

# JEE (Main)

2025

**GUIDE**



**Aakash**

Medical | IIT-JEE | Foundations

## Delivering Champions Consistently



**Chirag Falor**  
4 Year Classroom

**1** **AIR**  
**JEE (Adv.)**  
**2020**



**Tanishka Kabra**  
4 Year Classroom

**1** **AIR-16 CRL**  
**JEE (Adv.)**  
**2022**  
ALL INDIA  
FEMALE  
TOPPER



**Sanvi Jain**  
4 Year Classroom

**1** **AIR-32 CRL**  
**JEE (Main)**  
**2024**  
ALL INDIA  
FEMALE  
TOPPER



# Index

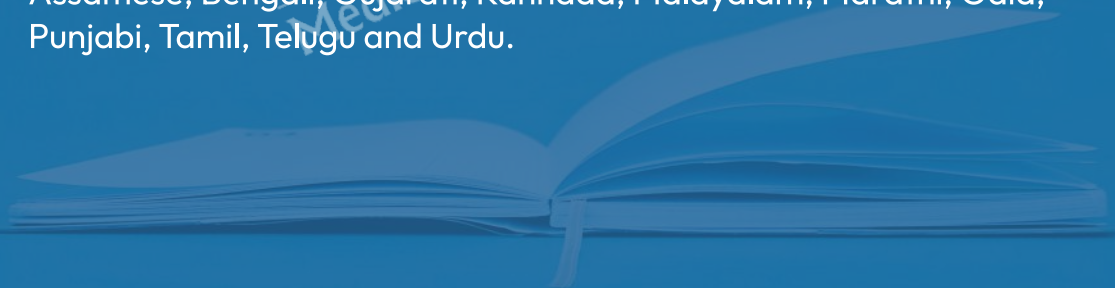


- About JEE (Main) 2025
- Must know Facts about JEE (Main)
  - Previous Year's Cut off Trends
  - JEE (Main) Trends over the Years
  - Success Mantra from JEE (Main) Toppers
  - Top Preparation Tips
  - Best Books for JEE (Main) 2025
  - Subject-wise Preparation Strategy
  - The D-Day Strategy

# About JEE (Main) 2025

JEE (Main) is a National Level Engineering Entrance Examination conducted by National Testing Agency (NTA). Formerly known as All India Engineering Entrance Examination (AIEEE) till 2013, JEE (Main) comprises two papers. Paper 1 is conducted for admission to Undergraduate Engineering Programs (B.E/B.Tech.) at NITs, IITs, other Centrally Funded Technical Institutions (CFTIs), and Institutions/Universities funded/recognized by participating State Governments. JEE (Main) is also an eligibility test for JEE (Advanced), which is conducted for admission to IITs. Paper 2 is conducted for admission to B. Arch and B. Planning courses in the country.

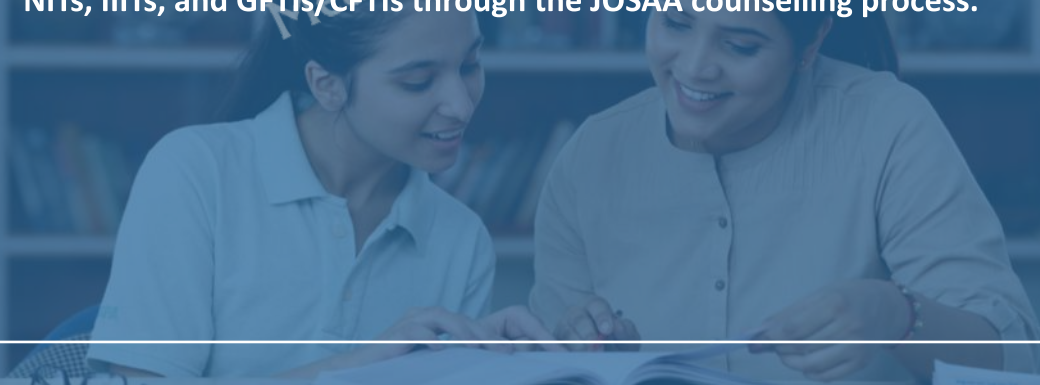
This examination will be conducted in 13 languages - English, Hindi, Assamese, Bengali, Gujarati, Kannada, Malayalam, Marathi, Odia, Punjabi, Tamil, Telugu and Urdu.



# Must know

## Facts about JEE (Main)

- JEE (Main) will be conducted twice a year ; the first session is scheduled between 22nd January to 31st January, 2025, while the second session will take place from April 1st to April 8th, 2025.
- Aspirants have the flexibility to choose to appear for JEE (Main) in either January or April, or even in both. The All India Rank will be calculated based on the best score of the two sessions for the counselling process.
- The examination will be conducted in the Computer-Based Test (CBT) mode only.
- Candidates falling within the General, EWS, and OBC categories must achieve a minimum score of 75%, while those from the SC and ST categories are required to attain at least 65% in their qualifying examination (12th grade) OR secure a position under top 20 percentile in their respective board examinations to get eligible for admission into NITs, IIITs, and GFTIs/CFTIs through the JOSAA counselling process.





### Paper 1 B.E/B.Tech in Computer Based Test (CBT) Mode:

Subject-wise distribution of question, total number of Questions, and marks	Subject	Section A	Section B	Marks
	Mathematics	20*	05*	100
	Physics	20*	05*	100
	Chemistry	20*	05*	100
	Total	75		300

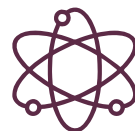
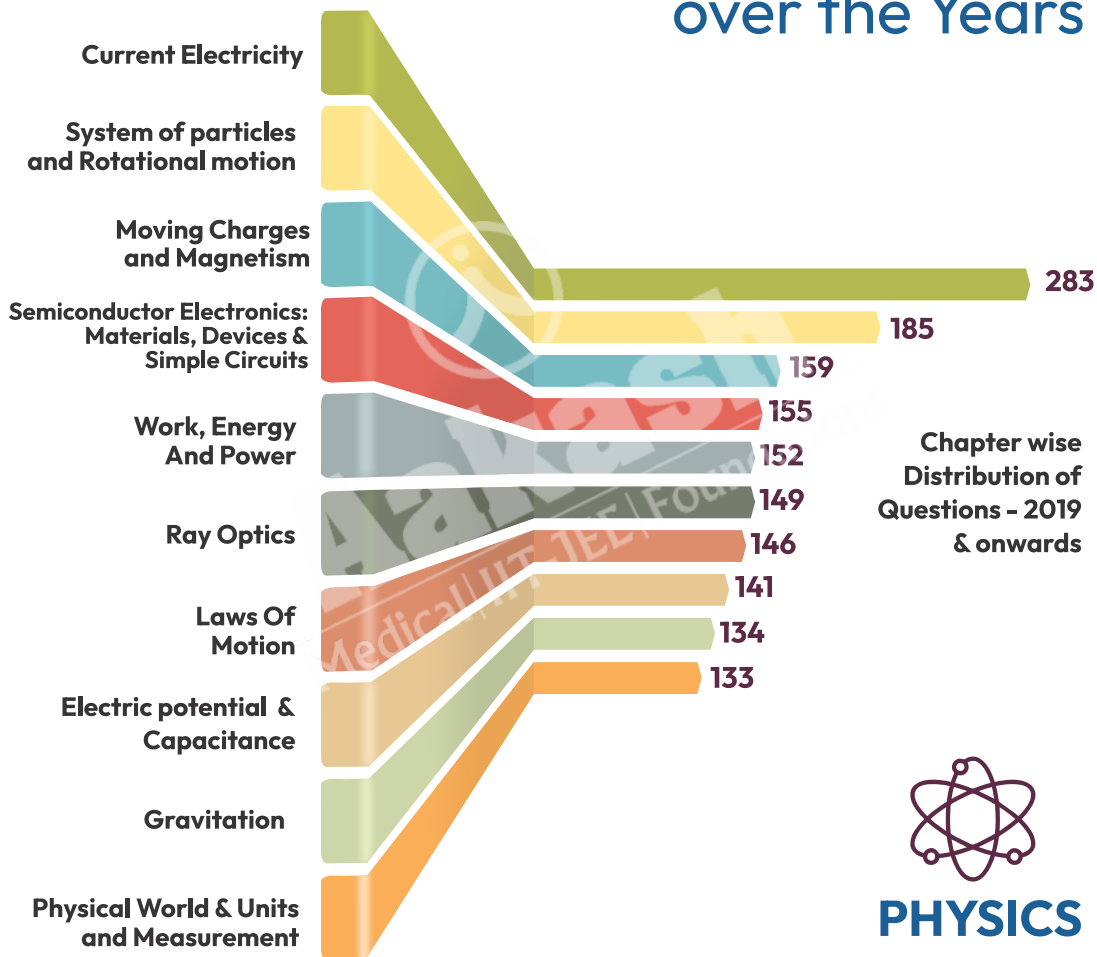
\*Each Subject will have two sections. Section A will be of Multiple-Choice Questions (MCQs) and Section B will contain Questions whose answers are to be filled in as a numerical value. There will be negative marking for incorrect answer in Section A and Section B. For each question in Section B, a candidate has to enter the correct integer value of the answer using the mouse and the on- screen virtual numeric keypad in the place designated to enter the answer. For Section B, the answer should be rounded off to the nearest integer.

## Previous Year's Cut off Trends

Category	2024	2023	2022	2021	2020	2019
General	93.2362181	90.7788642	88.412138	87.899224	90.376534	89.754885
General - EWS	81.3266412	75.6229025	63.111414	66.221485	70.243552	78.217487
OBC-NCL	79.6757881	73.6114227	67.00903	68.023445	72.888797	74.316656
SC	60.0923182	51.9776027	43.082095	46.882534	50.176025	54.012816
ST	46.697584	37.2348772	26.777133	34.6729000	39.06961	44.334517
Gen-PwD	0.0018700	0.0013527	0.0031029	0.0096375	0.0618524	0.1137173

## Chapter Name (Physics)

# JEE (Main) Trends over the Years



**PHYSICS**

# JEE (Main) Trends over the Years

## Chapter Name (Chemistry)

Organic Chemistry Some Basic  
Principles and Techniques

Coordination Compounds

Aldehydes, Ketones And  
Carboxylic Acids

The P-Block Elements

Chemical Bonding And  
Molecular Structure

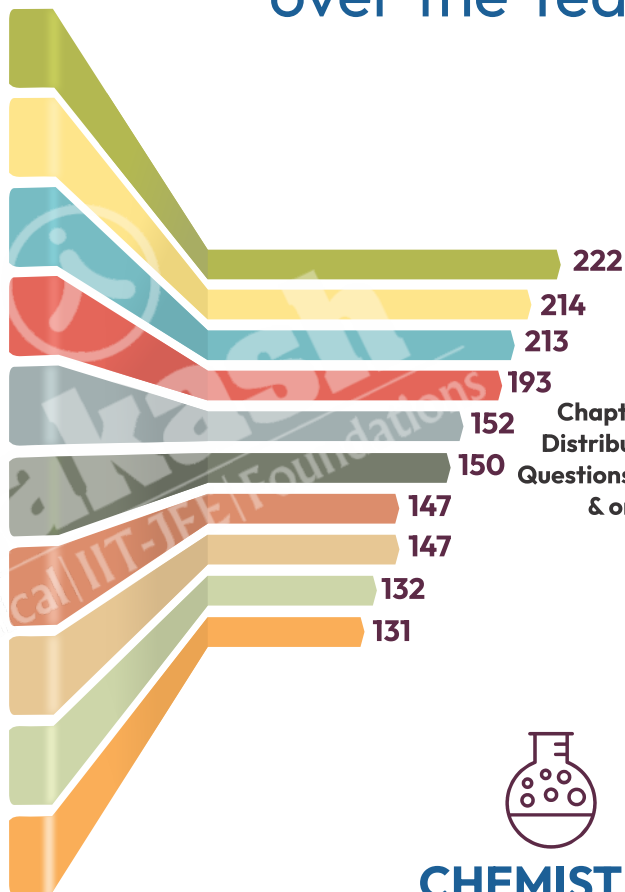
Amines

Equilibrium

The D And F-Block  
Elements

Hydrocarbons

Alcohols, Phenols  
And Ethers



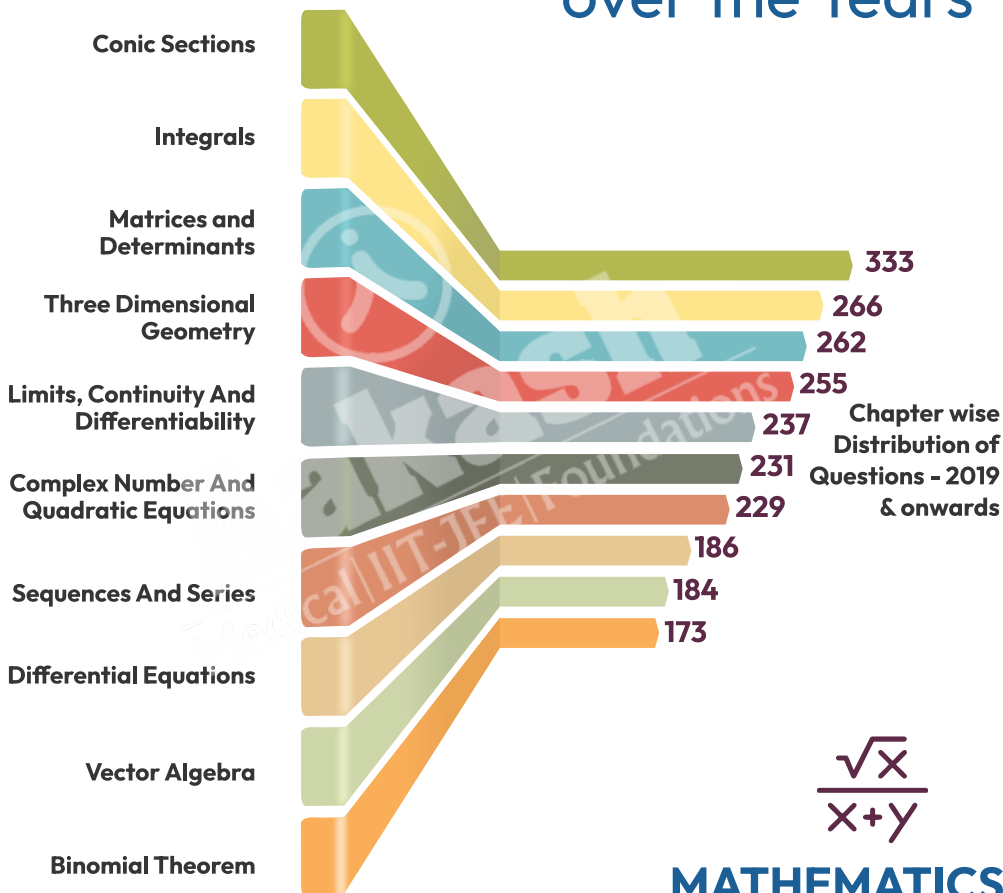
Chapter wise  
Distribution of  
Questions - 2019  
& onwards



**CHEMISTRY**

# JEE (Main) Trends over the Years

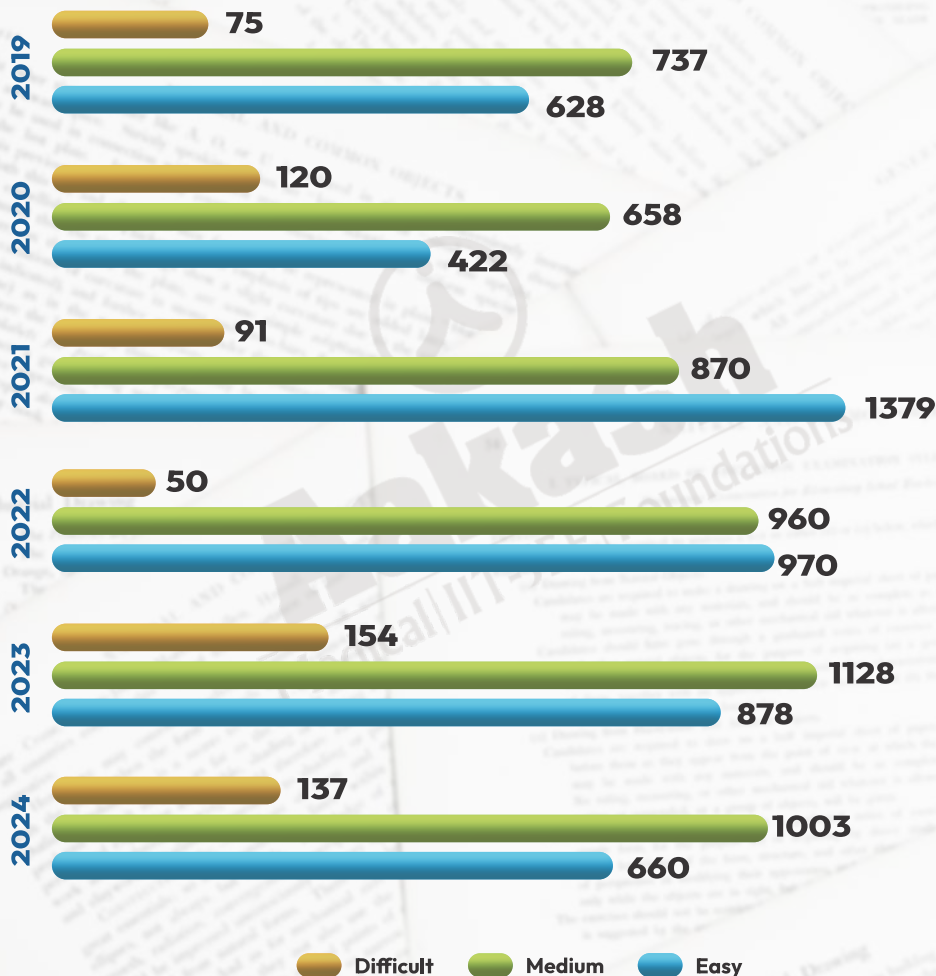
## Chapter Name (Mathematics)



$$\frac{\sqrt{x}}{x+y}$$

**MATHEMATICS**

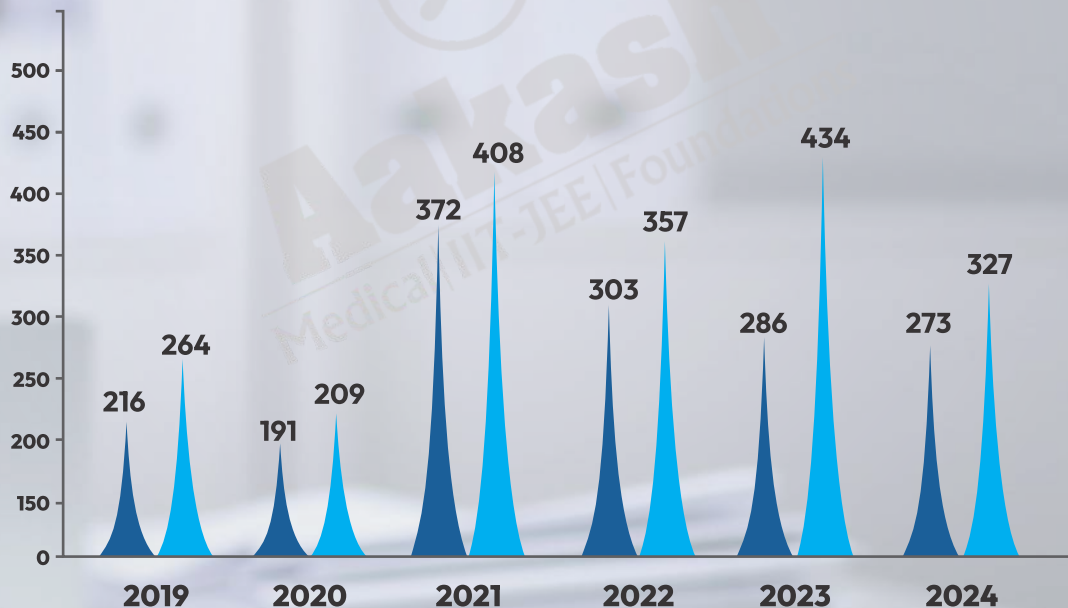
# Level of Questions Across Years



# JEE (Main) Year-wise & Class-wise question distribution

## Physics

■ Class XI ■ Class XII

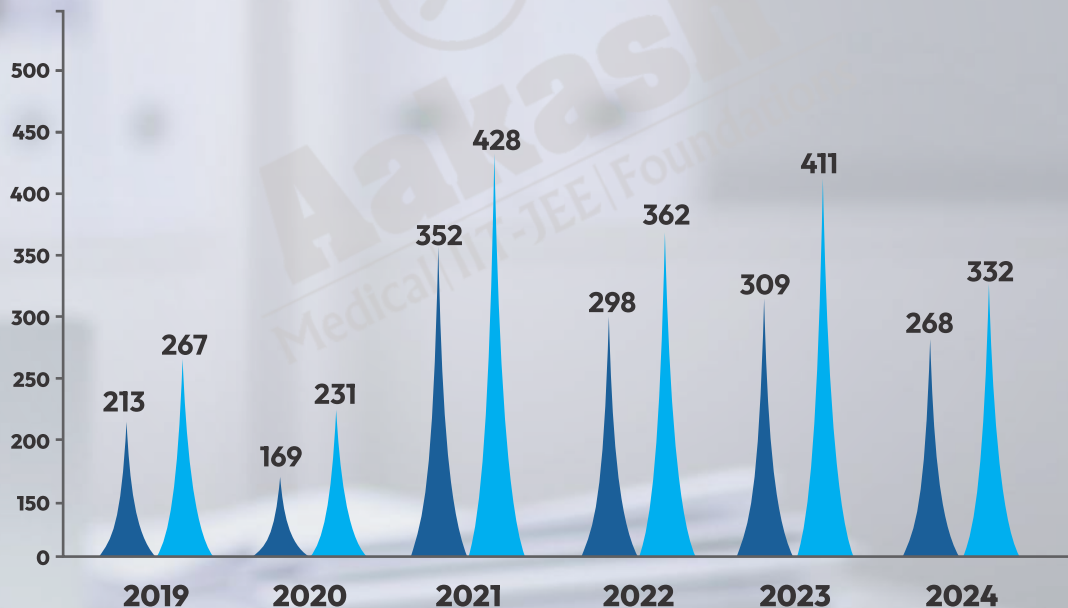




# JEE (Main) Year-wise & Class-wise question distribution

## Chemistry

■ Class XI ■ Class XII



# JEE (Main) Year-wise & Class-wise question distribution

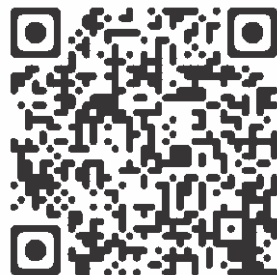
## Mathematics



# Success Mantra

## from JEE (Main) Toppers

- **Consistency is Key:** For two years, stay dedicated and consistent with 100% effort; this is crucial for success.
- **Self-Study Makes the Difference:** Focus on self-study to deepen understanding, strengthen concepts, and build confidence.
- **Revise Regularly:** Review concepts daily or weekly to retain information effectively and identify weak areas.
- **Analyze and Improve:** Regularly analyze your test results and understand where you went wrong. Use this feedback to strengthen weak concepts.
- **Leverage Family Support:** Utilize family support, like parents, for feedback and error analysis to stay on track and motivated.
- **Balance Study with Breaks:** Manage stress by listening to music, going for walks, and getting 7–8 hours of sleep for optimal focus and memory retention.
- **Prioritize Time Management:** Allocate specific time to each subject during exams and move to the next section if one area takes too long.
- **Limit Distractions:** Avoid social media and other distractions for these two years to stay focused on your goals.
- **Use Reliable Resources:** Study thoroughly from recommended materials, as they contain well-explained concepts, diagrams, and accessible solutions.
- **Practice with Past Papers:** Solve previous years' question papers and module questions to reinforce your understanding and improve exam readiness.



# Success Mantra

## from JEE (Main) Toppers

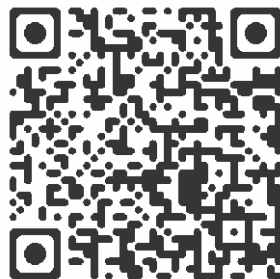
- **A Good Beginning is Half Done:** Start strong by strategizing. Plan how to approach each paper, allocate your time, and learn each topic effectively.
- **Focus Fully in Class:** Pay complete attention during lessons to understand concepts thoroughly, which builds a solid foundation for problem-solving.
- **Thoroughly Use Provided Materials:** Regularly review all study resources, like Target Success, Magnet Success, and previous years' question papers, to reinforce learning.
- **Prepare for Ups and Downs:** Challenges are part of the journey. Stay resilient, seek support from teachers and parents, and keep pushing forward.
- **Clear All Doubts:** Don't hesitate to ask questions. Teachers play a vital role, so seek clarity until you fully understand each concept.
- **Focus on Revision in the Final Month:** Revisit previously learned material instead of exploring new topics. Practice marked questions and refine your understanding.
- **Limit Distractions:** Avoid social media and mobile devices to stay focused. Discipline yourself to maintain a distraction-free environment.
- **Maintain Discipline and Punctuality:** Be consistent with attending classes, completing assignments on time, and attending exams without fail.
- **Take Breaks to Maintain Efficiency:** Avoid burnout by taking breaks, listening to music, and using power naps to stay productive.



M. Sai Divya Teja Reddy  
2 Year Classroom

**AIR**

**15** JEE  
(Main)  
2024



# Success Mantra

## from JEE (Main) Toppers

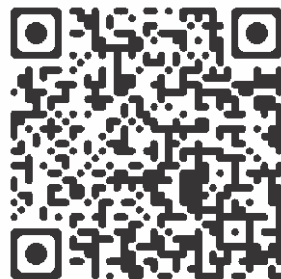
- **Seek Peer Support:** Collaborate with friends for group study sessions, discussing difficult concepts and sharing ideas to expand your thinking.
- **Create Short Notes for Memorization:** For subjects like inorganic chemistry, make brief notes and review them regularly to aid memorization.
- **Focus on Weak Areas:** Identify and strengthen weak topics through one-on-one interactions with teachers and additional practice.
- **Quality Over Quantity:** Effective and productive study time is more important than the number of hours spent studying.
- **Practice Mock Tests Regularly:** Take frequent mock tests to build confidence, practice time management, and become comfortable with the exam format.



M. Sai Divya Teja Reddy  
2 Year Classroom

**AIR**

**15** JEE  
(Main)  
2024



# Top Preparation Tips



**START YOUR PREPARATION EARLY AND PLAN YOUR STUDY:** It is beneficial for you to start your preparation from the 11th grade. You will be able to have a better understanding of the syllabus and get hold of your strong areas and the ones you need to work on.



**UNDERSTAND THE SYLLABUS AND STAY UPDATED:** JEE covers a vast syllabus. Dedicate these two years of your life religiously to this examination. Follow a timetable and maintain a record of the chapters that you have covered and the ones that require revision. Also, stay updated about the exam pattern, eligibility criteria, etc.



**USE THE RIGHT STUDY MATERIALS:** JEE is a very vital exam, choose the books and the other study materials judiciously. NCERT books are the best, as they help in forming the base. Keep a track of important formulae, equations, theorems, etc. Always go for concept-based learning rather than learning the lengthy chapters. Remember, smart work always beats hard work!





# Top Preparation Tips



**CLEAR YOUR DOUBTS ON REGULAR BASIS:** Whenever you're stuck on a concept or problem, don't let it linger. Clarify your doubts either through your teachers, peers or online forums.



**ANALYZE MISTAKES AND LIMIT DISTRACTIONS:** After each test, analyze your mistakes. Understanding where you went wrong will help you prevent repeating those mistakes. At the same time, stay away from unnecessary distractions, especially as the exam approaches. This includes excess use of social media or indulging in too many leisure activities.



**PREVIOUS YEARS' PAPERS AND MOCK TESTS:** Solving previous years' JEE question papers gives you a clear idea about the type of questions asked and helps improve time management. Regularly take mock tests. It also aids in time management, which is crucial in the actual exam. Additionally, you also get habituated with the type of questions.

Aakash  
Foundations



# Best Books for JEE Main 2025

There are hundreds of books out there on each subject. Selection of relevant and sufficient books is most important part of strategy to crack JEE (Main) with top ranks.

Our experts have selected them for you on the basis of deep understanding of JEE requirements. These are :

## Physics

NCERT Books (vol. 1 & 2 of 11th & 12th)

Concept of Physics, vol. 1 & vol. 2 by HC Verma

Fundamental Physics – Resnick, Walker & Halliday

Problems in General Physics by I.E. Irodov.

## Chemistry

NCERT – XI and XII (Part 1 & 2)

Organic Chemistry by Morrison Boyd

Numerical Chemistry by P. Bahadur

Concise Inorganic Chemistry by J.D. Lee

Organic and Inorganic Chemistry by O.P. Tandon

## Mathematics

Comprehensive Mathematics (McGraw Hill)

Higher Algebra (Hall & Knight)

Trigonometry (S. L. Loney)

Coordinate Geometry (S. L. Loney)

Calculus by Thomas and Finney



# Subject-wise Preparation **Strategy**

## Physics

**Physics is concept based subject. So it requires in-depth understanding of natural laws and their applications. It is more interesting than other subjects.**

- Fundamentals of physics must be understood first from NCERT and HCV books.
- Concept must be developed to solve numerical.
- Theoretical aspects should be covered from NCERT and HCV books.
- After HCV and NCERT problem, try Irodov's book. It will strengthen solving ability of problems.
- Try to solve problems with the help of diagrams. Put data on diagram and then analyze to get it done in minimum steps.
- Practice past years questions. They are most relevant for the exam.
- Always try to solve questions in limited time. Speed is more important.
- Some important topics are – Rotations, Fluid, Thermodynamics, Electrostatics, Current Electricity, Magnetism, Optics and Modern Physics.
- Modern physics is very scoring and easy too.
- In JEE Main, theoretical chapters, such as EM waves, Magnetism and Matter, Semiconductors are also important. Read them from NCERT and HCV.

# Subject-wise Preparation **Strategy**

## Chemistry

**JEE (Main) chemistry, traditionally regarded as the easiest of the three courses, may be easily nailed by a comprehensive study of NCERT Chemistry (Part 1 and Part 2).**

- Physical chemistry is the most basic. Learn its formulas after understanding and know how to apply them.
- Practice rapid multiplications and divisions for answering physical chemistry questions. This will save your time during the exam.
- If you have the formulae at your fingertips, application-based questions will be easy to solve.
- To do well in Organic chemistry, you must know name reactions and crucial equations.
- Concentrate on understanding the mechanism of reactions.
- Inorganic is all about memorizing (after comprehending) as it is entirely theoretical.
- Analyze patterns in the properties of elements and their compounds.
- Practice the reactions by writing them several times so that they get ingrained in your mind.
- Read the NCERT from beginning to end. Don't skip a single line--that's the key for preparing chemistry.
- With a little work, you can easily achieve an 80+ out of 100 in chemistry.
- Periodic revision of Organic and Inorganic equations.

# Subject-wise Preparation **Strategy**

## Mathematics

**JEE Mathematics required conceptual clarity and problem solving skills, as the exam often presents complex but fundamental with problems.**

- Calculus, has the maximum weightage in Mains and Advanced paper, as it requires the strong fundamentals, understanding of concepts and its application.
- Conic sections in Coordinate Geometry, 3D Geometry and vectors are relatively easy to master, JEE carry significant weightage in these segments. So scoring well in this area can boost your overall score.
- Permutation and Combinations, Binomial theorem and Trigonometry has less weightage, hence manage your time accordingly for these topics.
- In JEE (Main) Mathematical Reasoning, Statistics and Matrices are comparatively easy topics to understand, while they appear regularly in Main Paper.



# The D-Day Strategy

With JEE MAIN 2025 Session-1 scheduled from 22nd January, 2025 to 31st January, 2025, students have only a few days now. The last days before the exams are very crucial and should be utilised in the best possible way. We are sharing below some Expert Advice from Previous Year Toppers for the D-Day of the exam. Kindly use these tips and Expert Advice so that you will get the best possible outcome in the exam.

## **The D-Day Strategy**

JEE Main Paper will have 75 questions –Among them 25 from Physics, 25 from Chemistry and 25 from Mathematics and all have to be attempted. Here are some pointers that Toppers have shared about their exam day experience:

1. Before you enter the exam hall, know this – you will not be able to solve all the questions, neither will any other person be. And it is perfectly OKAY!
2. You have 180 minutes to complete the paper with 25 questions in each subject. But do not make the mistake of assuming that you have 1 hour for each subject. Chemistry is expected to be completed in 35-40 minutes. You will require remaining time in tougher sections, that is, Physics and Math. 80 minutes is enough for solving the Mathematics section, which leaves you with an hour for Physics.



# The D-Day Strategy

3. While solving questions, first opt the ones which are easy. Since each question has equal marks, do not miss out on any question which you can solve.
4. JEE Main has negative marking for incorrect answers. So, avoid guessing answers.
5. Do not freak out if you are unable to solve some questions. Additionally, do not spend too much time on one question. Move on. You can come back to it later.
6. Once you read a question, go through its options before you start solving it.
7. While you are at it, do not rush into solving questions. While we won't ask you to be too generous with your time, simply rushing will end up in a lot of silly mistakes.
8. Remember to use the tricks and shortcuts that you have used during preparation.
9. Last but not the least, visit your exam center a day before the exam. This will help you on the exam day as you will not feel panicked for finding the location of the exam center.

**Best of Luck !!!**

# Outstanding Results in JEE (Main & Adv.) 2024

# 13485

(12527 Classroom + 958 Distance & Digital)

## Aakashians Qualified in JEE (Main) 2024

ALL  
INDIA  
RANK  
(Female)

# 1



**Sanvi Jain**  
4 Year Classroom  
**AIR 34 CRL**

AIR  
**15**



**M S Divya Teja R**  
2 Year Classroom

AIR  
**19**



**Rishi Shekher Shukla**  
2 Year Classroom

AIR  
**25**



**Rachit Aggarwal**  
4 Year Classroom

and many more...

# 3081

(2819 Classroom + 262 Distance & Digital)

## Aakashians Qualified in JEE (Advanced) 2024

AIR  
**25**



**Rishi Shekher Shukla**  
2 Year Classroom

AIR  
**67**



**Krishna Sai Shishir**  
4 Year Classroom

AIR  
**78**



**Abhishek Jain**  
4 Year Classroom

AIR  
**93**



**Hardik Aggarwal**  
2 Year Classroom

AIR  
**95**



**Ujjwal Singh**  
4 Year Classroom

AIR  
**98**



**Rachit Aggarwal**  
4 Year Classroom

AIR  
**129**



**Ansh Agrawal**  
3 Year Classroom

AIR  
**131**



**Shubham Nair**  
4 Year Classroom

and many more...