

How to start Preparation For IIT JEE

The best time to start preparation is at the beginning of 11th class. Students are fresh after the break after boards and a lot more can be learnt. Students who start late often end up leaving some key topics of 11th class JEE syllabus. Also, if you start your preparation in 12th class then the amount of hard work is increased manifold due to additional pressure of 12th boards, so chances of getting a high rank in JEE are decreased. There is a big transition from the mugging up study of 10th class to more understanding based study of 11th class. So you shouldn't get bogged down by seeing the level of complexity in JEE exam.

The first two or three months should be spent in revising your basic concepts (topics like algebra, mechanics) which had been taught in 9th class. Concepts in topics like algebra, mechanics and stoichiometry should be studied in great detail as they also form the basis for other topics and are very scoring. There should be no doubt in your mind about these concepts. For these, develop the habit of inquisition. Clear all your doubts so that mentally you feel confident tackling any concept. A key in this area is problem-solving. Regular problem solving not only strengthens the concepts, but also increases your mental sharpness which is must for JEE. Initially problems of low level should be tried and only when you have mastered them, you should go on to solving intricate JEE type problems. You should have systematic plan for the preparation of JEE. Regular hours should be allotted to mastering concepts and problem-solving. It is not necessary to memorise the lessons and formulae. Understand the derivations of formulae and apply the formulae to solving problems. Slowly these formulae will settle down in your brain and you will be able to recall them under any situation. What is required is a clear understanding and an easy familiarity with the concepts and laws. Maximum attention should be paid to solving problems. Try to be analytical rather than being intuitive. Remember that hardwork pays! You should first take up a problem and try to solve it yourself. You should understand what is given and what is required, recall what principles, laws, equations are involved. Don't hurry to see the solution as I doesn't help you to learn. Only when you've pondered over it over a long time and unable to see any light, should you see the solutions. You would be insulting yourself and seriously hurting your chances of success if you skip these problems or make half-hearted attempts in solving them. An other very important aspect of your JEE preparation will be the coaching institute, whose importance and selection procedure will be delved into in the next section.]

Temperal Balance

- Keep your cool during the paper. If you feel you are getting flustered, close your eyes for some time to regain your composure and concentration.
- Keep yourself in a cheerful and positive mood.
- If you feel tension rising during the paper, take deep breaths to release tension.
- Do not get demotivated or overexcited on seeing the question paper. Keep your balance. Demotivation will make even easy questions appear tough and overconfidence will make you commit silly mistakes.
- Do not get depressed by tough questions. Instead remind yourself that these questions are tough for every aspirant.
- Do not get emotionally attached to any question. It is not necessary that you will be able to solve a question from topics you have prepared well.
- Do not worry about the minimum cut-off marks for JEE. No one knows about the cut-off for sure, but no one has ever been rejected on the basis of any subject-wise minimum cut-off.
- Do not argue with anyone about anything before the test.
- Have faith in God and in yourself. Whatever happens to you will be for the best.

Keep depressing thoughts away

- First of all, realize that you are not the only one facing anxiety. Each IIT-JEE aspirant is facing the same dilemma.
- Also realize that if you have studied even 60% of JEE syllabus properly, you need not harbour negative thoughts. Your success at the screening test is ensured.
- Whenever you feel tensed, start a countdown from 50 to 1. It will help you release tension.

- Light stretching exercise also helps reduce pent-up tension.
- If you are feeling tensed, do not suffer alone. The company of friends and light chit-chat will help you divert your mind from negative thoughts.

Books For IIT-JEE

I suggest following books for IIT JEE preparation:

Physics

- MECHANICS
 - Physics by H.C. Verma
 - Problems in physics by I.E. Irodov
 - Resnick and Halliday
- ELECTRICITY AND MAGNETISM
 - Resnick and Halliday Circuits devices and systems by R.J. Smith
 - Problems in physics by I.E. Irodov
- OPTICS
 - Physics by H.C. Verma
- MODERN PHYSICS
 - Physics by H.C. Verma
 - Problems in Physics by I.E. Irodov
- HEAT AND WAVES
 - Physics by H.C. Verma
 - Resnick and Halliday

Chemistry

- ORGANIC CHEMISTRY
 - Morrison & Boyd
 - Solutions to Morrison Boyd
 - Reaction mechanism in Organic Chemistry by Parmar & Chawla
- INORGANIC CHEMISTRY
 - NCERT Inorganic Chemistry
 - Concise Inorganic Chemistry by J.D. Lee
 - IIT Chemistry by O.P. Aggarwal
- GENERAL CHEMISTRY
 - J.D. Lee
 - O.P. Aggarwal
 - R.C. Mukerjee

Maths

- ALGEBRA
 - High school mathematics by Hall and Knight
 - IIT Maths by M.L. Khanna
- CALCULUS & ANALYTIC GEOMETRY
 - G.N. Berman
 - Calculus and analytic geometry by Thomas and Finney
 - Coordinate geometry by Loney
 - IIT Maths by M.L. Khanna
 - I.A. Maron
- VECTORS
 - IIT Maths by M.L. Khanna

Course Planning

Course planning is essential in the sense, that it can get you at the top in rank list. This planning should be done by the student in 11th class itself. From this year, a screening test is being conducted and so proper planning becomes all the more important. Have a look at all the topics and shortlist topics, and months wherein you plan to complete them. Finishing syllabus at least a month before the exam is essential. The summer vacations in 12th class are the best time to finish a huge lot of syllabus. I can suggest the following course plan for students in 11th class.

JUNE TO OCTOBER : Mathematical concepts used in Physics, Basic mechanics, stoichiometry, general chemistry---atomic structure, chemical bonding, periodic table, algebra---number theory, quadratic equations, progressions.

OCTOBER TO JANUARY : Complete Mechanics, waves, Physical Chemistry--equilibrium, heat, kinetics, thermochemistry, electrolysis, algebra ----induction, complex numbers, trigonometry.

JANUARY TO MAY : Heat, fluid mechanics, gravitation, Inorganic chemistry---properties and metallurgy of metals and non metals, gas laws, analytic geometry, permutations and combinations, binomial theorem.

MAY TO AUGUST : Electrostatics and electricity, electrochemistry, solutions, solids, qualitative analysis, transition metals, differentiation and integration.

AUGUST TO NOVEMBER : magnetism, optics, modern physics, organic chemistry, differential equations, probability, vectors.

NOVEMBER TO DECEMBER : FINAL REVISION

By following this plan, course will be finished in time and revision can also be done, to ensure maximum success in JEE. To maximize your potential you have to plan. My next topic tells you about certain important topics to which special interest should be given.

Important Topics

Choosing the right topics for maximum study is very important not only for clearing JEE but also for getting a high rank. Lots of topics in JEE syllabus require a huge lot of time, incomparable to that required by other topics. Spending too much time on these topics and ignoring other topics leads to drastic failure in rank. Lots of topics in JEE are very easy and are of NCERT level. The key to topping JEE is to maximize your scoring in these topics which boosts the rank. Many such topics require considerably less time and are much less than the time required by certain other topics with proportionate marks. You should spend more time on these topics and try to earn full marks in such topics. I list a few of these topics:

MODERN PHYSICS AND ELECTRONICS : Most of the questions are easy and similar to past JEE questions.

WAVE OPTICS : Most of the questions are similar to past JEE questions

INORGANIC CHEMISTRY AND GENERAL CHEMISTRY : Most of the questions are of NCERT level and are simple.

SOLID STATE : Most of the questions are very easy.

PROBABILITY AND DIFFERENTIATION : Most of the questions are simple and NCERT level.

DIFFERENTIAL EQUATIONS : Most of the questions are similar to past JEE questions.

By spending legible time on these topics, the scoring in JEE will be boosted and only will you clear JEE but also get a high rank. But beware, don't neglect these other topics. In topics like mechanics, electricity, physical chemistry and analytical geometry, if the concepts are clearly understood then many of the questions pertaining to these topics can be easily handled. My next topic discusses the marks and the rank which can be expected with those Examination Strategies For IIT JEE

Things to keep in mind one day before the examination:

- You need at least 6-8 hours of sleep before the examination to keep yourself fresh while solving questions.
- Eat a light meal so that you do not feel drowsy or lethargic during the paper.
- Revise only those topics that you have studied earlier. Do not start reading any new topics just before the examination, since this will be a waste of time and you may lose the information you have already grasped.
- You should reach the test center at least half an hour before the exam and if you haven't seen the center before, then you must go and visit the center on the day before the exam.
Note: If your examination center is in another city-
 - Reach the city positively on the day before the exam.
 - Ensure the place of your stay there is calm, clean and conducive to study.
 - In actuality it does not make any difference whether the center is in your city or in some other city. So get the fear of an unknown city out of your mind.
- Never go to the center on an empty stomach. Always keep biscuits, fruits etc. handy.

- Some students complain of nausea or headache close to the test. So keep relevant medicine handy.
- If you plan to ride your own vehicle to the center, ensure it is in proper running condition and has enough fuel in its tank.
- If you do not have a vehicle, ensure a means of traveling that reaches you to the center well in time, and give at least half an hour of time for unforeseen delays like traffic jams and rush hour traffic.
- Keep a wristwatch, your permission letter, a pen, two pencils (sharpened at both ends), an eraser, a sharpener and other relevant stationary systematically with you.

Some important points to keep in mind during the examination

General Instructions

- Synchronize your wristwatch with the center clock.
- Open your permission letter and keep it on your table.
- Do not use a red pen.

Points regarding presentation

- Start attempting the question paper only after reading the instructions given on it very carefully.
- While attempting questions, go on segregating them by the A, B, C method **A** :These questions are from topics that you have prepared well, and you can clearly comprehend the meaning of these questions. You have done questions containing similar concept earlier and you are confident that you will be able to solve these. **B** :You know you can solve these questions but they are time-consuming, nevertheless you are confident you will be able to crack them when you come back to them. These questions should be attempted in the second round of question attempting, i.e. when you have solved all questions marked with a B. **C**: You don't know head or tail of these questions and you should not waste time attempting them.
- Attempting to solve all questions in haste increases the chances of error. It is better to solve slightly fewer questions faultlessly.
- Never attempt two questions at the same time. Concentrate on one question at a time.
- Carry out all rough work only in the space given in the paper.
- If you need a diagram to understand questions in say physics or coordinate geometry etc., do make one.
- Use the value of constants given in the paper in solving a numerical. If the value is not mentioned, use the one you remember.
- Give all three subjects equal time. While attempting the answers, do not shade the answer key immediately. Instead, tick your response with a pencil 4 on the answer key.
- Keep marking questions with A, B, C in the first round of solving the paper. All questions should be segregated into one of these three categories. This saves valuable time later.
- Fill out the answer key 30 minutes before final time. Fill out the responses to questions attempted after this directly in the answer key.