminology	Picture Analysis	Foreshortening & Perspective
Inspiration & Design Development	Use of Measurements	Natural & Geometrical Form
Theme Development	Scale & Proportions	Innovation in Design

EMERGING CAREER HORIZONS

Principles of Composition/ Lettering/Optical Illusion	Colour, Pattern & Texture Exercises on Imagination	Elements & Principles Art & Design
Understanding Light & Shade	Lateral Thinking	Developing Themes & Colour Associations
Memory Drawing	Story Pictures	Inspiration & Creativity
Usage of Colour in Compositions	Mood, Theme & Colour Inter-relationship	Ornaments & Motifs
Expression & Emotion	Design Theory	Visual Logic
Presentation Techniques	History of Art	Good Design vs Bad Design
Scribbling & Doodling	Western Art	Design Awareness
3D Visualisation	Indian Art	Poster, Lettering, Imaginative Composition
Colour Psychology & Optical Illusions	Far eastern Art	Creative Thought Art aesthetic
Form & Function		

QUESTION PAPER DESIGN

NID DAT Prelims Exam Pattern : It is an offline exam which takes place with a total duration of 3 hours. The exam comprises of 26 questions with total marks of 100. The question type is mixed - Subjective and Objective.

Type of Questions	Part/Section	Number of Questions
Objective	Part 1	22
Subjective	Part 2	4
Total Number of Questions		26

NID DAT Syllabus for B.Des.-Studio Test

How to Evolve Ideas	Audio-Visual Exercises
Model Making	Doodling
Meeting Students Who Qualified NID DAT	Creative Thinking
Material Manipulation	

NID DAT Exam Pattern

Along with going through NID DAT Syllabus, candidates must also go through NID DAT exam pattern to understand all the parameters of the test, and to get an idea about the distribution of questions throughout the test paper. Understanding the question paper pattern will help candidates to strategize their preparation and eventually, they can perform well in the exam.

The Prelims Exam carries a weightage of 70% in the final consolidated scores, and the remaining 30% is designated for the Mains Exam.

MODE OF EXAM

The National Institute of Design (NID) conducts the Design Aptitude Test (DAT) for admission to its undergraduate and postgraduate courses in Fine Arts, Design, and Architecture. The exam is conducted in two stages - Prelims and Mains.

The Prelims exam is an offline exam that consists of two parts: Part A and Part B. Part A is a Multiple-Choice Question (MCQ) test that assesses the candidate's knowledge of Design, Visual Communication, and Creativity. Part B is a subjective test that evaluates the candidate's Drawing, Sketching, and Writing Skills.

The Mains exam is an online exam that consists of a Studio Test and a Personal Interview. The Studio Test assesses the candidate's ability to work with different materials and techniques, while the Personal Interview evaluates their communication skills, personality, and attitude towards design.

Please note that the exam pattern and mode of exam are subject to change. Aspirants can visit the official website of NID for the latest updates on the exam pattern, mode of exam, registration process, sample question papers, and college rankings.

NID DAT Prelims Exam Marking Scheme for B.Des. and GD&PD

The marking scheme for NID DAT exam pattern of Prelims test varies for each year. The below-given table of marks weighting is based on the previous year analysis, and candidates can take a note of the same.

Question number	1 to 14	1 mark
	15 to 22	2 marks
	23	15 marks
	24	20 marks
	25	15 marks
	26	20 marks
Total marks		100

Questions 1 to 22 belong to part 1 of the exam and account for 30 marks in total.

Questions 23 to 26 account for 70 marks and these questions collectively form part 2.

EXAM DATE

- Application Date (Forms Online) - September
- Exam - December to April
- Physical Verification to be announced later by the respective NID.

FREQUENCY OF EXAM

Annual

MODE OF REGISTRATION

Online

*The application starts in September, The exam is usually conducted in December, the first round is DAT Prelims, and the next round in the month of April DAT Mains. Students can apply from the NID admission portal which is online.

OFFICIAL WEBSITE

<https://admissions.nid.edu>

SCOPE

Lead Designers, Art Directors, Project Managers, and NID is currently one of the best places for Product Designers in terms of infrastructure, collaboration opportunities, and resources. Designers from NID have bagged various prestigious Design awards time and again. Students get to work under faculty directly on Govt. Projects and other big projects. Many Designers from NID have started their start-ups, some of them quite successful like Ultraviolet India, etc. Product leads. Product design: People from this discipline work in Design studios, Systems, UI/UX, Automobile, Exhibition, Medical and Health, Service Design, Branding and Packaging, Strategic Design Management, Game and Toy Design, Project Managing, Material, and

EMERGING CAREER HORIZONS

Manufacturing Design, Jewellery Designer, Lifestyle and Accessory Design. Textile Design: Textile Designer, Export House, Surface Designer, Pattern and Printmaking, Apparel, and Fabric Construction, Chemical and Natural Dying, Fashion and Styling, Fashion Illustrators. Furniture and Interior Design: Furniture Designer, Interior Designer, Space Designer, CMF Design. Ceramic and Glass Design: Ceramic Design, Automobile Design, Interior Design, Glass Design, and Accessory Design. Graphics Design: Graphic Designer, Branding and Packaging, Print and Publication, Print and Digital Media, Motion Graphics and Video Editing, Visual Design, System Design, UI/UX Design, and Typography, Advertisement. Animation Design Animators, Illustrators, Script Writers, Post-Production, Storytelling and Narration. Film and Video Communication Design Story Writing and Narration, Cinematography, Video Editing, Filmmaking, Direction, Pre and Post-Production, Storyboarding, Script Writing, Sound Design, Light Design, and Casting. Exhibition Design: Exhibition Designer, Space Design, Art, and Curation.

SALARY

Salary range may vary depending on factors such as experience, location, company, and industry.

SOME RENOWNED ORGANISATIONS/ INSTITUTIONS

NID Ahmedabad, Gujarat

NID Vijayawada

NID Gandhinagar

NID Jorhat

NID Bhopal

NID Kurukshetra

NID Bangalore

SOURCES/WEBSITES FOR SAMPLE QUESTION PAPERS, STUDY MATERIALS AND REFERENCE BOOKS

<https://stuffyoulook.blogspot.com/p/ceed-exam.html>

<https://www.getmyuni.com/exams/nid-previous-years-papers>

<https://admission.aglasem.com/nid-question-papers/>

<https://silica.co.in/nid-sample-papers>

TOP PLACEMENT COMPANIES

Some of the top recruiters at NID include Adobe, Amazon, Google, Infosys, Mahindra & Mahindra, Maruti Suzuki, Nalli Silk, Oracle, Nokia, Tanishq, Tata Enterprise, Wipro, and Trident Group etc.

TOP DESIGN COLLEGES IN INDIA

SI.NO.	College Name	Location	UG Courses	PG Courses
1	NID	Ahmedabad, Gandhinagar, Bengaluru, Kurukshetra, Vijayawada, Bhopal, Jorhat	Product Design, Furniture & Interior Design, Ceramic & Glass Design, Graphic Design, Animation Film Design, Film & Video Communication, Exhibition Design, Textile Design	Furniture & Interior Design, Product Design Transportation & Automobile Design, Toy & Game, Textile, Graphic, Animation Film, Apparel Design & Merchandising, Lifestyle Accessory, Film & Video Communication, Strategic Design Management, Photographic, Design for Retail Experience

EMERGING CAREER HORIZONS

Sl.NO.	College Name	Location	UG Courses	PG Courses
2	NIFT	Delhi, Mumbai, Kangra, Bengaluru, Kolkata, Shillong, Hyderabad, Gandhinagar, Patna, Chennai, Kannur, Bhubaneswar, Srinagar, Raebareli, Panchkula, Jodhpur, Bhopal	Fashion Design, Leather Design, Accessory Design, Textile Design, Knitwear Design, Fashion Communication, B.Ftech (Apparel Production)	MFM (Master of Fashion Management), M.Des (Master of Design) M.FTech (Master of Fashion Technology)
3	IIT	Delhi, Mumbai, Bengaluru, Guwahati, Kanpur, Jabalpur, Hyderabad	Product Design, Industrial Design, Interaction Design, Communication Design, Mobility & Vehicle Design, Visual Design	Product Design, Industrial Design, Interaction Design, Communication Design, Mobility & Vehicle Design, Visual Design
4	Pearl Academy	Delhi-West, Delhi-South, Mumbai, Jaipur, Bengaluru	Fashion Design, Graphic & Communication Design, Textile Design, Fashion Styling & Creative Direction, Interior Design, Product Design, Accessory Design, Game Design, Jewellery Design, Fashion & Lifestyle Business Management, User Experience & Interaction Design, Digital Business & Data Analytics, Advertising & Marketing Journalism, Entertainment Fashion Communication, Global Luxury Brand Management, Digital & Social media marketing, Media and Entertainment Management,	Fashion Design, Textile Design, Fashion Styling & Image Design, Costume Design: Film, TV & Theatre, Interior Design & Styling, Graphic & Communication Design, Product Design, Accessory Design, User Experience Interaction Design, Retail & Experience Design, Advertising & Marketing Journalism, Entertainment Fashion Communication, Branding & Digital Media, Luxury Brands, Entrepreneurship and Startup Enterprise, Media & Entertainment Business
5	IIAD	Delhi	Fashion Design, Communication Design, Fashion Communication, Interior Architecture and Design, Fashion Business Management	Fashion Design, Fashion Business Management
6	UID	Gandhinagar	B.Des in Product Design, B.Des in Automobile & Transportation Design, Fashion Design, Lifestyle and Accessory Design, Visual Design (Graphics), Interior & Furniture Design, Animation & Motion Graphics, Interaction Design	Industrial Design, Visual Experiential Design, Interior & Experience Design, Fashion Design
7	The Design Village	Noida	B.Des in Graphic and Communication Design, B.Des in Product Design, B.Des in Space & Interior Design, B.Des in Interaction and UX Design, B.Des in Fashion & Textile Design, B.Des in Transportation and Mobility Design,	M.Des in Graphic and Communication Design, M.Des in Product Design, M>Des in Space and Interior Design, IVLDes in Fashion & Textile Design
8	UPES	Dehradun	Graphics & Communication Design, Game Design, Product, Transportation & Mobility Design, Industrial & Product Design, Interior and retail space Design, Animation and VFX, Interaction Design, Interior and Retail space Design, Lifestyle and Accessory Design, User experience and Interaction Design	Transportation and Mobility Design, Industrial Design, Interaction Design, Fashion Design, Product Design, Graphic Design

EMERGING CAREER HORIZONS

Sl.NO.	College Name	Location	UG Courses	PG Courses
9	World University of Design	Sonipat	Product Design, Transportation Design, Interior architecture Design, Computer science Design, Film and Video design, graphic and Communication Design, Animation and Game design, Fashion Design, Animation and Game Design, Fashion Communication, Textile Design	User Experience and Interaction Design, Transportation and Industrial Design, Fashion Design, Communication Design, International Fashion Business, Design Strategy and Management
10	ARCH	Jaipur	Fashion Design, Interior Design, Jewellery Design, Product Design, Graphic Design, Digital Design Photography, BBA Design and Entrepreneurship	Fashion Design, Interior Design Jewellery Design, Product Design and Entrepreneurship, Graphic Design
11	MIT Institute of Design	Pune	Product Design, Transportation Design Interior Space & Furniture Design, Retail Design, User Experience Design, Graphic Design, Animation Film Design Film & Video Design, Fashion Management & Marketing Fashion Communication, Game Design Fashion Design, Design Management,	Immersive Media Design, Graphic Design, Animation Film Design, Film & Video Design, Transcultural Design Fashion Design, Fashion Communication, Design Management, Fashion Management & Marketing
12	AWANTIKA University	Ujjain	Industrial Design, Communication Design, User Experience Design, Interaction Design, Transportation Design, Interior space and furniture Design, Retail Design, Animation Design, Fashion Design	Industrial Design, Communication Design, User Experience Design, Interaction Design, Interior Space and Furniture Design, Retail Design, Animation Design, Design Management
13	ITM Group of Institutions	Mumbai	B.Des in Fashion Design, B.Des in Visual Communication, B.Des in Interior Design, VFX & Animation	
14	Soft	Pune	Fashion Design, Fashion Communication, Textile Design, Jewellery Design	Fashion Design and Merchandising, Indian Fashion Art
15	école intuit. lab	Delhi, Mumbai, Kolkata	Visual Communication, Game Design, Art and Design, Fine Arts, Digital Product Design	Visual Communication, Master in advertisement Design and Digital Communication
16	PPSU	Surat	Visual and Communication Design, Fashion and Textile Design, Product Design, Interior and space design	
17	Sushant University	Gurgaon	Interior Design, Interior architecture, Product design, Fashion and textile design, Visual Communication, UX Design, Animation Design	Interior Design, UX Design, Transportation and Mobility Design, Social Design
18	LPU	Jalandar	Interior and Furniture Design, Product Design, Fashion Design, Design in Multimedia, Graphic Design, Gaming Design, Film and TV Production	Interior and Furniture, Product and Industrial, Fashion Design, Multimedia Design, Film and TV Production
19	Atria University	Bengaluru	Interactive Technologies, Life Sciences, Digital Transformation, Mobility, Energy Sciences	

EMERGING CAREER HORIZONS

Sl.NO.	College Name	Location	UG Courses	PG Courses
20	JK Lakshmi path University	Jaipur	Product Design, Interaction Design, Interdisciplinary Design, Integrated Communication Design	Product Design, Interaction Design
21	RIMT University	Gobindgarh (Punjab)	Industrial Design, Communication Design, User Experience Design, Interaction Design, Transportation Design, Interior space and furniture Design, Retail Design, Animation Design, Fashion Design	Industrial Design, Communication Design, User Experience Design, Interaction Design, Interior Space and Furniture Design, Retail Design, Animation Design, Design Management
22	Imagin XP	Pune, Mumbai Delhi; Gurgaon; Bhopal; OehradauH; Chennai; Jaipur, Mangalore; Sikar, Ahmedabad, Nasik, Chandigarh	UX-UI, Gaming and Animation, Digital Design	UX-UI
23	VGU (Centre for Design Excellence)	Jaipur	Bachelor of Architecture, Fashion 8c Textile Design Interior 8c Product Design, Graphic 8c Communication, INTEGRATED COURSE OF 5 YEARS B.Des + MBA	Sustainable Design (SD)(User Experience Design (UX))
24	AURO University	Gujarat	Interior Space Design, Graphics and Communication Design Fashion and Textile Design	Interior Architecture and Design, Interior Product and Furniture Design, Graphics & Communication Design, Fashion & Textile Design, User Experiences and Interfaces, Fashion Apparel and Merchandising

ADMISSION PROCESS IN TOP DESIGN COLLEGES

College	Application Procedure	Campus	Written Test	Interview	Portfolio	Studio Stimulation
Pearl Academy	Online & Offline	Delhi, Mumbai, Bengaluru, Jaipur	GPT (General Proficiency Test)	Applicable	Only of Design Aspirants	Not Applicable
IIAD	Online & Offline	Delhi	IIAD DAT : Design Aptitude Test For Design Aspirants IIAD MAT : Management Aptitude Test For Fashion Management Aspirants	Applicable	Only of Design Aspirants	Applicable
TDV	Online & Offline		Applicable	Applicable	Only for Design Aspirant?	-
UID	Online & Offline	Ahmedabad	GAT (General Aptitude Test) CAT (Creative Ability Test)	Applicable	Only for Design Aspirant?	Applicable
IM	Online	Mumbai	SOP (Statement of Purpose)	Applicable	Only for Design Aspirants	Not Applicable
UPES	Online & Offline	Dehradun	Not applicable for Aspirants secured more than 65% in 12th / Applicable for students appearing or have secured less than 65% marks in 12th	Applicable	Only for Design Aspirants	Not Applicable

EMERGING CAREER HORIZONS

College	Application Procedure	Campus	Written Test	Interview	Portfolio	Studio Stimulation
ITM	Online & Offline	Mumbai	Common Intellegence Test	Applicable	Only for Design Aspirants	Not Applicable
WUD	Online & Offline	Sonipat	Applicable	Applicable	Only for Design Aspirants	Not Applicable
Arch Academy	Online & Offline	Jaipur	Applicable	Applicable	Only for Design Aspirants	Not Applicable
Avantika	Online & Offline	Ujjain	Applicable	Applicable	Only for Design Aspirants	Not Applicable
LPU	Offline	Phagwara	LPU nest (National Eligibility and Scholarship Test)	Applicable	Not Applicable	Not Applicable
SOFT	Offline	Pune	GAT (General Aptitude Test) CAT (Creative Ability Test)	Applicable	Only for Design Aspirants	Not Applicable
Sushant University	Online & Offline	Gurgaon	Applicable	Applicable	Only for Design Aspirants	Not Applicable
PPSU	Online & Offline	Surat	Applicable	Applicable	Only for Design Aspirants	Applicable
Ecole	Online & Offline	Delhi, Mumbai, Kolkata	Applicable	Applicable	Only for Design Aspirants	Not Applicable
Imagine XP	Online & Offline	Pan India	Applicable	Applicable	Only for Design Aspirants	Applicable for some Universities
RIMT	Online & Offline	Gobindgarh	Applicable	Applicable	Only for Design Aspirants	Not Applicable
VGU-CODE	Online & Offline	Jaipur	Applicable	Applicable	Only for Design Aspirants	Not Applicable
MIT-ID	Online	Pune	MIT- Design Aptitude Test	Applicable	Only for Design Aspirants	Not Applicable
JKLU	Online & Offline	Jaipur	Applicable	Applicable	Only for Design Aspirants	Not Applicable



ANIMATION

A BRIEF INTRODUCTION

Animation is a method of photographing successive drawings, models, or even puppets, to create an illusion of movement in a sequence. Because our eyes can only retain an image for approximately 1/10 of a second, when multiple images appear in fast succession, the brain blends them into a single moving image.

In traditional animation, pictures are drawn or painted on transparent celluloid sheets to be photographed. Early cartoons are examples of this, but today, most animated movies are made with computer-generated imagery or CGI.

To create the appearance of smooth motion from these drawn, painted, or computer-generated images, frame rate, or the number of consecutive images that are displayed each second, is considered. Moving characters are usually shot “on twos” which just means one image is shown for two frames, totaling in at 12 drawings per second. 12 frames per second allows for motion but may look choppy. In the film, a frame rate of 24 frames per second is often used for smooth motion.

Why Animation?

It is large & ever growing industry. Animation world in India is expanding big time and is assured to offer highly promising job opportunities to skilled ones. Expertise skills in using industry-standard software to model characters, props and environments. Practice on every important traditional and digital animation technique is provided that would help in producing competent animation. Students gain professional knowledge about the techniques of Storytelling, Cinematography, Video Editing and Digital Sculpture Making.

CAREER OPTIONS/ SCOPE

Modeling & Texturing Artist, Lighting & Rendering Artist, Rigging Artist, Fx Artist, Storyboard Artist, Character Modeler, Asset Modeler, Animator, Editor, Pre-Viz Artist, Concept Artist, Creative Director, Art Director, Visual Designer, Film Director, Graphic Designer, Visualizer, Motion Graphic Designer, etc.

ELIGIBILITY CRITERIA

The exam is open to students who have passed Class XII (or equivalent) in any stream (Science, Commerce, or Arts & Humanities).

EMERGING CAREER HORIZONS

SYLLABUS

Same as NID.

QUESTION PAPER DESIGN

Different for different colleges based on drawing, colouring, visual concepts and studio tests.

FREQUENCY OF EXAM

Different for different colleges.

ATTEMPTS ALLOWED	A candidate can attempt the exam a maximum of two times and that too in consecutive years.
MODE OF EXAM	Offline
EXAM DATE	Different for different colleges
EXAM DURATION	3 hours
MODE OF REGISTRATION	Online
DEADLINE FOR REGISTRATION	Different for different colleges

OFFICIAL WEBSITE

www.icat.ac.in

www.collegesearch.in/articles/animation-courses-after-12th-crs

www.jnafau.ac.in

www.shiksha.com/animation/colleges/colleges-india

SALARY

According to Animation skills.

BRIEF INTRODUCTION OF ORGANISATION / INSTITUTION / AGENCY CONDUCTING THE ORGANISATION

Different for different colleges

SOURCES/WEBSITES FOR SAMPLE QUESTION PAPERS AND STUDY MATERIALS

Same as NID.

REFERENCE BOOKS

Same as NID.

TOP UNIVERSITIES

ICAT, JNAFAU, IIT Bombay, Loyola College, Fergusson College, VIT Vellore, Jamia Millia Islamia, PSGR Krishnammal College for Women, MAHE Manipal, Pearl Academy, LBC, RSACE, Amity University, Frameboxx Animation & Visual Effects Private Limited, Dr. M.G.R. Educational & Research Institute, Maeer's MIT Institute of Design, Brainware University, Unitedworld Institute of Design, ROOTS Collegium, Suryadatta Group of Institutes, Dev Bhoomi Group of Institutions, Chandigarh University, Karnavati University.

TOP PLACEMENT COMPANIES

Reliance Media Companies Ltd., Crest Animation Studios, Anibrain, Pentamedia Graphics, MAKUTA, UTV Toonz, Film Production Houses, Media Agencies, Computer and Mobile Game Developers, Animation Studios, Advertising Agencies, Post Production Houses, Web Entities.



ART COLLEGE

A BRIEF INTRODUCTION

An art college is an educational institution that focuses on the Visual Arts, including Fine Art, Illustration, Painting, Photography, Sculpture, and Graphic Design. Art colleges offer undergraduate and graduate programs in various Fields of Art. The curriculum includes theoretical and practical lessons that help students develop skills in various artistic techniques.

In contrast to a liberal arts college, which offers a broad range of subjects, an art college focuses primarily on the visual arts.

CAREER OPTIONS

- Professor in Art Colleges, IIT, NID, MIT, NIFT, Architecture Colleges, Medical colleges, Design Colleges, B.Ed. Colleges, Art Teacher as PGT, TGT, PRT. etc.
- Curator, Archaeologist under ASI, Art Historian, Restoration in Museums, Cinematographer, Art Director, Actor, Film Director, Script Writer, Artist, Illustrator, Graphic Designer, Sculptor.
- Cinematography, Photographer, Art Critic, Animator, Graphic Designer, Cartoonist, Theatre Artist, Painter, Interior Designer, Art Museum Technician, Digital Designer.
- **Fashion / Interior Designer:** This field requires artistic skills, an eye for detail, exceptional fashion sense, great visualization power, excellent drawing skills, networking and digital skills.
- **Creative Director/Media Manager/ Journalist:** This field requires excellent communication skills, boldness and courage, strive for the truth, flexible work hours, multi-tasking, objectivity and good judgment, critical thinking.
- **Wildlife Photography:** This field requires excellent photography skills, outdoor survival skill, mastery in photographic styles, and the skill of using professional equipment, post-processing skills, patience and physical endurance

ELIGIBILITY CRITERIA

To get enrolled in an art college, aspirants need to fulfil certain eligibility criteria. For instance, to pursue an undergraduate degree in arts, they must score at least 50% marks during their 10+2 from a recognized board - ISC / CBSE or any state board. The candidate should not be over 22 years old. The applicant can belong to

EMERGING CAREER HORIZONS

any stream- Science, Commerce or Humanities. Belonging to Arts stream at an intermediate level will be just an added advantage.

SYLLABUS

Same as NID, CUET and as mentioned in Question Paper Design

QUESTION PAPER DESIGN

- Art History, Fundamentals of Art, Sadanga (MCQ)
- Observation Skill, Drawing Skill
- Creative Skill, Composition skill
- Portfolio Presentation and Studio Test
- Viva

FREQUENCY OF EXAM : Once in a year

ATTEMPTS ALLOWED (IF APPLI.) : 2 times

MODE OF EXAM : Offline and Online

For admissions to Arts colleges in India, candidates must qualify some of the popular exams and they are:

- CUET: CUET stands for Central University Entrance Test. It is an all-India level entrance exam conducted by NTA for admission in UG courses offered in all the participating institutions. The exam is conducted in a Computer-Based Mode for two hours. Originally CUET was conducted by UGC in paper-pencil-based mode.
- JNU Entrance Exam
- DUET

EXAM DATE : Varies from March to June in different colleges.

EXAM DURATION : 3 hours

MODE OF REGISTRATION : Online

DEADLINE FOR REGISTRATION : Different for different colleges

OFFICIAL WEBSITES

- cuet.samarth.ac.in
- www.visvabharati.ac.in
- www.collegeofartsandcraftspu.in
- www.gcac.edu.in
- www.rbu.ac.in
- www.msubaroda.ac.in
- www.sirjjschoolofart.in
- www.iksv.ac.in
- www.jmi.ac.in.com,
- www.jmi.ac.in.com
- www.bkartcollege.org -
- www.delhicollageofart.com

SALARY : Depends on the type of job, experience, company, etc.

BRIEF INTRODUCTION OF ORGANISATION / INSTITUTION / AGENCY CONDUCTING THE ORGANISATION

- NTA - CUET, DUET, JNU Entrance Exam.

SOURCES/WEBSITES FOR SAMPLE QUESTION PAPERS AND STUDY MATERIALS

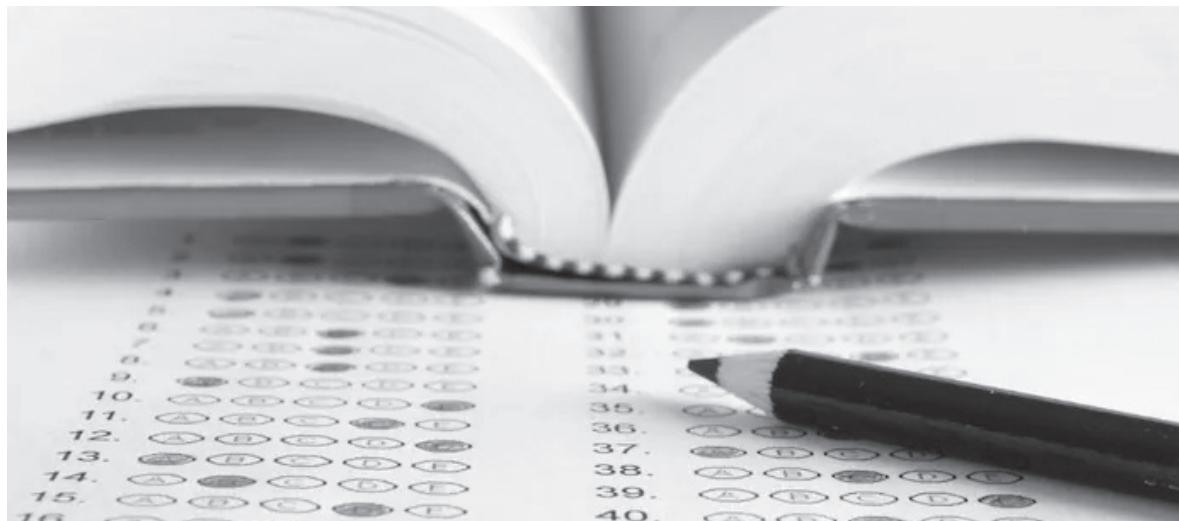
www.bhu.ac.in

TOP UNIVERSITIES

- Viswa Bharti University, Santiniketan Kala Bhavan
- The Maharaja Sayajirao University Of Baroda
- BHU
- Patna Art College
- Government College Of Art And Craft, Calcutta
- Rabindra Bharati University
- Indira Kala Sangit Vishwavidyalaya- Khairagarh
- Jamia Millia Islamia
- B K College Of Art And Crafts
- J.J. School Of Art, Mumbai
- Delhi Art College Etc.

TOP PLACEMENT COMPANIES

According to CAREER OPTION given above.



JEE PAPER-2

A BRIEF INTRODUCTION

JEE Paper 2 is an entrance exam for admission to undergraduate architecture and planning courses in India. It consists of two parts: Paper 2A for B.Arch programs and Paper 2B for B.Planning programs. The exam is conducted in online mode, except for the drawing section in Paper 2A, which is in offline mode. The exam duration is 3 hours for both papers.

The syllabus and pattern of JEE Paper 2 are as follows:

- **Paper 2A (B.Arch.):** It has three sections: Mathematics, Aptitude Test, and Drawing Test. The Mathematics and Aptitude sections have Multiple-Choice Questions (MCQs) with one correct answer, while the Drawing section has questions that require sketching skills. The total number of questions is 82, and the total marks are 400. The marking scheme is +4 for each correct answer, -1 for each incorrect answer, and 0 for each unanswered question.
- **Paper 2B (B.Planning):** It has three sections: Mathematics, Aptitude Test, and Planning Based Questions. All the sections have MCQs with one correct answer. The total number of questions is 105, and the total marks are 400. The marking scheme is +4 for each correct answer, -1 for each incorrect answer, and 0 for each unanswered question.

The exam is conducted in Hindi and English languages, except for candidates belonging to Gujarat, Daman & Diu, and Nagar Haveli, who can also opt for Gujarati language.

The JEE Paper 2 exam is conducted by the National Testing Agency (NTA) four times a year: in February, March, April, and May. The candidates can apply online through the NTA website by filling the application form and paying the fee. The candidates can also download the admit card, check the result, and participate in the counselling process through the same website.

The JEE Paper 2 exam is important for those who want to pursue a career in architecture or planning. The exam tests the candidates' aptitude, mathematical skills, and creativity. The exam also opens the doors to various prestigious colleges in India, such as NITs, IIITs, CFTIs, SPAs, and other private institutes.

CAREER OPTIONS

There are many career options in architecture, depending on one's interests, skills, and goals. Architecture is a broad field that encompasses the design, construction, and management of various types of structures and spaces. Some of the common career paths in architecture are:

- **Building Architect:** This is the most obvious and popular choice for architecture graduates. Building Architects design and create houses, public buildings, commercial complexes, and other types of structures. They work with clients, contractors, engineers, and other professionals to ensure that the buildings meet the functional, aesthetic, and environmental requirements. Building Architects need to have a good knowledge of architectural styles, materials, codes, and regulations. They also need to have strong creative, technical, and communication skills.
- **Landscape Architect:** If you love working with nature and outdoor spaces, you might enjoy being a landscape architect. Landscape architects plan, design, and manage open spaces such as parks, gardens, campuses, resorts, and urban areas. They aim to create attractive, sustainable, and harmonious environments that enhance the quality of life for people and wildlife. Landscape architects need to have a good knowledge of ecology, horticulture, geography, and environmental issues. They also need to have artistic, analytical, and problem-solving skills.
- **Urban Planner:** Urban Planners are responsible for shaping the development and growth of cities and towns. They analyze the social, economic, and environmental aspects of urban areas and propose plans and policies for land use, transportation, housing, infrastructure, and public services. Urban Planners work with various stakeholders such as government officials, community groups, developers, and architects to create livable, efficient, and equitable urban spaces. Urban Planners need to have a good knowledge of urban studies, sociology, economics, law, and politics. They also need to have research, data analysis, and presentation skills.
- **Restoration Architect:** Restoration Architects specialize in preserving and restoring historical buildings and monuments. They research the original design and condition of the structures and apply appropriate techniques and materials to repair or reconstruct them. Restoration architects work with heritage agencies, conservation groups, museums, and private owners to protect the cultural and architectural value of the buildings. Restoration architects need to have a good knowledge of history, archaeology, art history, and conservation methods. They also need to have attention to detail, accuracy, and respect for the past.
- **Research Architect:** Research Architects are involved in advancing the knowledge and practice of architecture through scientific inquiry and innovation. They conduct experiments and studies on various topics such as new materials, technologies, methods, systems, or theories related to architecture. Research Architects work with academic institutions, research centers, or industry partners to develop new solutions or improve existing ones for architectural challenges. Research Architects need to have a good knowledge of Mathematics, Physics, Engineering, and Computer Science. They also need to have curiosity, creativity, and critical thinking skills.

These are some of the common career options in architecture, but there are many more possibilities for aspirants to explore. They also combine their architectural skills with other disciplines such as Interior Design, Graphic Design, Product Design, or Art. They can also pursue further education or specialization in a specific area of interest such as Sustainable Architecture, Digital Architecture, or Social Architecture.

Whatever career path they choose, they can use their architectural degree as a foundation for building a rewarding and fulfilling career in architecture or related fields.

ELIGIBILITY CRITERIA

The eligibility criteria for JEE Paper 2 are as follows:

- There is no age limit to apply for the exam. However, one may be required to satisfy the age criteria set by the institute to which one is willing to take admission.

EMERGING CAREER HORIZONS

- One must have passed or appeared in Class XII Exam or equivalent examination in any of the past three years with Physics, Chemistry, and Mathematics as compulsory subjects at 10+2 level and should have secured above 50% marks in each subject.
- One must have qualified Paper 2 of JEE Main by scoring marks equivalent to or above the cutoff1.
- General category candidates must have secured 75% while SC/ST candidates must have secured 65% in the qualifying examination.
- One must choose the state code of eligibility based on the state from where one has passed Class 12 (or equivalent) qualifying examination.

SYLLABUS

The syllabus for JEE Paper 2 is based on the topics from Mathematics, General Aptitude, and Drawing/Planning. The syllabus is different for B.Arch. and B.Plan. programs, as the Drawing section is only for B.Arch. and the Planning section is only for B.Plan. The Mathematics and General Aptitude sections are common for both programs. Applicants can download the PDF of the syllabus from this link or this link.

The **Mathematics section** covers topics such as Sets, Relations and Functions, Complex Numbers, Quadratic Equations, Matrices and Determinants, Permutations and Combinations, Mathematical Induction, Binomial Theorem, Sequences and Series, Limit, Continuity and Differentiability, Integral Calculus, Differential Equations, Coordinate Geometry, Three Dimensional Geometry, Vector Algebra, Statistics and Probability, Trigonometry, and Mathematical Reasoning.

The **General Aptitude section** tests your awareness of persons, objects, places, buildings, materials, textures related to architecture and built environment. It also tests your visualizing skills, analytical reasoning, mental ability (visual, numerical and verbal), and three-dimensional perception.

The **Drawing Section Tests** your sketching skills and your understanding and appreciation of scale and proportion of objects, building forms and elements, colour texture, harmony and contrast. You have to draw geometrical or abstract shapes and patterns in pencil, transform the shapes in 2D and 3D union and subtraction, create 2D and 3D compositions using given shapes and forms, generate plan, elevation and 3D views of objects.

The **Planning Section Tests** your general knowledge of planning principles and techniques. It also tests your understanding of social, economic and environmental issues related to planning. You have to answer questions on development issues such as migration, urbanization, poverty alleviation; government policies and programs related to housing, infrastructure, transport; planning concepts such as smart city, sustainable development; map reading skills such as identification of directions, distances; simple statistics such as graphs, charts.

Part-1: (General Aptitude) Awareness of Persons, Objects, Places, Buildings, Materials, Textures related to Architecture and build-environment, Visualizing different sides of three-dimensional objects, Visualizing three-dimensional objects from two-dimensional drawings, Analytical Reasoning Mental Ability (Visual, Numerical and Verbal).

Part-2: (Drawing) Three-dimensional- perception: Understanding and appreciation of scale and proportion of objects, building forms and elements, colour texture, harmony and contrast. Design and drawing of geometrical or abstract shapes and patterns in pencil, Transformation of forms in both 2 D and 3 D union, subtraction, rotation, development of surfaces and volumes, Generation of Plan, elevations and 3 D views of objects, Creating two-dimensional and three-dimensional compositions using given shapes and forms. Sketching of scenes and activities from memory of urbanscape (public space, festivals, market, street scenes, monuments, recreational spaces, etc), landscape (riverfronts, jungles, trees, plants, etc) and rural life.

https://collegedunia.com/exams/jee-main/barch-syllabus#barch_syllabus

<https://collegedunia.com/exams/jee-main/barch-syllabus>

FREQUENCY OF EXAM : The National Testing Agency (NTA) conducts JEE Main Paper 2 twice a year, in January and April.

ATTEMPTS ALLOWED (IF APPLI.) : A candidate can attempt the exam a maximum of **two times** and that too in consecutive years.

MODE OF EXAM

The exam consists of three parts: Mathematics, Aptitude Test, and Drawing Test.

The Mathematics and Aptitude Tests are conducted online, while the Drawing Test is conducted offline on an A4 size sheet. The duration of the exam is 3 hours (180 minutes).

Please note that the exam pattern and mode of exam are subject to change. You can visit the official website of JEE Main for the latest updates.

EXAM DURATION

The duration of the exam is 3 hours (180 minutes).

MODE OF REGISTRATION

The entire JEE Main Paper 2 application process is conducted online. The process involves four stages: registration, filling up the application form, uploading documents, and fee payment.

To register for the exam, you can visit the official website of JEE Main and fill out the application form using a valid email ID and phone number.

DEADLINE FOR REGISTRATION

Please note that the registration process and mode of exam are subject to change. Applicants can visit the official website of JEE MAIN for the latest updates.

OFFICIAL WEBSITE : jeemain.nta.nic.in

SCOPE : Refer to career options above.

SALARY : Salary figures are subject to change and may not be accurate.

NAME OF ORGANISATION / INSTITUTION / AGENCY CONDUCTING THE ORGANISATION : National Testing Agency (NTA)

SOURCES/WEBSITES FOR SAMPLE QUESTION PAPERS AND STUDY MATERIALS

From official sites of Getmyuni, Vedantu, Mosaic Designs, Aakash Institute, College Dunia

REFERENCE BOOKS : B.Arch by Arihant Publication

TOP UNIVERSITIES

- Indian Institute of Technology (IIT), Kharagpur
- National Institute of Technology (NIT), Calicut
- School of Planning and Architecture (SPA), New Delhi
- Birla Institute of Technology, Mesra, Ranchi

Maulana Azad National Institute of Technology, Bhopal etc.

TOP PLACEMENT COMPANIES

The top placement companies for engineers in India are Larsen & Toubro, Tata Projects, NCC Limited, GMR, Jaypee Group, and Ircon International etc.



NATIONAL APTITUDE TEST IN ARCHITECTURE (NATA)

A BRIEF INTRODUCTION

The National Aptitude Test in Architecture (NATA) is a national-level entrance examination conducted by the Council of Architecture (COA) for admission to undergraduate architecture courses offered by various institutes across India.

CAREER OPTIONS

Same as JEE paper 2

ELIGIBILITY CRITERIA

Same as JEE paper 2

SYLLABUS

The exam is conducted in two stages: Prelims and Mains.

The Prelims Exam is an offline exam that consists of two parts: Part A and Part B. Part A is a Multiple-Choice Question (MCQ) test that assesses the candidate's knowledge of design, visual communication, and creativity. Part B is a Subjective Test that evaluates the candidate's drawing, sketching, and writing skills.

The Mains Exam is an online exam that consists of a Studio Test and a Personal Interview. The Studio Test assesses the candidate's ability to work with different materials and techniques, while the Personal Interview evaluates their communication skills, personality, and attitude towards design.

QUESTION PAPER DESIGN

According to the official website of NATA, the syllabus for NATA has been divided into seven parameters of aptitude.

Aptitude Techniques	Explanation
Diagrammatic Reasoning	Testing the candidate's ability of logical reasoning, using diagrams and scenarios
Numerical Reasoning	Testing the candidate's Mathematical ability through simple problems

Verbal Reasoning	Assessing the ability to assess verbal logic
Inductive Reasoning	Testing the ability to see patterns and analyse given data
Situational Judgment	Assessing the problem solving ability of the candidate
Logical Reasoning	Ability to recognize patterns, sequences or relationships between shapes and imagery
Abstract Reasoning	Assessing the candidate's general knowledge and ability to utilize knowledge in new situations

FREQUENCY OF EXAM

The National Aptitude Test in Architecture (NATA) is conducted by the Council of Architecture (COA) twice every year. Candidates can appear for any one session, any two sessions, or all three sessions.

ATTEMPTS ALLOWED (IF APPLI.)

According to the official website of NATA, the maximum number of attempts for a candidate in NATA shall remain two.

MODE OF EXAM

Online

EXAM DATE

Intimated after application

EXAM DURATION

3 hours

MODE OF REGISTRATION

Online

BRIEF INTRODUCTION OF ORGANISATION / INSTITUTION / AGENCY CONDUCTING THE ORGANISATION

Council of Architecture (COA)

SOURCES/WEBSITES FOR SAMPLE QUESTION PAPERS AND STUDY MATERIALS

<https://www.nata.in/>

REFERENCE BOOKS

Same as JEE paper-2

TOP UNIVERSITIES

- Sir J. J College of Architecture, Mumbai
- Department of Architecture, IIT Roorkee
- Chandigarh College of Architecture, Chandigarh
- Department of Architecture, NIT Calicut
- Sushant School of Arts and Architecture, Gurgaon
- Faculty of Architecture and Ekistics, JMI
- Department of Architecture, BIT, Mesra
- RV School of Architecture, RVSE, Bangalore
- Faculty of Architecture, Manipal University
- CSI Institute of Technology, AP
- Guwahati College of Architecture, Assam

TOP PLACEMENT COMPANIES

Same as JEE paper-2



HEALTH, PHYSICAL EDUCATION AND SPORTS

INTRODUCTION

Sports bring together different genres and evoke various emotions, such as excitement, hope, and joy. It is a way to unite people and create happiness.

People with a genuine interest in having a career option in Physical Education should take up courses to elevate their knowledge and be updated with the dynamic laws of the sports federation.

Physical education is a growing field of educational study as well as a profession these days. Not only is it extremely important in the development of a person's life, but it also aids in the development of a student's competence and confidence. In addition, it encourages their participation in a wide range of physical activities that are significant in their lives both in and out of school. Regular physical activities help a person develop an affinity for a positive outlook on life, and thus emphasis is placed on creating a sports environment from childhood. Several schools and colleges have begun to make physical education a mandatory subject, requiring students to participate in various games and tire themselves out.

Sports Scientists with different specializations like

Anatomy, Physiology, Kinesiology, Biomechanics, Psychology etc. Sports Officers at National and State level (District Sports Officers, Regional Sports Officers etc.) Sports Event Managers, Professors in different universities etc., Sports Nutritionist, Sports Performance Enhancer etc.

ELIGIBILITY CRITERIA

Minimum Qualification for U.G. courses is class 12th.

For Administrative Post individual should have to qualify NET examination.

For Sports Scientists, individuals should have to complete masters in Sports Science subjects.

FOR U.G. COURSE

- Sports Current Affairs
- General English
- Science

- Sports Specialization (Theory/Practical)
- Physical Fitness test

FOR P.G. AND OTHER COURSES

Specialization subjects in theory and practical as well as physical fitness test.

QUESTION PAPER DESIGN

Objective and Subjective (depends on the Universities and Colleges)

- | | |
|-----------------------------|---|
| FREQUENCY OF EXAM | : Annually |
| ATTEMPTS ALLOWED | : As per the University and Colleges norms. |
| MODE OF EXAM | : Online and Offline. |
| EXAM DATE | : April to May of every year. |
| EXAM DURATION | : 90-120 minutes. |
| MODE OF REGISTRATION | : Online and Offline. |

DEADLINE FOR REGISTRATION : Official websites of different colleges/universities.

CAREER OPTIONS

- Sports Scientists with different specializations
- Coach of Specialised Sports
- Sports Manager
- Professors
- Sports Officers in different States
- Sports Nutritionist
- Fitness Influencer etc.

SALARY : Depends on the individual qualification and quality and not less than 10 lakh per annum.

REFERENCE BOOKS

- A. Physical Education and Sports Sciences
- B. Physiology of Sports and Exercise
- C. Fundamentals of Sports Management
- D. Essential of Physical Education
- E. Physical Education by M.L.Kamlesh

TOP UNIVERSITIES IN INDIA

- Lakshmibai National Institute of Physical Education, Gwalior, M.P. and Guwahati, Assam
- Netaji Subhash National Institute of Sports (NSNIS) Patiala, Punjab
- National Sports University, Imphal, Manipur
- Lakshmibai National College of Physical Education, Thiruvananthapuram, Kerala
- Swarnim Gujrat Sports University, Gujrat
- D.A.V.V. Indore, M.P.
- Banaras Hindu University, U.P.
- Symbiosis School of Sports Sciences, Symbiosis International (Deemed University), Pune, India

TOP PLACEMENT COMPANIES

- Sports Authority of INDIA
- Top Schools of CBSE, ICSE, IB Boards
- Fitness influencers in GOLD GYM, TALWALKARS etc.
- Sports Anchors in different news channels of

India.

- Sports Managers like Amazon, Flipcart, Myntra etc.

EMERGING CAREER HORIZONS



JOURNALISM, MASS COMMUNICATION AND PHOTOGRAPHY

BRIEF INTRODUCTION

Journalism is the activity of gathering, assessing and presenting news and information. Journalists use their writing, photography, and video skills to cover important events. They work in media organizations at all levels, from local newspapers to national network television channels. Journalism careers also include marketing, communications, and public information roles. Journalism degrees help learners develop writing abilities, interviewing skills, and research competencies. Curiosity is the foundation for successful journalists. Curiosity helps journalists to identify interesting reporting projects and ask questions that inform readers and viewers. Journalism degrees supplement students' natural curiosity with research, interview, and writing skills.

Careers in journalism require the ability to talk to diverse individuals to gather information and multiple perspectives. Reporters then share that information, adhering to a code of ethics built on honesty and maintaining the public's trust. As media companies provide breaking news and adhere to strict publishing timelines, journalists also need to work well on a deadline. While journalism students once specialized in writing or broadcast, today's journalism programs incorporate both of these skills in order to enhance traditional and emerging media channels. Journalism careers require comfort with new technology, essential data analysis ability, and strong writing and grammar skills. Critical thinking, decision-making, and problem-solving are also crucial skills for journalists.

CAREER OPTIONS

- a. **Print Media:** - Publisher, Editor - In- Chief, Editors, Reporters, Photographers, Camera Persons, Illustrators and Marketing.
 - b. **Radio:** - Content Writer, Script Writer, Radio Jockey, Show Producer, Social Media Managers and Marketing.
 - c. **Television:** - Reporter, Anchor, Camera Persons, Editors, Advertisers, Producers, Director, Animator, Photographer and Marketing.
 - d. **Social Media:** - Social Media Managers, Content Writer, Social Media Analyst, Digital Marketing.
 - e. **Advertisement:** - Social Media Coordinator, Event Planning, Graphic Designer, Web Designer, Marketing Coordinator, Market Researcher, Copywriter/ Content Writer, Digital Marketing.
 - f. **Public Relations:** - Communications Manager, Event Management, Social Media, Account Executive,

EMERGING CAREER HORIZONS

Chief Communications Officer, Media, Account Manager, Publicist And Corporate Communication.

g. **Film Industry** : - Film Director, Cinematographer, Art Director, Screenwriter Producer, Camera Operator, Actor, Production Designer, Costume Designer, Video Editing, Production Assistant, Makeup Artist, Assistant Director, Casting Director, Location Manager, Film Editor, Sound Technician, Videographer, Animation, Executive Producer And Animator.

h. **Professors** (After qualifying UGC NET).

ELIGIBILITY CRITERIA : Intermediate with More than 70%

SYLLABUS

Language skills (Both English and Hindi) : This section will include topics such as Words/ Phrases Correction, Tenses, Jumbled Words/ Phrases, Synonyms, Antonyms, Grammar.

- | | |
|--|--|
| 1. Comprehension and analytical capability | 5. Current Affair |
| 2. Aptitude and Mental Ability | 6. Translation |
| 3. Writing skills | 7. Brand Awareness (for advertisement) |
| 4. General Knowledge | |

QUESTION PAPER DESIGN

: Depends upon the institution

FREQUENCY OF EXAM

: Annually

MODE OF EXAM

: Online, Offline and Interview

EXAM DATE

: December to May

EXAM DURATION

: 3 hrs

MODE OF REGISTRATION

: Online and Offline

DEADLINE FOR REGISTRATION

: Depends upon the institution

OFFICIAL WEBSITE

: Website of the Institution.

SALARY

: Upto ₹ 9.0 Lakhs (Upon Work Experience)

BRIEF INTRODUCTION OF ORGANISATION/INSTITUTION/ AGENCY CONDUCTING

THE EXAMINATION : Refer to the Official Websites of the institutions.

REFERENCE BOOKS

Success Master: Journalism & Mass Communication Entrance Examination (Book), Mass Communication in India (Book), Mass Communication, Principles and Concepts (Book), Manorama Year Book (For Current affairs and General Knowledge)

TOP UNIVERSITIES

1. World

- | | |
|---|------------------------------------|
| a) University of Amsterdam | h) University of Wisconsin-Madison |
| b) University of South California | i) Michigan State University |
| c) The London School of Economics and Political Science | j) New York University |
| d) Stanford University | |
| e) The University of Texas | |
| f) Nanyang Technological University | |
| g) University of Pennsylvania | |

EMERGING CAREER HORIZONS

2. India

- a) Indian Institute of Mass Communication
- b) A.J. Kidwai Mass Communication Research Centre
- c) Symbiosis centre for Media and Communication
- d) Department of Media & Communication Studies, Savitribai Phule Pune University
- e) Manipal Institute of Communication
- f) Xavier Institute of Communication
- g) Department of Media Studies, Christ University
- h) Indian Institute of Journalism and New Media
- i) Monorala School of Communication
- j) Makhanlal Chaturvedi National University of Journalism and Communication



INDIAN STATISTICAL INSTITUTE – ADMISSION TEST

ABOUT THE INSTITUTE

The Indian statistical Institute (ISI) conducts the Indian Statistical Institute – Admission Test in order to offer students admission in undergraduate courses which are offered at various centers of ISI. Admission to the academic programme is strictly based on the merits obtained by the candidates which are evaluated from their performance in admission test and interviews. The past academic record of the candidate may also be taken into account for the purpose of performance evaluation. It is conducted every year at 38 centers across the country. It is a National level inference exam conducted in offline mode i.e. pen and paper test.

ABOUT THE COURSES OFFERED

1. B. Statistics (Honours), at Kolkata centre of course duration 3 years.
2. B. Mathematics Honours, Bengaluru centre of course duration 3 years.
 - Number of seats available - Total 63 (23 General, 17 OBC, 9 SC, 5 ST, 6 EWS, 3 PWD)
 - Application fee – INR 1500 for male candidate, INR 1000 for female candidate, INR 750 for reserved categories.

CAREER CHOICES

- | | | |
|----------------------|------------------------|--------------------|
| • Subject Researcher | • Scientific Assistant | • Economist |
| • Meteorologist | • Operation Research | • Accountant |
| • Data Scientist | • Statistician | • Actuaries |
| • Financial Planner | • Mathematician | • Astronomer, etc. |

SCOPE

- After undergraduate courses, students may go further for post graduate courses like M. Statistics and M. Mathematics for higher futuristic scope and job opportunities.
- Various reputed job opportunities are there even after undergraduate courses in government sector , private sector , corporate firms , etc

ORGANIZATION CONDUCTING EXAMINATION

EMERGING CAREER HORIZONS

Indian Statistical Institute, Kolkata

INSTITUTE TAKING ADMISSION

- Indian Statistical Institute, Kolkata
- Indian Statistical Institute, Delhi
- Indian Statistical Institute, Bengaluru
- Indian Statistical Institute, Chennai
- Indian Statistical Institute, North East Centre , Tezpur

SCHEDULE OF EXAMINATION

- 1st sitting – 10.30 hrs to 12.30 hrs. MCQ type
- 2nd sitting – 14.00 hrs. to 16.00 hrs. Descriptive type

MODE OF EXAMINATION

- Offline, once in a year in the month of May.
- Medium of exam is English of 2 hours duration of total 100 marks.
- Nearest examination centers are at Ranchi, Patna, Bhubaneswar, etc

SOURCES/ WEBSITES FOR SAMPLE QUESTIONS

- www.isical.ac.in
- www.shiksha.ac.in
- www.selfstudy.ac.in
- www.mathsdunia.ac.in
- www.collegeworld.ac.in

SALARY

As per higher qualification and experience.

SYLLABUS OF EXAMINATION

1. **For B.Statistics :** Majority of the questions are asked from maths syllabus of 10+2 level including the main branches like algebra, calculus, statistics and probability, operation research, optimisation, applied part of calculus, etc.
2. **For B.Mathematics :** Majority of the questions are asked from maths syllabus of 10+2 level including the main branches like algebra, calculus, geometry, trigonometry, coordinate geometry, etc.



BACHELOR OF BUSINESS ADMINISTRATION (BBA) AND HOTEL MANAGEMENT

ABOUT THE COURSE /INSTITUTE

BBA is one of the most sought – after under graduate bachelors degree programme pursued after class XII. It is a 3 years professional course in Business Management. Top BBA colleges in India are SSCBS, Delhi, NMIMS Anil Surendra Modi School of Commerce, Mumbai, Christ University, Bengaluru, Mount Carmel College, Bengaluru, Symbiosis Institute of Computer Studies and Researches, Pune, Maharaja Surajmal Institute of Technology, Delhi, etc.

Hotel Management involves overseeing the operations of a hotel or similar establishment. Students aspiring to work in the field of Hotel Management can pursue a bachelor's degree or diploma in Hotel Management after 12th class. Students from the science, arts and humanities streams are eligible to pursue this course after 12 class.

CAREER CHOICES

- Business Development Managers
- Research Assistant
- Operations Analyst
- Commodity Traders
- Accountant
- Sales Executive
- Investment Bankers
- Loan Officer
- Chefs
- Hotel Managers
- Executive Chefs
- Bakers
- Hospitality Executive
- Catering Officers

SCOPE

- After undergraduate course, students may go further for post graduate courses MBA for higher futuristic scope and job opportunities.
- Various reputed job opportunities are there even after undergraduate courses in government sector, private sector, corporate firms, etc.
- The government sector BBA recruiters are: Oil and Natural gas corporation, ISRO, SAIL, GAIL, DRDO, NTPC, BHEL, etc.
- The private sector BBA recruiters are Microsoft, TCS, infosys, capgemini, genpact, IBM, HDFC, deloitte etc.

EMERGING CAREER HORIZONS

SALARY

As per higher qualification and experience. A BBA graduate's beginning pay can range from 5 lacs per year to 12 lacs per year.

ORGANIZATION CONDUCTING EXAMINATION

CUET, SET, DU JAT, IPMAT, AIMA UGAT, IPM Aptitude Test, NMIMS NPAT, etc

SCHEDULE OF EXAMINATION

- CUET (15th July to 20th August)
- SET (Second week of May)
- DU JAT (June)
- IPMAT (Second week of May)
- AIMA UGAT (First week of May)
- IPM Aptitude Test (Third week of May)
- NMIMS NPAT (Second week of April to Third week of June)

TOP HOTEL MANAGEMENT COLLEGES

IHM Pusa, IHM Bangalore, and IHM Kolkata. The common exams are NCHMCT JEE, AIMA UGAT, and AIHMCT WAT.

HOTEL MANAGEMENT COURSES (UNDERGRADUATE)

- Bachelor of Hotel Management (BHM)
- Bachelor of Hospital Management
- Bachelor of Hospitality Management
- B.A. Hospitality Management
- B.Sc. Catering Science and Hotel Administration
- B.Sc. Hospitality Studies

HOTEL MANAGEMENT COURSES (POSTGRADUATE)

- Master in Tourism and Hotel Management
- Master of Hotel Management(MHM)
- M.Sc. Tourism and Hospitality Management

HOTEL MANAGEMENT COURSES (DIPLOMA)

- Diploma in Hospitality Management
- Post Graduate Diploma in Hotel Management
- Diploma Course in Housekeeping
- Diploma in Aviation Hospitality and Travel Management
- Diploma in Bakery and Confectionery
- Diploma in Food Production
- Diploma in Hotel Management & Catering Technology

MODE OF EXAMINATION

Offline and online mode, once in a year nearest examination centers are at Ranchi, Patna, Bhubaneswar, etc.

SOURCES/ WEBSITES FOR SAMPLE QUESTIONS

- www.mbauniverse.com
- www.amityonline.com
- www.niu.edu.ins
- www.upesonline.ac.in
- www.hotelmanagement.ac.in
- www.chefdunia.ac.in

SYLLABUS OF EXAMINATION

1. **For BBA Entrance :** Majority of the questions are asked from topics like mathematical arithmetic, financial mathematics, commercial mathematics, abstract reasoning, logical thinking questions, etc.
2. **For HM Entrance :** Majority of the questions are asked from english language competency, verbal and non verbal reasoning, basic computer skills, general knowledge, behavioral pedagogy, etc.



PSYCHOLOGY

A BRIEF INTRODUCTION

Career opportunities in the field of psychology are rising each day. According to surveys, in today's "rat race" for getting into some fascinating profession, psychology is evolving as a great career option in India and abroad. There are various options for careers in Psychology. The ideal method to determine which career is suitable for you is to pick one that fascinates you and you can learn about it. Psychologists are constantly in demand as teachers, counsellors, and researchers. They may also assist those suffering from mental and physical illnesses by assessing and treating them.

What do psychologists do?

Psychologists study mental processes and human behaviour by observing, interpreting, and recording how people and other animals relate to one another and the environment.

To do this, psychologists often look for patterns that will help them understand and predict behaviour using scientific methods, principles, or procedures to test their ideas, conduct research at universities, government agencies, and private organizations, promote physical and mental health as a health care provider.

Top Careers in Psychology (Career profiles)

A lot of surveys have stated that psychology is known to offer positive career growth to professionals. Be it any field, they are needed in every industry because they help individuals get on the path of self-discovery. Additionally, they also help in making the lives of people better by playing a significant role in improving their mental condition. Psychologists are known to help individuals by working on their behavioural tendencies. We have listed some of the top career choices that one pursuing a career in psychology should resort to.

- Psychologist:** The first and the most popular career stream for those who pursue a degree in psychology is that of a psychologist. A psychologist is one who follows a scientific approach to deal with the problems faced by their patients. The major skill sets that a psychologist should possess are patience, ethics, research, enthusiasm, learning attitude, and emotional stability.
- Counsellor:** A counsellor is a person who studies the patient's history and tries to know about the major events that have led to their emotional disparity. They usually offer immediate help by talking to them and listening to their problems. Counsellors are often considered for those who are facing issues in their

EMERGING CAREER HORIZONS

studies, marriage, relationships, work, etc. They usually empathise with the situation of their patients and provide them with solutions that help them to return to normal life with ease.

3. **Psychotherapist:** As the name suggests, their primary work area is to deal with the mental problems faced by their patients. The patients that seek the help of psychotherapists are those who deal with any type of behavioural or accidental trauma. They usually provide cognitive solutions to personality disorders, depression, narcissism, and obsessive-compulsive disorders. Consulting a psychotherapist helps one with coping up with anxiety, and building self-confidence and self-esteem. They help their patients by using cognitive behaviour therapy.
4. **Career Psychologist:** Career psychologists are usually those who guide and counsel students regarding the delusion surrounding career issues. They go through the problems faced by their patients, try to study their mental state, and then provide solutions to provide a clear idea. Additionally, their primary role includes assessing the academic potential of the student and then suggesting the best career fields.
5. **Criminal Psychologists:** Criminal psychologists are usually employed by the juvenile justice board, jails, and defence wing. The primary job of these psychologists is to counsel juvenile criminals or offenders at the psychological level and help them in returning to normal life. Additionally, they also help police officers in solving cases by studying the behaviour of the criminals and the next step to be taken. They help their patients by making them aware of their skills and indulging them in rehabilitation programs.
7. **Licensed Clinical Psychologist** - A clinical psychologist plays a vital role in assessing, diagnosing, and treating individuals with mental, emotional, and behavioral disorders. They offer professional support to help people navigate a wide range of challenges, from short-term personal issues to severe and chronic conditions.

CAREER OPTIONS

Psychologist, Licensed Clinical Psychologist, Counsellor, Psychotherapist, Family and Marriage Counsellor Business Management & Communications Psychology Careers, Forensic Psychologists, Psychology Research Careers, Sports Psychologist, Military Psychologist, Health Psychologist.

ELIGIBILITY CRITERIA

- a) Students must be appearing for or have passed 10+2 or equivalent from a recognized board with any stream and minimum 55% marks.
- b) Score of CUET for getting enrolled in Undergraduate Programme.

Degrees are offered at these levels:

Bachelor's (B.S. or B.A.)

Master's (M.A., M.S.) or

P.G. Diploma (Specialization) or,

M.Phil. (RCI Clinical/ Rehabilitation Psychology)

Doctorate (Ph.D. or Psy. D.)

The degree you need depends on which field of Psychology you want to go into

- o **SYLLABUS** : Complete Psychology Syllabus Depending on Universities
- o **QUESTION PAPER DESIGN** : Depends on different entrances

Introduction of CUET Syllabus for Psychology :

Psychology is the scientific exploration of the human mind and its impact on behavior. The discipline delves into both the cognitive and intuitive aspects of our psyche, making it a fascinating and stimulating topic. The subject has captivated many students' interest, with the CUET Psychology syllabus covering nine distinct units that build off one another to form a cohesive whole.

It's important to thoroughly read the curriculum to avoid overlooking any critical information. The CUET syllabus is thoughtfully designed to cover a broad range of psychological subjects such as Self and Personality, Meeting Life Challenges, Psychological Disorders, Attitude and Social Cognition, and Psychology and Life, among others. These topics are presented in a comprehensive table following the course breakdown.

CUET Syllabus for Psychology :

Unit	Chapter	Topics
1	Variation in Psychological Attributes	<ul style="list-style-type: none"> • People concerning their various psychological attributes. • Individual differences in human functioning; • Special abilities • Assessment of psychological attributes; • Emotional intelligence.
		<ul style="list-style-type: none"> • Intelligence • Creativity;
2	Self and Personality	<ul style="list-style-type: none"> • Study of self and personality. • Self-esteem, self-efficacy, and self-regulation. • Culture and self; Concept of personality. • Type and Trait, Psychodynamic, Humanistic, Behavioural, Cultural. • Assessment of personality.
3	Meeting Life Challenges	<ul style="list-style-type: none"> • Nature of stress. • Promoting positive health and well-being. • Effects on psychological functioning and health. • Nature, types, and sources of stress. • Coping with stress.
4	Psychological Disorders	<ul style="list-style-type: none"> • Concepts of normality and abnormality. • Classification of disorders. • Factors Underlying abnormal behaviour. • Major psychological disorders.

EMERGING CAREER HORIZONS

Unit	Chapter	Topics
5	Therapeutic Approaches	<ul style="list-style-type: none"> • Goals, techniques, and approaches to treating psychological disorders. • Nature and process of therapy: Therapeutic relationship. • Types of therapies: Psychodynamic, Humanistic, Cognitive, Behavioural and Bio-medical. • Alternative therapies — Yoga, Meditation; Rehabilitation of the mentally ill.
6	Attitude and Social Cognition	<ul style="list-style-type: none"> • Formation and change of attitudes. • Behaviour in the presence of others. • Explaining social behaviour. • Attitude formation and change. • Prejudice and discrimination. • Impression formation and explaining behaviour of others through attributions; • Social cognition. • Strategies for handling prejudice. • Schemas and stereotypes. • Nature and components of attitudes. • Pro-social behaviour.
7	Social Influence and Group Processes	<ul style="list-style-type: none"> • Concept of the group, its functions. • Cooperation and Competition. • Nature and formation of groups; • Types of groups; • Social identity; • Influence of the group on individual behaviour; • Intergroup conflicts; • Conflict resolution strategies.
8	Psychology and Life	<ul style="list-style-type: none"> • Application of psychological understanding. • Human-environment relationship. • Environmental effects on human behaviour: Noise, pollution, crowding, natural disasters. • Promoting pro-environmental behaviour. • Psychology and social concerns.
9	Developing Psychological Skills	<ul style="list-style-type: none"> • Effective psychological and interpersonal skills

GATE Syllabus (FOR ADMISSION IN IIT's) : For admission in Masters psychology/ Research, PH.D

GATE for Recruitment

The GATE score is used by some public sectors and other government agencies like DRDO/ISRO/BARC for (Scientist 'B') recruitment purposes. Qualifying in the GATE exam tremendously increases one's chances of getting a job in the private sector as well.

General Aptitude Paper A (15 Marks) **Verbal Aptitude Basic English grammar:** Tenses, Articles, Adjectives, Prepositions, Conjunctions, Verb-Noun Agreement, and other Parts of Speech. Basic vocabulary- Words, Idioms, and Phrases, In context Reading and Comprehension, Narrative Sequencing, Quantitative Aptitude.

Data interpretation: Data Graphs (bar graphs, pie charts, and other graphs representing data), 2- and 3-Dimensional Plots, Maps, and Tables Numerical Computation and Estimation- Ratios, Percentages, Powers, Exponents and Logarithms, Permutations and Combinations, and Series Mensuration and Geometry, Elementary Statistics and Probability, Analytical Aptitude.

Logic: Deduction and Induction, Analogy, Numerical Relations and Reasoning, Spatial Aptitude, Transformation of Shapes- Translation, Rotation, Scaling, Mirroring, Assembling, and Grouping, Paper Folding, Cutting and Patterns in 2 and 3 Dimensions; Section B1 – Reasoning and Comprehension (Compulsory) & Section C (C5 - Psychology).

RCI SYLLABUS - Entire curriculum of Psychology till Masters.

FREQUENCY OF EXAM

CUET / university entrances (for bachelors degree) - Once a year

RCI M.Phil Psychology – Once a year from each RCI institution Independently

NET – For Professorship Twice a Year (June and December)

P.G. Diploma Guidance and Counseling –No entrance exam. Can be completed in online and offline mode depending on the institution. Eligibility Criteria of the university needs to be fulfilled.

EXAM DURATION : RCI M.Phil - 60 Mins

GATE – 180 Mins (3 Hours)

MODE OF REGISTRATION : Online

DEADLINE FOR REGISTRATION : CUET - APRIL

GATE- SEPT OCTOBER

UGC NET- SEPT_ OCTOBER and JANUARY- FEBRUARY

OFFICIAL WEBSITE : CUET- <https://cuet.samarth.ac.in/>

GATE- <https://gate2024.iisc.ac.in/>

UGC NET- <https://ugcnet.nta.nic.in/>

SCOPE

- **Psychological Research Centres** – These centres hire Psychologists to conduct research on different aspects of mental health issues.
- **Forensics** – Psychologists are required in the Forensic field to get an insight into the basic psychology that is involved with the criminals.
- **Education Sector** – Psychologists are also required in the education sector to counsel students and teachers from time to time.
- **Rehabilitation Centres** - They hire Psychologists to cater to the needs of the people who require mental help from experts.
- **Development of Prevention Programmes** – This industry hires Psychologists to conduct deep research on different issues and provide comprehensive solutions for the same.
- Hospitals,
- Private Clinics,
- Government Institutions,
- Indian Military,
- Sports authority

EMERGING CAREER HORIZONS

SALARY : 6- 10 lakh per annum.

SOURCES/WEBSITES FOR SAMPLE QUESTION PAPERS AND STUDY MATERIALS

CUET- <https://cuet.samarth.ac.in/>

GATE- <https://gate2024.iisc.ac.in/>

UGC NET- <https://ugcnet.nta.nic.in/>

<https://www.upseducation.in/> (For checking more details)

REFERENCE BOOKS

Introduction to Psychology (8th-10th Edition): Rita Atkinson and Hilgard

Social Psychology: Baron Robert

Theories of Personality: Hall, Lindzey, and Campbell

Human Development: Papalia and Sally Olds

BioPsychology: James W. Kalat. BioPsychology, Key-Points written by Dr. Arvind Otta is also very useful Book for M.Phil. Clinical Psychology Entrance Examinations.

Cognitive Psychology: Robinson-Riegler

Statistics: Quinn McNemar / Minium

Research Method: James Goodwin / Lewin & Fox / A. K. Singh

Psychological Testing: Ronald Jay Cohen and Mark E. Swerdlik

Abnormal Psychology: Sarason and Sarason / R. Comer

Clinical Psychology: Alan Carr / Hecker and Geoffrey

Latest Advancement: Follow Psychology Journal or Magazine. You also refer to Psychologists Magazine published by Utsaah Psychological Services Pvt. Ltd.

Studying Manual can also be important so go with anyone, choose DSM or ICD. It is recommended to study DSM-5

TOP UNIVERSITIES

- Central Universities
- Delhi University
- Jamia Millia Islamia University
- Benaras Hindu University
- Christ University
- Amity University
- Fergusson College
- Chandigarh University
- Harvard University
- Stanford University
- Yale University
- IIT's
- NFSU

TOP PLACEMENT COMPANIES

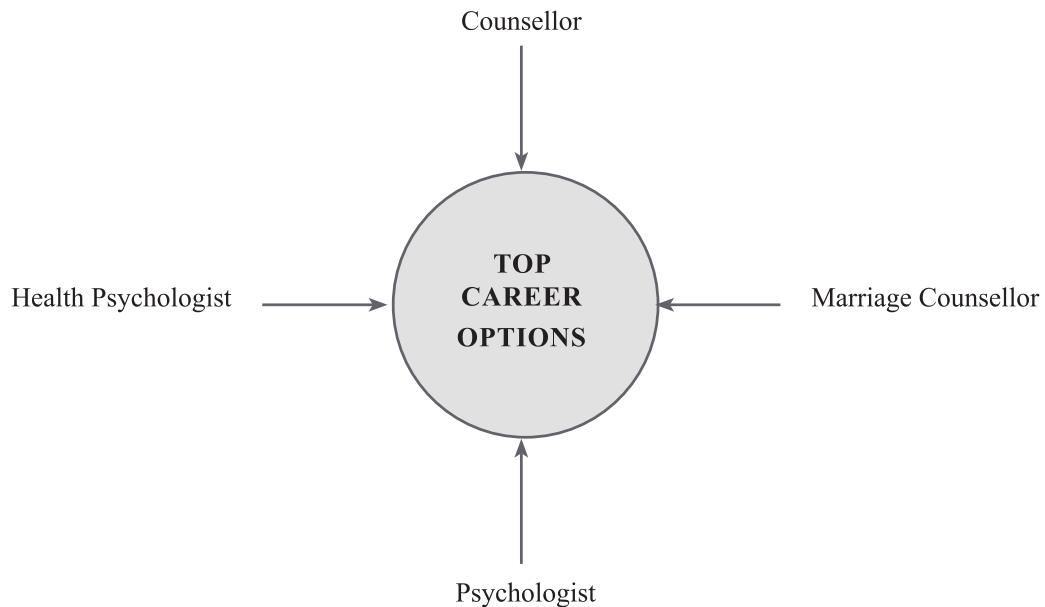
- TCS.
- AIIMS, Navodaya Vidyalaya.
- EMRS
- Accenture.
- Deloitte.
- Google.
- Microsoft.
- Mannah Wellness.
- Kokilaben Dhirubhai Ambani Hospital.
- Fortis Hospital.
- CSIR.
- Defence Research Development Organisation (DRDO).
- Private Hospitals.

Max Hospital

Apart from these recruiters several **Indian colleges and schools** also recruit psychologists from time to time on permanent or temporary basis.

RCI Approved M.Phil Clinical Psychology Institutes and Universities

- National Institute of Mental Health and Neurosciences (NIMHANS),
- Lokopriya Gopinath Bordoli Regional Institute of Mental Health (LGBRIMH)
- Government Medical College & Hospital, Department of Psychiatry,
- Dharwad Institute of Mental Health & Neurosciences (D.I.M.H.A.N.S.),
- Amity Institute of Behavioural & Allied Sciences, Amity University
- Regional Institute of Medical Sciences, (RIMS), Lamphelpat,
- King George's Medical University,
- Dr. Ram Manohar Lohia University, Delhi (PGIMER)
- Central Institute of Psychiatry (CIP), Ranchi
- Ranchi Institute of Neuropsychiatry and Allied Sciences (RINPAS), Ranchi
- Institute of Human Behaviour and Allied Sciences (IHBAS)





INSTITUTE OF BANKING PERSONNEL SELECTION (IBPS)

The **Institute of Banking Personnel Selection**, popularly known as **IBPS** is an autonomous body that conducts recruitment examinations for all Public Sector Banks (PSBs) except SBI. Over the years, the institute has provided services related to assessment and testing for different banks through various exams. The institute was constituted in 1984 and is governed by a board of nominees from different government bodies and banks such as **RBI, Ministry of Finance, NIBM, IBA, etc.** In the same year, the centralised examinations covering all public sector banks started on a limited scale. The process of conducting the exams online started in late 2000. **IBPS exams are conducted to recruit employees for PSBs at various levels**, such as Probationary Officers, Clerks, and Specialist Officers.

HIGHLIGHTS OF IBPS EXAMS

The important highlights of the various IBPS exams are summarised in the table below.

Details	Overall IBPS Exam Highlights
Conducting Body	Institute of Banking Personnel Selection
Exams Level	National
Exams Purpose	Selection of candidates as PO, Clerk and SO for Public Sector Banks and Regional Rural Banks
Exams Frequency	Once a year
Exams Language	English and Hindi
Official Website	ibps.in

Details	IBPS PO
Post name	Probationary Officer/Management Trainee
Number of vacancies	6432 (Announced in 2022)
Recruitment stages	Preliminary exam, Mains exam, and interview
Exam Mode	Preliminary and Mains exam is conducted online

Details	IBPS PO
Exam Duration	Prelims: One hour (60 minutes) Mains: 3 hours 30 minutes

Details	IBPS RRB
Post names	Officers Scale I, II & III and Office Assistant (Multipurpose)
Number of vacancies	9075
Recruitment stages	Officers Scale I: Prelims, Mains, and Interview Officers Scale II and III: Single level exam and Interview Office Assistant (Multipurpose): Prelims and mains
Exam Mode	Prelims, Mains, and Single level exams are conducted online
Exam Duration	Prelims: 45 minutes Mains: Two hours Single level exam: Two hours

Details	IBPS SO
Post names	IT Officer (Scale-I), Agricultural Field Officer (Scale I), Rajbhasha Adhikari (Scale I), Law Officer (Scale I), HR/Personnel Officer (Scale I), and Marketing Officer (Scale I).
Number of vacancies	1828
Recruitment stages	Prelims, Mains, and Personal Interview
Exam Mode	Online
Exam Duration	Prelims: 120 minutes Mains: 120 minutes

IBPS ELIGIBILITY CRITERIA

The eligibility criteria for various exams are given below.

Exams	Eligibility
IBPS PO eligibility criteria	Educational Qualification: Graduation in any discipline Age Limit: 20 to 30 years
IBPS RRB eligibility criteria	Educational Qualification: Candidates must hold a degree in any discipline from a recognised university. Age Limit: 18 to 40 years (Vary as per the posts)
IBPS SO eligibility criteria	Age Limit: 20 to 30 years Educational Qualification: Graduation (Vary as per posts)

IBPS RECRUITMENT PROCESS

The complete recruitment process of IBPS is explained below.

Step 1: IBPS Registration

This is the first stage of the recruitment process. Candidates who fulfil the eligibility criteria are required to register online with IBPS for its various exams. Candidates can click the links below to know the application process for various IBPS exams.

EMERGING CAREER HORIZONS

Step 2: IBPS Admit Card

IBPS issues admit cards online separately for different posts and stages of the exam. **Candidates can access the admit card from the official website by logging in with their registration number or roll number and date of birth or password.**

Step 3: IBPS Exam

Candidates need to appear in the IBPS exam as per the details mentioned in the admit card. The exam is conducted across various cities spread throughout the country in multiple shifts. **IBPS PO exam is conducted in three stages: Prelims, Mains and Interview.** IBPS RRB exam is held in three stages: Prelims, Mains and Single online exam, Interview. IBPS SO is conducted in three stages: Prelims, Mains, and Personal Interview. IBPS Clerk is conducted in two stages: Prelims and Mains exam.

Step 4: Result

The result is announced online on the official website. IBPS result is announced separately for different posts and stages. The result can be accessed by logging in with the required credentials. **Candidates qualifying for the Prelims exam are selected for the Mains exam.** Candidates who qualify for the mains exam are called for interview (specific to the posts).

IBPS SYLLABUS

IBPS syllabus is more or else the same for all the exams. **However, the pattern of questions as well as the difficulty level differs from exam to exam.** IBPS syllabi for prelims and mains exam are given below.

IBPS PRELIMS SYLLABUS

English Language	Quantitative Ability	Reasoning
Reading Comprehension	Simplification	Logical Reasoning
Cloze Test	Profit & Loss	Alphanumeric Series
Para jumbles	Mixtures & Allegations	Ranking/Direction/Alphabet Test
Miscellaneous	Simple Interest & Compound Interest & Surds & Indices	Data Sufficiency
Fill in the blanks	Work & Time	Coded Inequalities
Multiple Meaning/Error Spotting	Time & Distance	Seating Arrangement
Paragraph Completion	Mensuration – Cylinder, Cone, Sphere	Puzzle
-	Data Interpretation	Tabulation
-	Ratio & Proportion, Percentage	Syllogism
-	Number Systems	Blood Relations
-	Sequence & Series	Input-Output
-	Permutation, Combination & Probability	Coding-Decoding

IBPS MAINS SYLLABUS

Data Interpretation and Analysis	
Simplification	Average
Percentage	Ratio and Percentage
Data Interpretation	Mensuration and Geometry

Data Interpretation and Analysis	
Quadratic Equation	Interest
Problems of Ages	Profit and Loss
Number Series	Speed, Distance and Time
Speed, Distance and Time	Time and Work
Number System	Data Sufficiency
Linear Equation	Permutation and Combination
Probability	Mixture and Allegations

General Awareness: Questions are asked from Financial Awareness, Current Affairs and General Knowledge

Reasoning & Computer Aptitude	
Verbal Reasoning	Internet
Syllogism	Memory
Circular Seating Arrangement	Keyboard Shortcuts
Linear Seating Arrangement	Computer Abbreviation
Double Lineup	Microsoft Office
Scheduling	Computer Hardware
Input-Output	Computer Software
Blood Relations	Operating System
Directions and Distances	Networking
Ordering and Ranking	Computer Fundamentals /Terminologies
Data Sufficiency	-
Coding and Decoding	-
Code Inequalities	-

English Language: Questions are asked from Reading Comprehension, Vocabulary, Grammar, Verbal Ability and Fill in the blanks.

IBPS PO EXAM PATTERN

IBPS PO Prelims Exam Pattern consists of three sections. The paper will have 100 objective-type multiple-choice questions. Questions in the exam are asked from Quantitative Aptitude, Reasoning Ability, and English Language. The total time allotted to candidates to solve questions in IBPS PO Prelims Exam is 60 minutes. Candidates will get 20 minutes to attempt each section. The Mains Exam consists of both Objective and Descriptive Type Tests. The Objective Test is divided into four sections-Reasoning & Computer Aptitude, General/ Economy/ Banking Awareness, English Language, and Data Analysis & Interpretation. The descriptive section carries questions from English Language (Letter Writing and Essay). **The total marks of the Mains Exam are 225.** The interview carries 100 marks.

IBPS SO EXAM PATTERN

IBPS SO Prelims Exam pattern for Law Officer and Rajbhasha Adhikari comprises objective-type questions based on subjects such as English Language, Reasoning and General Awareness with Special Reference to Banking Industry. The Prelims question paper for the post of IT Officer, Agriculture Field Officer, HR/Personnel Officer, and Marketing Officer comprises subjects such as English Language, Reasoning, and Quantitative

EMERGING CAREER HORIZONS

Aptitude. **The total marks allotted to the prelims exam are 150.** The Mains Exam pattern for the post of Law Officer, IT Officer, Agriculture Field Officer, HR/Personnel Officer, and Marketing Officer is such that it comprises questions from professional knowledge. **IBPS SO Mains Question Paper for the post of Rajbhasha Adhikari comprises Objective and Descriptive-Type Questions from professional knowledge.**

IBPS RRB EXAM PATTERN

IBPS RRB exam pattern is different for **Officers Scale I, II, III and Office Assistant.** The Prelims Exam is common for Officers Scale I and Office Assistant where candidates are asked questions based on Reasoning Ability and Numerical Ability. The Mains Exam comprises questions from Reasoning Ability, Numerical Ability, General Awareness, English/Hindi Language and Computer Knowledge. Candidates appearing for the post of SO are required to appear for Professional Knowledge Section along with other subjects.

IBPS SALARY

The post-wise salaries of IBPS Clerk, PO, SO, Office Assistant, Officers Scale I are given below.

Exam	IBPS Salary
IBPS PO	The basic salary is INR 36,000*
IBPS SO	The basic pay of candidates is INR 23,700* for Scale I
IBPS RRB PO	INR 51,000 to 58,000*

* (as per seventh pay commission)

LIST OF BANKS UNDER IBPS SELECTION PANEL

- Indian Overseas Bank
- UCO Bank
- Bank of Maharashtra
- Punjab and Sind Bank
- Punjab National Bank
- Canara Bank
- Union Bank of India
- Indian Bank
- Bank of India
- Bank of Baroda
- Central Bank of India



COMMON ADMISSION TEST (CAT)

Common Admission Test or CAT is a national level management aptitude test which is conducted by the IIM for admission to the MBA courses offered by its 20 campuses and over 1,200 B-schools in India. Those planning to pursue MBA must appear for CAT exam as it is an exam which is accepted by most of the government as well as private MBA colleges in India.

Apart from MBA programmes, the CAT score is valid for admission to Executive MBA, Ph.D. and FPM programmes of IIMs and other B-Schools.

CAT Exam Highlights

CAT Exam Particulars	CAT Details
CAT Full Form	Common Admission Test (CAT)
Conducting Institute	IIM
Exam Level	National
CAT Entrance Exam Frequency	Once a year
CAT Exam Date	Last week of November
CAT Exam Timings	<ul style="list-style-type: none"> Session 1: 8:30 AM to 10:30 AM Session 2: 12:30 PM to 2:30 PM Session 3: 4:30 PM to 6:30 PM
CAT Exam Fees	INR 2,400 (General category) and INR 1,200 (Reserved category)
Eligibility Criteria	Graduation with 50% aggregate (45% for SC/ST students)
Number of Applications	3.30 lakh (in 2023)
Number of Test Takers	2.22 lakh (in 2022)
Exam Purpose	Admission to IIMs, SPJIMR, FMS, MDI, IMT and over 1,200 B-Schools in India
Courses Offered	MBA/PGDM

EMERGING CAREER HORIZONS

Cat Syllabus	<ul style="list-style-type: none"> • Verbal Ability & Reading Comprehension (VARC) • Data Interpretation & Logical Reasoning (DILR) • Quantitative Ability (QA)
Cat Exam Mode	Computer Based Test (CBT) with MCQs and non-MCQs
No. of Test Cities	150
Cat Exam Website	https://iimcat.ac.in
Exam Helpdesk No.	1-800-210-1088 (Toll Free)

CAT Exam Pattern & Test Structure

CAT question paper is divided into three sections: Verbal Ability and Reading Comprehension, Data Interpretation and Logical Reasoning and Quantitative Aptitude. Candidates are required to solve both MCQ and Non-MCQ type questions. The **CAT questions paper** is usually of moderate to high difficulty level with Reading Comprehension and Quantitative Aptitude posing more challenges in terms of difficulty level.

CAT Paper Pattern	
Mode of CAT Exam	Computer Based Test
Duration of Exam	<ul style="list-style-type: none"> • 120 minutes • 40 minutes per section
CAT Exam Slots	<ul style="list-style-type: none"> • Morning: 8:30 AM to 10:30 AM • Afternoon: 12:30 PM to 2:30 PM • Evening: 4:30 PM to 6:30 PM
Number of Questions	66
CAT Total Marks	198
Language of Question Paper	English
Number of Answer Choices	4
Question Type	MCQ and non-MCQ

CAT Syllabus

CAT Syllabus sections	CAT Syllabus topics
Verbal Ability & Reading Comprehension (VARC)	Reading Comprehension, Para Jumbles, Para Summary and Odd Sentence Out
Data Interpretation & Logical Reasoning (DILR)	Set Theory (Variables), Set Theory + Puzzles, Puzzles with Additional Data, Coding-Decoding and Series
Quantitative Aptitude (QA)	Number System, Algebra, Arithmetic, Geometry and Mensuration

MBA Admission Through CAT Exam Score

IIM selection process and admission includes shortlisting of candidates on the basis of CAT score and Written Ability Test (WAT) /Group Discussion (GD) /Personal Interview (PI). Each IIM fixes minimum CAT cut off percentile to shortlist candidates for participation in the next round of admission process. Given below is an overview of selection process of IIMs and non-IIMs:

IIM Admission Process

The IIMs release admission criteria and selection process for PGP/MBA prior to the CAT result declaration. The documents contain cutoffs, parameters, process, etc. for MBA admission. Selection procedure through CAT for all the IIMs includes the following:

- Screening of candidates on the basis of their CAT score
- Written Ability Test/Group Discussion/Personal Interview (WAT/GD/PI)
- Computation of Composite Score followed by final selection

Non-IIM Admission Process Through CAT:

Institutes accepting CAT score other than IIMs also conduct GD/PI for admission to their MBA/PGDM programmes. However, there are a few colleges that do not conduct personality assessment round and admit students based on CAT score only.

List of IIMs for MBA/PGP Courses

CAT scores are accepted by 20 IIMs and over 1,200 B-schools across the country. You can visit the links in the below table to know the cut offs, placements, fees, rankings and selection process of each IIM:

List of IIMs Accepting CAT Score

- | | | | |
|-----------------|----------------|-----------------------|-----------------|
| • IIM Calcutta | • IIM Indore | • IIM Udaipur | • IIM Bodh Gaya |
| • IIM Ahmedabad | • IIM Shillong | • IIM Nagpur | • IIM Amritsar |
| • IIM Bangalore | • IIM Rohtak | • IIM Tiruchirappalli | • IIM Sambalpur |
| • IIM Lucknow | • IIM Ranchi | • IIM Kashipur | • IIM Sirmaur |
| • IIM Kozhikode | • IIM Raipur | • IIM Visakhapatnam | • IIM Jammu |

IIM Fees for MBA – Campus Wise

Below is the list of MBA/PGP programme fees of each IIM. The amount mentioned here is course fee of PGP/MBA (two years) that is paid semester wise in instalments.

IIM campus	PGP/MBA seats	*MBA/PGP fees
IIM Ahmedabad	385	INR 24.61 lakh
IIM Bangalore	430	INR 24.50 lakh
IIM Calcutta	210	INR 27.00 Lakh
IIM Lucknow	436	INR 20.70 lakh
IIM Kozhikode	375	INR 20.50 lakh
IIM Raipur	210	INR 16.10 lakh (excluding boarding fees)
IIM Udaipur	260	INR 19.00 lakh
IIM Rohtak	240	INR 17.60 lakh
IIM Visakhapatnam	60	INR 17.58 lakh
IIM Trichy	180	INR 21.00 lakh
IIM Sambalpur	120	INR 13.08 lakh
IIM Ranchi	240	INR 17.50 lakh
IIM Bodhgaya	120	INR 15.50 lakh
IIM Sirmaur	60	INR 15.75 lakh (including fees for international immersion programme)

EMERGING CAREER HORIZONS

IIM campus	PGP/MBA seats	*MBA/PGP fees
IIM Jammu	120	INR 17.15 lakh
IIM Amritsar	60	INR 16.00 lakh
IIM Shillong	120	INR 17.50 lakh
IIM Kashipur	210	INR 17.30 lakh
IIM Nagpur	130	INR 18.00 lakh
IIM Indore	451	INR 21.14 lakh

*The fee amounts mentioned in the table above have been rounded off to the nearest lakh. The fees may increase in the new academic session.

Top Colleges Accepting CAT Exam Score

Given below is the list of **top MBA colleges in India accepting CAT score**. The list also includes IITs offering MBA programme through their Department of Management Studies. For the academic session 2024-26, the IIFT will also be accepting CAT score for MBA admission.

Top Non-IIMs Accepting CAT Score

- IIFT Delhi
- SPJIMR, Mumbai
- FMS, Delhi University
- IMT, Ghaziabad
- MDI, Gurgaon
- IMI, Delhi
- IIT Kanpur-IME
- IIT Bombay-SJMSOM
- IIT Delhi - DoMs
- IIT Roorkee-DoMs
- IIT Madras-DoMs
- IIT Dhanbad-ISM
- IIT Kharagpur-VGoSM
- IMT-Nagpur
- Great Lakes Institute of Management
- IPE-Hyderabad
- IMI-Kolkata
- Institute of Management, Nirma University
- ITM-University
- Goa Institute of Management (GIM), Goa
- IIITM-Gwalior
- New Delhi Institute of Management
- Woxsen University, Hyderabad
- KIIT KSOM

CAT Eligibility Criteria

The minimum eligibility criteria to appear in CAT exam is graduation in any stream. Given below are the detailed CAT eligibility criteria:

- Candidates must possess a bachelor's degree with minimum 50 per cent aggregate or equivalent CGPA (45 per cent aggregate for SC, ST and PWD/DA category) from a recognised university to appear in CAT.
- The education mode of the bachelor's degree can be regular or distance learning, but should be a 3-year programme.
- Candidates who have completed a professional degree (CA/CS/ICWA/FCAI) with the required percentage can also appear for CAT.
- Candidates appearing for the final year of bachelor's degree/equivalent qualification or awaiting the result are also eligible to appear for CAT exam.

Website Reference:

<https://iimcat.ac.in>



XAVIER APTITUDE TEST (XAT)

Xavier Aptitude Test or XAT is a national-level management entrance examination conducted by XLRI, Jamshedpur for admission to MBA/PGDM programmes. Apart from XLRI and 10 other XAMI member colleges, over 1,000 B-schools accept XAT scores for admission to their post-graduate management programmes. The XAT question paper consists of 100 Multiple Choice Questions (MCQs) from Decision Making, Verbal & Logical Ability, Quantitative Ability & Data Interpretation and General Knowledge. XAT cut offs for XLRI's PGDM-BM programme are usually around 95 percentile for male candidates and 92 percentile for female candidates.

XAT Eligibility Criteria

It is mandatory to fulfill the XAT eligibility criteria to be able to appear for the test. Given below are the **latest XAT eligibility criteria** and academic requirements:

- Candidates must hold a bachelor's degree of minimum three years duration or equivalent in any discipline from a recognised university.
- Students in their final year of bachelor's degree or awaiting their results are also eligible to appear for XAT.
- There is no minimum marks requirement in graduation criteria for XAT exam. Candidate should have passing marks in their bachelor's degree programme.
- Working professionals and candidates with professional degrees (CA/CS) can also appear in the exam.

XLRI Selection Process Through XAT

XLRI, Jamshedpur admission through XAT includes three stages: **shortlisting of candidates, group discussion & personal interview and final selection.**

Step 1: Shortlisting of candidates

After the exam, candidates will be shortlisted for group discussion and personal interview round of XLRI, Jamshedpur on the basis of their XAT result.

EMERGING CAREER HORIZONS

Step 2: Group Discussion and Personal Interview

XLRI, Jamshedpur will announce group discussion and personal interview schedule by the end of January 2024 for selected candidates. The admission round will be held in various cities and the candidates will have to confirm their interview city online on the official website of XLRI Jamshedpur within the stipulated time limit.

Step 3: Final Selection

Each candidate will be evaluated on the basis of their XAT 2024 score, GD/PI performance, academic history and other parameters for preparing the final merit list. Selected candidates will be called to complete the admission formalities.

Selection procedure of other institutes accepting XAT scores

Institutes accepting XAT score for admission to their MBA/PGDM programmes, conduct their own application and admission process. While some institutes open their registration window much before the XAT exam is conducted, others start their registration process after the XAT result is announced

XAT SYLLABUS

XAT syllabus consists of all the important topics of Verbal & Logical Ability, Quantitative Ability & Data Interpretation and General Knowledge. **Decision Making** is a unique section for which there is no syllabus so you can refer to previous years' question papers and sample test papers for preparation. Check below some key points about **XAT syllabus**:

- XAT Decision Making section will present scenarios drawn from both personal and professional lives. Candidates will be required to apply critical thinking, problem solving skills, and prioritization to make informed decisions
- XAT Verbal & Logical Ability includes Critical and Analytical Reasoning, Reading Comprehension, English Grammar, Vocabulary, Parajumbles, Cloze Test, etc.
- In the XAT Quantitative Ability & Data Interpretation section, the topics include Arithmetic, Algebra, Geometry, Modern Math, etc.
- And in the GK section of XAT exam, the topics pertain to politics, culture, society, personalities, business, art & entertainment, sports, inventions, innovation, world, economy, science, technology, books, etc.
- Analytical Essay Writing (AEW) will have 3 topics and candidates will have to write an essay of 250 words on one of them.

AT EXAM PATTERN AND TEST STRUCTURE

XAT exam is conducted in online mode and the question paper consists of 100 MCQs to be solved in 210 minutes. There is sectional time-limit in XAT exam. Thus, candidates are advised to maintain adequate speed in all four sections so that they can solve the paper within the time-limit. Each correct attempt carries one mark and each incorrect attempt carries -0.25 marks. Here are the highlights of XAT exam pattern:

XAT Sections	Number of Questions	Total Marks
Decision Making	22	22
Verbal and Logical Ability	26	26
Quantitative Ability & Data Interpretation	28	28
General Knowledge	25	25 (To be evaluated for shortlisting)
Analytical Essay Writing	1	(To be evaluated for shortlisting)

TOP COLLEGES ACCEPTING XAT SCORES

Apart from **XLRI, Jamshedpur**, XAT score is accepted by 11 members of Xavier Association of Management Institutes (XAMI) and over 1,000+ other MBA institutes in India. The admission process of these colleges also include GD/PI. Given below is the table of some of the popular **B-Schools that accept XAT score for admission**:

XAT Score Accepting College	
XLRI Xavier School of Management	Loyola Institute of Business Administration
St. Joseph's Institute of Management	St. Aloysius Institute of Management and Information Technology
Xavier Institute of Management, Xavier University	Xavier Institute of Management & Entrepreneurship
Xavier Institute of Development Action and Sciences (XIDAS)	Xavier Institute of Social Service
BIMTECH Greater Noida	K J Somaiya Institute of Management
FLAME University: School of Business	FORE School of Management, New Delhi
Institute of Rural Management Anand	Goa Institute of Management
St. Francis Institute of Management and Research (SFIMAR)	MICA Ahmedabad
Xavier Business School (XBS), St.Xavier's University, Kolkata	Institute of Management Technology (Ghaziabad)
Xavier Institute of Management & Research	Woxsen University
BITS Pilani	Great Lakes Institute of Management
New Delhi Institute of Management	

OFFICIAL WEBSITE: <https://xatonline.in/>

REGISTRATION FEES: INR 2100

REGISTRATION DATE: July to December.

EXAM DATE: First week of January.



MANAGEMENT APTITUDE TEST (MAT)

Management Aptitude Test or MAT is a national-level entrance exam conducted by the **All India Management Association (AIMA)** for admissions to MBA/PGDM courses at **800+ B-schools in India**. The exam is conducted in multiple sessions in four phases – February, May, September and December.

MAT exam is conducted in offline (**Paper Based Test or PBT**), online (**Computer Based Test or CBT**) and remote proctored (**Internet Based Test or IBT**) modes. MAT fees, exam pattern and syllabus for all three modes are same but admit card and exam dates are different. Candidates can take multiple attempts in any mode of their choice. However, they have to register for each session separately. The score of the last MAT test will be taken into consideration for admission.

MAT ELIGIBILITY CRITERIA

For appearing in the MAT exam 2024, aspirants have to fulfill certain academic requirements fixed by the examination agency. Given below are the **eligibility criteria for MAT exam**:

- Candidates should have completed graduation or equivalent degree from a recognised university.
- Final year graduation students awaiting their results are also eligible to apply for MAT.
- There is no minimum score requirement for MAT. Candidates with passing marks can appear for the exam.
- Candidates who have completed a professional degree such as CA, CS or ICWA are also eligible to apply for the MAT exam.

MAT REGISTRATION PROCESS

The MAT application process is same for all the three exam modes - PBT, CBT and IBT. Candidates can apply for their preferred exam mode and session at the AIMA website. Check below the **process to apply for MAT exam**:

- Open AIMA-MAT website in a new browser: <https://mat.aima.in/>
- Enter name, date of birth, email ID, mobile phone number, state, city, test mode and a password
- Click on ‘register’ to create a login account
- In the next page, select preferred test mode (CBT, PBT, IBT) test cities and five B-Schools
- Make fee payment of INR 2,100 via debit/credit card, net banking or e-wallet

- Fill the **MAT exam application form** with relevant information
- Upload a recent passport size photo and scanned signature
- Fill the remaining fields and click on submit
- An acknowledgement will be shared in email

MAT EXAM PATTERN

MAT exam pattern is same for all the three modes. The exam duration is also same. Candidates must take a look at the below table for MAT exam pattern highlights:

MAT Exam Features	Details
Exam Modes	CBT, PBT, IBT
Exam Duration	150 minutes
MAT Sections	<ul style="list-style-type: none"> • Language Comprehension • Data Analysis & Sufficiency • Mathematical Skills • Intelligence & Critical Reasoning • Indian & Global Environment
Number of Questions	200
Number of Questions Section-wise	40
Total Marks	200
Marking Scheme	+1 for each correct entry -0.25 for each incorrect entry 0 for not attempting a question

MAT SYLLABUS

MAT syllabus is similar to other MBA entrance exams. It contains English, Data Interpretation, Quantitative Ability, Logical Reasoning and Current Affairs. Take a look at the table below for the topics that are included in MAT syllabus:

MAT Sections	MAT Exam Syllabus
Language Comprehension	Reading Comprehension, Parajumbles, Fill in the blanks, One Word Substitution, Sentence Correction, Verbal Ability, Antonym & Synonyms, Idioms & Phrases, etc.
Data Analysis & Sufficiency	Tables, Charts, Pie Charts, Bar Diagrams, Caselet-based Data, Venn Diagram, Graphs, Data Comparison, Data Sufficiency, etc.
Mathematical Skills	Algebra, Geometry, Trigonometry, Mensuration, Number System, Percentage, LCM & HCF, Inequalities, Set Theory, etc.
Intelligence & Critical Reasoning	Blood Relation, Family Tree, Coding & Decoding, Numeric Grid, Syllogism, Clocks, Calendars, Visual Reasoning, etc.
Indian and Global Environment	Static GK, Science, Technology, Business, Sports, World News, Events, Politics, Awards & Recognition, Art, Geography, History, etc.

EMERGING CAREER HORIZONS

Top MBA Colleges Accepting MAT Score for Admission

MAT is one of the most popular exam for admission to Tier 2 and Tier 3 B-Schools. MAT scores are accepted by over 800 MBA colleges in India. Given below is the list of colleges accepting MAT score for admission to MBA/PGDM programmes. If planning to appear for MAT, do keep in mind the following colleges for admission.

Top MAT Colleges	
Amity University	ABBS School of Management
Dr DY Patil B School, Pune	EIILM
ITM University	Unitedworld School of Business
GL Bajaj Institute of Management & Research	IILM University
OP Jindal Global University	SRM University
Christ University	Alliance University
GITAM Institute of Management	Jain University
JIMS Rohini	Taxila Business School, Jaipur
New Delhi Institute of Management	

OFFICIAL WEBSITE: mat.aima.in

REGISTRATION FEES: INR 2100

REGISTRATION DATE: Last week of February To First Week of December.

EXAM DATE: Four times in a year in February, May, September and December.



GRADUATE RECORD EXAMINATION (GRE)

The Graduate Record Exam (GRE), Conducted by ETS, is a multiple-choice, computer-based, standardised exam that is an important admission requirement to graduate schools or business schools globally. The GRE Test is one of the most popular graduate admission tests for candidates looking to pursue MS Studies or Graduate (MBA) studies abroad.

Types of GRE Exam

There are two types of GRE tests, the GRE General Test and the GRE Subject Test.

- GRE General Test
- GRE Subject Test

What is the GRE General Test?

Created and administered by ETS, the GRE General Test is a standardized test to measure the **overall academic readiness of a candidate** wanting to attend graduate school. Through the GRE General Test, a candidate is evaluated on his analytical writing, quantitative ability, and verbal reasoning skills. The GRE Exam is conducted around the year, and candidates can appear for the GRE General Test at/her convenience. Students seeking admission to MS courses and a select few MBA courses or professional courses at the graduate level are required to appear for the GRE General Test. A growing number of students opt for the GRE test as the majority of universities across the world have started accepting GRE scores. The GRE General Test is available in three formats:

- **GRE Computer-Based Test** is the GRE General Test taken on a computer at a GRE-designated test centre. Candidates should note that GRE Computer Based Tests are available in all countries that have access to the Internet and computer technology. This online form of the GRE test is the most widely used mode of appearing for the GRE General Test.
- **GRE Paper Based Test** is the GRE test that is taken offline in destinations that have limited access to the Internet or computers. The GRE Paper Based Test is the GRE exam taken on pen and paper. In India, candidates are required to opt for the GRE Computer-Based Test. **There is no GRE Paper-Based test in India.**

EMERGING CAREER HORIZONS

- **GRE at Home Test:** Most recently launched, the GRE at Home is the GRE General Test that can be taken in the safety of the candidates' homes. Launched during the pandemic, the GRE at Home is built on keeping student safety paramount and the GRE test has been designed to be conducted from Home as long as the candidate can meet the system requirements pre-determined by ETS and have a conducive environment during the entire duration of the GRE at Home Test.

What is GRE Subject Test?

The GRE Subject Test evaluates the candidates' ability in a particular subject. Candidates should note that the GRE Subject Tests only extend to Chemistry, Mathematics, Physics and Psychology. Scores on these tests will continue to be reportable for five years per the GRE score policy.

Generally, the GRE Subject Test is required for getting admission to specialized courses/technical programmes. The GRE Subject test is primarily held three times a year and is a paper-delivered test. The GRE Subject Test is held in September, October and April. The total duration of the GRE Subject test is 2Hrs and 50 minutes and candidates are required to appear for only one of the subjects from the list mentioned below:

- Chemistry
- Mathematics
- Physics
- Psychology

ETS GRE Exam Pattern:

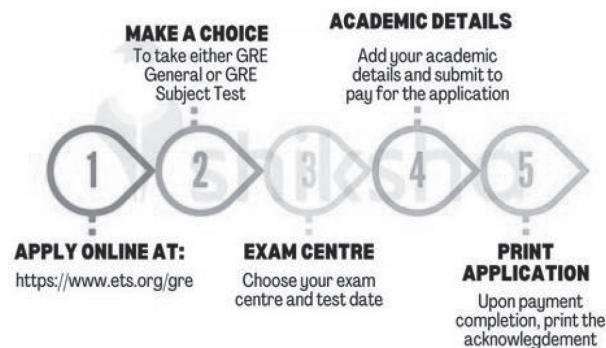
Factors	GRE Exam Pattern
GRE Analytical Writing	1 section, 2 essay tasks 60 minutes
GRE Quantitative Reasoning	2 sections, 40 questions total 70 minutes
GRE Verbal Reasoning	2 sections, 40 questions total 60 minutes
Unscored Section	Varies
Research	Varies
Total GRE Duration	3 hours 45 minutes

How to apply for GRE online?

Candidates are required to follow the below-mentioned steps to register for GRE via the online method.

- Candidates need to create an ETS account on the official website: <https://www.ets.org/mygre>
- Select the type of GRE exam they want to take – the GRE General or GRE Subject Test
- Select the GRE General Test
- Select your option to either appear for the GRE exam from a designated GRE Test Centre or GRE at Home
- Verify your email address, then continue.
- To select your test appointment, confirm your time zone, or select a new one
- Choose the two-month window you want to search and then select your preferred date from the calendar.
- Select an available time/date to test and click “Register for this test.”
- Complete your registration and pay the registration fee of ₹ 22,550 INR

STEPS TO APPLY FOR GRE ONLINE



GRE Test Centres

GRE Test Centres in India: In India, GRE is conducted in almost 22 cities having various GRE test centres. These are Ahmedabad; Allahabad; Bengaluru; Chennai; Cochin; Coimbatore; Dehradun; Gandhinagar; Gurgaon; Gwalior; Hyderabad; Indore; Kolkata; Mumbai; Nashik; New Delhi; Nizamabad; Patna; Pune; Trivandrum; Vadodara; and Vijayawada. The majority of them offer computer-based GRE options for the test.

GRE EXAM SYLLABUS

GRE Analytical Writing Syllabus:

- articulate complex ideas clearly and effectively
- support ideas with relevant reasons and examples
- examine claims and accompanying evidence
- sustain a well-focused, coherent discussion
- control the elements of standard written English

GRE Verbal Reasoning Syllabus:

- analyze and draw conclusions from discourse; reason from incomplete data; identify the author's assumptions and/or perspective; understand multiple levels of meaning, such as literal, figurative and author's intent
- select important points; distinguish major from minor or irrelevant points; summarize text; understand the structure of a text
- understand the meaning of individual words, sentences and entire texts; understand relationships among words and concepts

GRE Quantitative Reasoning Syllabus:

- understand, interpret and analyze quantitative information
- solve problems using mathematical models
- apply basic skills and elementary concepts of arithmetic, algebra, geometry and data analysis

EMERGING CAREER HORIZONS

Popular universities accepting GRE Scores:

University accepting GRE Scores	Verbal	Quantitative	Writing
Massachusetts Institute of Technology (MIT)	158	159	5.3
Stanford University	159	158	4.8
University of California, Berkeley	153 – 156	167	4.5
The University of California, Los Angeles (UCLA)	155	167	5.0
University of Virginia	163	166	4.5
University of Michigan – Ann Arbor	160	167	5.0
University of North Carolina – Chapel Hill	158	160	4.5
Georgia Institute of Technology	158	167	4.3
University of California – San Diego	162	160	5.5
University of Illinois – Urbana/Champaign	155	165	4.0
University of Wisconsin – Madison	163	163	4.5
University of Washington	156	167	4.0
Pennsylvania State University	150	165	3.0
University of Florida (UFL)	154	165	3.0
The University of Texas, Austin	155	165	4.0
Ohio State University	156	165	4.0
California Institute of Technology	160	157	5.0
Duke University	160	160	4.5
The University of Chicago	158	167	4.0
Northwestern University	160	160	5.0
Washington University in St. Louis	161	160	5.0
Johns Hopkins University	163	164	4.8
Rice University	160	167	5.0
Emory University	153	163	4.0-6.0
University of Notre Dame	165	165	5.3
Vanderbilt University	157	166	4.8
College of William and Mary	158	160	4.5
Johns Hopkins University	159	162	4.2

OFFICIAL WEBSITE: <https://www.ets.org/gre>

GRE EXAM FEES: **GRE General Test:** INR 22,550 INR **GRE Subject Test:** INR 14,500 INR

TEST SCHEDULE: Last week of September & November every year.

[Note: The candidate can schedule the test via the official web site].

COMPENDIUM OF CAREER CHOICES

SL. NO.	CAREER CHOICE	EXAMINATION CYCLE	DATE/MONTH OF EXAM	DEADLINE FOR REG/APPL.	MODE OF REG/APPL.	REG/APPL. FEE	LINK FOR REGISTRATION/ OFFICIAL WEBSITE	MODE OF EXAM
1	JEE (JOINT ENTRANCE EXAMINATION)	CONDUCTED BIANNUALLY (SESSION I & II)	SESSION I - LAST WEEK OF JANUARY TO FIRST WEEK OF FEBRUARY	SESSION I - DEC 1ST WEEK,	ONLINE	INR 1000 FOR MALE CANDIDATES (GEN/EWS/OBC),INR 800 FOR FEMALE CANDIDATES(GEN/ EWS/OBC) & INR 500 (SC/ST/ TRANSGENDER)	https://jeemain.nta.nic.in	ONLINE (CBT)
2	NEET (NATIONAL ELIGIBILITY CUM ENTRANCE TEST)	CONDUCTED ANNUALLY	FIRST WEEK OF MAY OR AS ANNOUNCED BY NTA	1ST WEEK OF APRIL	ONLINE	INR 1700 (GEN), INR 1600 (OBC), INR 1000 (SC/ST/PWD), INR 9500 (OUTSIDE INDIA)	https://neet.nta.nic.in	ONLINE (CBT)
3	BIOCHEMISTRY	CONDUCTED ANNUALLY (CUET)	SECOND WEEK TO LAST WEEK OF MAY	3RD WEEK OF MARCH	ONLINE	INR 1750 (GEN), INR 1650 (NCL/ EWS) & INR 1550 (SC/ST/PWBD/3RD GENDER)	https://cuet.samarth.ac.in	ONLINE (CBT)
4	BIOTECHNOLOGY	CONDUCTED ANNUALLY (CUET)	SECOND TO LAST WEEK OF MAY	3RD WEEK OF MARCH	ONLINE	INR 1750 (GEN), INR 1650 (NCL/ EWS) & INR 1550 (SC/ST/PWBD/3RD GENDER)	https://cuet.samarth.ac.in	ONLINE (CBT)
5	AGRICULTURE	CONDUCTED ANNUALLY (CUET)	SECOND TO LAST WEEK OF MAY	3RD WEEK OF MARCH	ONLINE	INR 1750 (GEN), INR 1650 (NCL/ EWS) & INR 1550 (SC/ST/PWBD/3RD GENDER)	https://cuet.samarth.ac.in	ONLINE (CBT)
6	CUET (COMMON UNIVERSITY ENTRANCE EXAMINATION)	CONDUCTED ANNUALLY	SECOND TO LAST WEEK OF MAY	3RD WEEK OF MARCH	ONLINE	INR 1750 (GEN), INR 1650 (NCL/ EWS) & INR 1550 (SC/ST/PWBD/3RD GENDER)	https://cuet.samarth.ac.in	ONLINE (CBT)
7	CA (CHARTERED ACCOUNTANCY)	CONDUCTED BIANNUALLY	NOVEMBER	AUGUST	ONLINE	FOUNDATION INR 9000 (INR), RSV 700 (USD)	https://www.ica.org	OFFLINE (PEN AND PAPER)
8	CS (COMPANY SECRETARY EXAM)	CONDUCTED BIANNUALLY	JUNE AND DECEMBER	FOR DEC DEADLINE MAR 31 & FOR JUN DEADLINE SEP 30	ONLINE	INR 1000 (APPROX.)	https://www.icsi.edu	OFFLINE (PEN AND PAPER)
9	CLAT (COMMON LAW ADMISSION TEST)	CONDUCTED ANNUALLY	FIRST WEEK OF DECEMBER	JULY 1 TILL NOV 3	OFFLINE (PEN SND PAPER)	INR 4000 (GEN/OBC/PED/NRI/PIO/ OCI) & INR 3500 (SC/ST/BPL)	https://consortiumofnlus.ac.in	OFFLINE (PEN AND PAPER)
10	CAT (COMMON ADMISSION TEST)	CONDUCTED ANNUALLY	THIRD/FOURTH WEEK OF NOVEMBER	3RD WEEK OF SEPTEMBER	ONLINE	INR 2400 (GEN) & INR 1200 (SC/ST/ PWD)	https://iimcat.ac.in	ONLINE (CBT)
11	ENTREPRENEURSHIP	AS PER INSTITUTION	AS PER INSTITUTION	AS PER INSTITUTION	AS PER INSTITUTION	AS PER INSTITUTION	OFFICIAL WEBSITE	AS PER INSTITUTION
12	SAT (SCHOLASTIC ASSESSMENT TEST)	CONDUCTED 7 TIMES PER YEAR	JULY, SEPTEMBER, OCTOBER, NOVEMBER	FEB, APR, MAY, AUG, SEP, OCT & NOV	ONLINE	INR 8536	https://satsuite.collegeboard.org	ONLINE (CBT)
13	FOREIGN EDUCATION (UK /USA)	CONDUCTED BIANNUALLY	AUGUST AND JANUARY	AS PER INSTITUTION	AS PER INSTITUTION	AS PER INSTITUTION	OFFICIAL WEBSITE	ONLINE (CBT)
14	FOREIGN EDUCATION (AUSTRALIA/ CANADA/JAPAN)	CONDUCTED BIANNUALLY	AUGUST AND JANUARY	AS PER INSTITUTION	AS PER INSTITUTION	AS PER INSTITUTION	OFFICIAL WEBSITE	ONLINE (CBT)
15	UPSC (UNION PUBLIC SERVICE COMMISSION)	ANNUALLY (CONDUCTED IN 3 STAGES) PRELIMS , MAINS, AND INTERVIEW	PRELIMINARY EXAM (MAY/JUNE), MAINS EXAM (SEPTEMBER/OCTOBER) & INTERVIEW (FEB- MARCH)	FEB	ONLINE	INR 100 FOR GEN / OBC / EWS NILL FOR SC / ST/ PWD	www.upsconline.nic.in www.upsc.gov.in	OFFLINE (PEN AND PAPER)
16	NDA (NATIONAL DEFENCE ACADEMY AND NAVAL ACADEMY EXAM)	CONDUCTED BIANNUALLY	NDA 1 - APRIL, NDA 2 - SEPTEMBER	NDA 1 - JAN, NDA 2 - JUNE	ONLINE	INR 100 FOR GEN/OBC, SC/ST/ SONS OF JCOS, NCOS, AND ORS EXEMPTED FROM FEES	https://nda.nic.in	OFFLINE (PEN AND PAPER)
17	CEPTAM (CENTRE FOR PERSONAL TALENT MANAGEMENT)	CONDUCTED ANNUALLY	THIRD/FOURTH WEEK OF FEBRUARY	OCTOBER	ONLINE	INR.100/- (GEN), SC, SC, ESM - EXEMPTED	https://www.drdo.gov.in	ONLINE (CBT)

EMERGING CAREER HORIZONS

SL. NO.	CAREER CHOICE	EXAMINATION CYCLE	DATE/MONTH OF EXAM	DEADLINE FOR REG/APPL.	MODE OF REG/APPL.	REG/APPL. FEE	LINK FOR REGISTRATION/ OFFICIAL WEBSITE	MODE OF EXAM
18	MERCHANT NAVY (IMU CET)	CONDUCTED BIANNUALLY	SECOND WEEK OF JUNE	3RD WEEK OF MAY	ONLINE	INR 1000 FOR GEN/OBC (NCL) & INR 700 FOR SC/ST	https://www.indianmerchantnavy.com	ONLINE (CBT)
19	AVIATION							
	BSC IN AVIATION	CONDUCTED ANNUALLY	MAY (THROUGH CUET)	TILL APRIL	ONLINE	INR 800 FOR GENERAL CATEGORY CANDIDATES AND INR 350 FOR SC/ST/PWD CANDIDATES	cuet.samarth.ac.in	ONLINE
	COMMERCIAL PILOT	CONDUCTED ANNUALLY	MAY	TILL APRIL	ONLINE	INR 12,000/- FOR GENERAL/ OBC/ EWS CANDIDATES NIL FOR SC/ ST CANDIDATES	https://igrua.gov.in/	WRITTEN TEST-ONLINE VIVA/INTERVIEW, AND PILOT APTITUDE TEST-OFFLINE
20	NIFT (NATIONAL INSTITUTE OF FASHION TECHNOLOGY)	CONDUCTED ANNUALLY	1ST - ROUND - 1 WEEK OF FEB 2ND ROUND - MARCH END / APRIL START	TILL LAST WEEK OF DECEMBER REGISTRATION FORM RELEASED ON NOVEMBER	ONLINE	INR 3000 (GEN - OBC) INR 1500 (SC- ST)	https://nift.ac.in	OFFLINE
21	TIFR (TATA INSTITUTE OF FUNDAMENTAL RESEARCH)	CONDUCTED ANNUALLY	THIRD/ FOURTH WEEK OF DECEMBER	LAST WEEK OF OCT	ONLINE	INR 1000 FOR MALE CANDIDATES & INR 500 FOR FEMALE CANDIDATES	https://www.tifr.res.in	OFFLINE (PEN AND PAPER)
22	CMI (CHENNAI MATHEMATICAL INSTITUTE)	CONDUCTED ANNUALLY	MAY	FEB	ONLINE	INR 1000 APPOX	https://cmi.ac.in/admission	OFFLINE (SUBJECTIVE)
23	ACTUARIAL SCIENCE (ACET EXAM)	CONDUCTED BIANNUALLY	JUNE & DECEMBER	FOR JUNE - LAST WEEK OF MAY FOR DEC- LAST WEEK OF NOV.	ONLINE	INR 3000/-	https://actuariesindia.org	ONLINE (CBT)
24	ARCHITECTURE (B.ARCH)	CONDUCTED ANNUALLY	MAY	3RD WEEK OF MARCH	ONLINE	INR 1750 (GEN), INR 1650 (NCL/ EWS) & INR 1550 (SC/ST/PWBD/3RD GENDER)	https://cuet.samarth.ac.in	ONLINE (CBT)
25	UCEED	CONDUCTED ANNUALLY	JANUARY	SEPTEMBER / NOVEMBER	ONLINE	INR 3800 FOR OPEN & INR 1900 FOR FEMALE/RESERVED CATEGORY	https://www.uceed.iitb.ac.in	PART A - ONLINE (CBT), PART B - OFFLINE (PEN & PAPER)
26	ISI (INDIAN STATISTICAL INSTITUTE)	CONDUCTED ANNUALLY	FIRST/SECOND WEEK OF MAY	MARCH - APRIL	ONLINE	INR 1500 FOR MALE, INR 1000 FOR FEMALE AND INR 750 FOR RESERVED CATEGORY	https://www.isical.ac.in/admission	ONLINE (CBT)
27	HOTEL MANAGEMENT (NCHM JEE)	CONDUCTED ANNUALLY	MID MAY	FEB TO MAY	ONLINE	INR 1000 (GEN UR)/OBC - (NCL), INR 750 (GEN-EWS) & INR 450 (SC/ST/ PWD)	https://nchmjee.nta.nic.in	ONLINE (CBT)
28	MASS COMMUNICATION, JOURNALISM AND PHOTOGRAPHY	CONDUCTED ANNUALLY	DECEMBER TO MAY	DEPENDS UPON INSTITUTION	ONLINE AND OFFLINE	DEPENDS UPON INSTITUTION	OFFICIAL WEBSITE	ONLINE, OFFLINE AND INTERVIEW
29	LICENSED CLINICAL PSYCHOLOGIST	CONDUCTED ANNUALLY	DEPENDS ON INSTITUTION	DEPENDS ON INSTITUTIONS	ONLINE/ OFFLINE	DEPENDS ON INSTITUTION		OFFICIAL WEBSITE
30	DATA SCIENCE/CODING/ARTIFICIAL INTELLIGENCE/CLOUD COMPUTING/ WEB DESIGNING ETC.	CONDUCTED ANNUALLY	JANUARY TO JUNE	DEPENDS ON INSTITUTION	ONLINE	DEPENDS ON INSTITUTION	OFFICIAL WEBSITE	ONLINE (CBT)
31	PHYSICAL EDUCATION/SPORTS SCIENCE/SPORTS JOURNALISM (THROUGH CUET)	CONDUCTED ANNUALLY	DEPENDS ON INSTITUTION	DEPENDS ON INSTITUTION	ONLINE	DEPENDS ON INSTITUTION	OFFICIAL WEBSITE	CBT/PEN-PAPER/ INTERVIEW/PHYSICAL TEST
32	NID	CONDUCTED ANNUALLY	JANUARY	01ST WEEK OF DECEMBER	ONLINE	INR 3000 (GEN, EWS, OBC - NCL), INR 5000 (OVERSEAS PURSUANT), INR 1500 (SC, ST & PWD)	https://www.nid.edu	PAPER PEN/PENCIL TEST/ OFFLINE
33	IBPS	CONDUCTED ANNUALLY	JANUARY	AUGUST	ONLINE	INR 850 (GEN/OBC) RS 175 (ST/SC/ PWD)	https://www.ibps.in	ONLINE
34	CAT	CONDUCTED ANNUALLY	NOVEMBER	AUGUST	ONLINE (CBT)	INR 2400 (GEN/OBC) INR 1200 (ST/ SC/PWD)	https://iimcat.ac.in	ONLINE (CBT)



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