

## How to prepare for IIT JEE 2015?

We can offer you better tips on how to prepare for IIT JEE

Here's an IIT JEE Preparation Guide for you by Team A – One Institute:

### How to prepare for JEE Main?

When you are preparing for IIT JEE 2015, do remember that your marks in Class XII board exams will play a vital role. So, you must pay appropriate attention to your board exams. Here are some other preparation tips for IIT JEE that you must keep in mind:

- \* Start your IIT JEE preparation with Class XII textbooks that you have. You can also refer to NCERT books that are prepared by many subject experts and are quite economical too.
- \* Beware of using too many reference books. Use the ones that cover maximum syllabus and suit your learning style.
- \* It can help you to score more by indexing topics in order of priority or weightage they carry in JEE Main and Class XII board exams.
- \* Grill yourself into the basics until all your fundamentals are very clear as JEE Main is specifically designed to test how well students have grasped the topics and how they apply them to a given set of problems.
- \* Revise, practice using previous year papers of IIT JEE, check solutions from solved papers, seek help where needed and revise and practice again.
- \* **Last minute IIT study tips often suggest students to try the IIT JEE paper of last three years.**

\* Time management is an important factor in JEE Main. So, while solving model JEE question papers, keep an eye on your watch too. If solving a\* question is taking too much time, move on. Here is a quick glance on the number of questions asked from each topic in AIEEE or JEE Main in the last four years:

Here is a quick glance on the number of questions asked from each topic in AIEEE or JEE Main in the last six years:

### Math's

Topic	2008	2009	2010	2011	2012	2013	2014
Sets, Relations and Functions	2	2	2	2	1	2	2
Limits, Continuity & Differentiability	1	1	2	3	1	2	1
Application of Derivatives	2	3	3	2	2	3	2
Indefinite Integrals, Definite Integrals & Area under the Curve	3	2	2	2	3	2	3
Cartesian coordinates & Straight Line	1	1	1	1	2	1	2
Circles	1	1	1	1	1	1	1

<b>Conics</b>	2	3	1	1	2	2	1
<b>Quadratic Equations, Inequalities, Progressions</b>	3	3	1	1	3	2	1
<b>Complex Numbers</b>	1	1	2	2	1	1	2
<b>Binomial Theorem, Exponential &amp; Logarithmic Series</b>	1	1	1	1	1	1	1
<b>Permutation &amp; Combination</b>	2	1	2	1	2	1	2
<b>Probability</b>	2	2	2	2	1	2	2
<b>Vectors</b>	2	2	2	2	2	2	2
<b>3-D Coordinate Geometry</b>	2	1	2	2	2	2	1
<b>Differential Equations &amp; Properties of Triangles</b>	2	1	1	2	1	1	2
<b>Trigonometric Ratios, Equations, &amp; Inverse Circular Function</b>	1	1	2	1	1	1	1
<b>Heights and Distances</b>	1	0	0	0	0	1	0
<b>Matrices &amp; Determinants</b>	3	2	2	2	2	2	2
<b>Mathematical Logic</b>	2	1	0	1	1	0	1
<b>Statics &amp; Dynamics</b>	0	0	0	0	0	0	0
<b>Statistics</b>	1	1	1	1	1	1	1
	<b>35</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>

**Physics:**

<b>Topic</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Units, Dimensions, Errors, Experiments</b>	5	1	1	1	2	3	2
<b>Kinematics</b>	1	2	3	2	2	3	2
<b>New ton's laws and friction</b>	0	0	1	0	1	0	1
<b>Work, Power &amp; Energy</b>	1	1	1	0	1	2	2
<b>System of particles</b>	3	1	2	0	1	2	1
<b>Gravitation, Rotational mechanics</b>	2	1	1	4	1	1	2

<b>Properties of Matter</b>	3	1	1	2	2	2	1
<b>SHM, Oscillations</b>	0	1	0	2	1	1	2
<b>Mechanical Waves and Sound</b>	3	2	1	1	1	1	2
<b>Ray Optics, Wave Optics</b>	5	3	3	4	3	3	3
<b>Heat and Thermodynamics</b>	1	5	1	4	3	1	2
<b>Electrostatics</b>	2	3	4	2	2	2	3
<b>Current Electricity</b>	2	1	1	3	2	2	2
<b>Magnetism, Magnetic effects of current</b>	2	2	1	1	3	2	1
<b>EMI , AC and EM waves</b>	1	1	3	1	1	1	1
<b>Modern Physics</b>	4	5	6	3	4	4	3
	<b>35</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>

**Chemistry:**

<b>Topic</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Atomic Structure and Classification</b>	1	3	3	3	2	2	2
<b>Chemical Bonding</b>	2	1	0	3	2	1	1
<b>Stoichiometry</b>	1	0	0	1	1	0	1
<b>States of Matter</b>	1	1	3	2	2	3	2
<b>Chemical &amp; Ionic Equilibrium</b>	4	1	4	1	2	2	1
<b>Chemical Kinetics &amp; Nuclear Chemistry</b>	1	1	2	2	1	1	1
<b>Chemical Thermodynamics</b>	2	2	2	1	1	2	1
<b>Solutions</b>	2	2	2	2	1	1	1
<b>Electrochemistry</b>	1	1	2	1	1	2	2
<b>General Organic Chemistry + Functional Group I</b>	9	5	6	2	5	4	6
<b>Organic Chemistry – Functional Group II</b>	1	2	1	2	3	3	2
<b>Organic Chemistry – Functional Gp III</b>	0	1	1	2	1	2	3

Chemistry of Representative Elements	5	3	0	2	3	2	2
Transition Elements	1	2	0	1	1	1	0
Coordination Compounds & Organometallics	2	2	2	4	2	3	2
Surface Chemistry	1	1	0	0	1	0	1
Biomolecules	1	2	2	1	1	1	2
	<b>35</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>

## How to prepare for JEE Advanced?

Students are shortlisted for IITs based on their marks in Class XII board exams as well as JEE Main. While JEE Advance is based on CBSE syllabus, there are a few topics in Mathematics and Physics that you do not need to cover for **IIT JEE preparation**:

- **Mathematics topics you do not need to cover:** Mathematical Induction, Statistics, Linear Inequality and Mathematical Reasoning.
- **Physics topics you do not need to cover:** Magnetism & Matter, Electromagnetic Waves, Electronic Devices (Solids and Semiconductors), and Principles of Communication Systems.

### **Other study tips you should keep in mind for JEE Advance are:**

- To crack JEE Advance, students need a strong understanding of concepts and skills to solve numerical that need good aptitude and have lengthy calculations.
- Students should solve short-answer questions, subjective-type problems and questions based on assertion reasoning to develop deep understanding of the subject as well as multiple-choice type questions to build up speed and accuracy.

### **Important topics you should cover for JEE Advanced are:**

- **Physics:** Mechanics and Electrodynamics are the two most important topics but one should also devote time to Heat, Thermodynamics, Optics and Modern Physics.
- **Chemistry:** General principles of Organic Chemistry are easy to understand. Numericals of Physical Chemistry are scoring. Inorganic Chemistry has many facts and figures and requires constant revision.
- **Mathematics:** Master inter-relationship between various topics. Coordinate Geometry and Vectors can help one to solve problems related to complex numbers. Permutation and Combinations help you to solve problems of Probability. Trigonometry and Calculus again help one to solve all types of problems.

## How to study for IIT JEE 2015?

- Before worrying about **how to prepare for IIT JEE 2015**, you must prepare for your Class XII board exams well. You can also buy a set of NCERT books to begin with and make sure that you really understand all the concepts clearly.

- The second step is to practice JEE papers, analyze your strengths and weaknesses topic-wise, and work on them accordingly.
- A – One Institute offers a facility where you can opt for an IIT JEE test series and get a detailed topic-wise report of where you have gained sufficient mastery and where you need to pay more attention.

## **IIT JEE preparation plan for you**



A customized plan for **IIT exam preparation** can go a long way in scoring good marks. A – One Institute experts can help students to make an **IIT JEE preparation plan** that considers your daily schedule, preferred study timings, subjects and topics where you need to pay more attention and devote more time, and number of days before the exam you have for preparation and revision.

You can design your study plan by keeping these points in mind too. Don't forget to allot some time for recreation and exercise too. And at least six hours of sleep!

## **How to prepare for IIT JEE at home?**

Resources and tools are important for any student to learn something. So, if you want to study at home, you should get appropriate **books for IIT preparation**. Besides mastering school books, you need to go through reference books and solve as many JEE model papers as you can.

**IIT preparation material** that you use must have a set of previous IIT JEE papers as well as AIEEE papers. These papers are incredibly important to learn where you actually stand in terms of your **IIT preparation**. You can also learn time management by solving these papers.

Never hesitate to approach teachers, subject experts or knowledgeable people within your reach to clear doubts. There is no such thing as a 'stupid question' when it comes to preparation for IIT.

**Preparation for IIT JEE 2015** means that you understand concepts enough to take on engineering studies once you crack IIT JEE. So, make sure you ask for help wherever and whenever you need it.

## **IIT Tips and Tricks**

While there are many sites that offer you generic **how to study for IIT JEE tips**, here are some specific **tips to crack IIT JEE** subject-wise:

### **Mathematics**

- For Mathematics in JEE Advanced, one should pay more attention to Vectors and 3D. Previous IIT JEE paper analysis also suggests that Complex Numbers and Definite Integral are also asked

frequently. Complex numbers are quite useful in solve coordinate geometry too. Integral calculus too can be used to simplify problems and save a lot of time.

- In Coordinate geometry, the trick is to acquire good knowledge about various conic sections and learn to break down tougher questions to simpler basic ones and then, solve the question.
- Matrices can be used to solve equations. A 3X3 matrix visualized as three-planed 3D geometry, determinants that can be broken as two using a common summand from a row or column, and other such properties can help students take on tougher questions in less time.
- Using graphs to solve Algebra functions take less time. So, learn to apply vertical and horizontal origin shifts well. Differential Calculus, especially Rolle's and Lagrange's theorem, can help you solve roots of equations. Useful in solving trigonometric questions. Prepare Permutation - Combination and Probability well with special focus Baye's theorem, derangements and various ways of distribution. You should pay special attention to the fact that objects are identical or not.

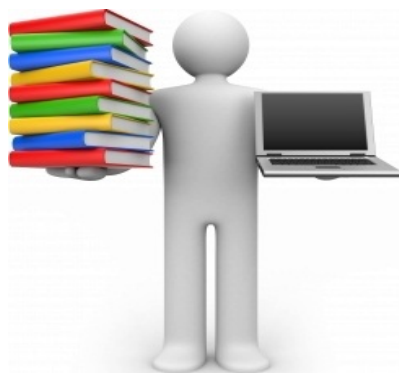
## **Chemistry**

- In Inorganic Chemistry, Coordination Chemistry and Chemical Bonding are important. Most of the questions are related to concepts related to structure, processes and applications.
- In Organic Chemistry, General section, Stereochemistry and Functional Group Analysis are important.
- Speed matters in Chemistry. So, practicing questions with conceptual clarity and applied knowledge of concepts can go a long way in solving Chemistry questions. Special attention should be given to topics like Chemical Equilibrium, Mole concept and Electrochemistry.

## **Physics**

- Mechanics should not be neglected in JEE Advanced as many questions are asked from this topic. Most questions in Mechanics are related to Particle Dynamics and Kinematics.
- To score more, topics Optics, Electricity and Magnetism, and Modern Physics are best.
- Thermodynamics is an important topic both in Physics and Chemistry that can be covered quickly too. One should take it up after mastering Wave Optics.

## **Online IIT preparation**



Online IIT preparation is ideal for students who choose to study at home. A – One Institute offers all the details about how to crack IIT JEE.

All the Best

For Enquiries and Support

Contact – A One Team