



How to prepare for  
JEE Main &  
Advanced Exam

**THE COMPLETE  
GUIDE**

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Preparing for the JEE Main exam will be one of the most rewarding things for your career and days to come. Having strong basics in Physics, Maths and Chemistry can really open up a lot of avenues for you in the future.

More than preparing for JEE Main exam, think about these 2 years (or 1 year?) as your foundation stone towards a brighter future in terms of better grades during your Engineering College, Interviews for high paying jobs, Higher Studies – the list is endless.

The JEE main and the advanced examination has evolved over the past many years. When I took the examination it was called the IIT JEE and in its current avatar, it is called the JEE Main and the Advanced exam. Here is an interesting post about the [history of IIT and its Joint Entrance Exams](#).

## How to start your JEE Main & Advanced 2016 / 2017 Preparation?

I have divided this entire post into 11 different parts:

1. [Time management](#)
2. [Follow a schedule / Prepare a plan](#)
3. [Know the syllabus and the exam pattern well, weightage](#)
4. [Coaching Classes – Online or Offline? Self-study.](#)
5. [Study concepts, solve problems, look at solutions](#)
6. [Solve previous years papers](#)
7. [Take timed practice test series](#)
8. [Group study, hangout more with toppers](#)
9. [Health is wealth](#)
10. [Manage Distractions – selfcontrol app](#)
11. [Retrospect your day](#)

Lets begin!

### 1. Time Management

Even before I go into tell you about how you should prepare yourself for the Maths, Physics or Chemistry, you need to pay attention to this – Without time management no magic is going to help you reach your goals, which is All India Rank 1!



*Time – nothing is more precious than this!*

Realizing this fact of planning, we can make time our friend rather than making it our foe. Always remember – “You need to work smarter in addition to working hard”

There is a difference between sitting with a book 18 hours a day and actually studying 18 hours a day. And you don't want to sit with a book 18 hours a day you need to put your time to good use as it is limited.

[Managing your time](#) over the next 2 years / or 1 year is the most crucial thing that you need to focus on. Not only this, you also need to [manage your time during the 3 hours of your actual JEE Main / Advanced exam](#).

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Here are the 5 key mantras of Time Management for JEE Exam Preparation:

a) Complete the most important tasks first – Studying that one chapter in say, Organic Chemistry is more important now than checking out what is the latest movie release or iPhone game on the block.

Once you have done the important task first, you will have a sense of accomplishment and that will lead you to the next important task.

b) Learn to Say NO to friends & family – I am not saying you cut yourself off from your friends or family while you prepare for the JEE. There will always be that friend who tried to distract you from your preparation, tell them a polite NO!



*You can be a jedi, but dont try hard to be one!*

Friends and family are always going to be around but if you lose these valuable two years of preparation, you are not going to get this time back either. So, you decide!

Parth Kothari, IIT Bombay, AIR 11 in JEE Main says, “I knew that if spent too much time with friends, then I could not make it to IIT Bombay ever. I know people felt that I am avoiding them but the news of my success must have made them proud”.

c) Don't procrastinate and aim for incremental improvement. My friend Atul was a genius in Maths but he could not clear IIT JEE because he use to postpone studying other subjects like Inorganic Chemistry.

$$1.01^{365} = 37.7834$$

$$0.99^{365} = 0.0255$$

*Law of 1.01 – Incremental improvement*

Above image is a great analogy of Incremental improvement. It is called the 1.01 Law:

- When we put that out 1% more effort every day, our progress can grow by 3800% in one single year.
- When we slack off 1% every day, we do not progress, rather we push ourselves to failure!

If you do not like a subject then do not waste time by postponing it, take baby steps towards studying it and gradually you will become a master!

d) Turn important tasks into habits – There is a well known theory that for any task to become a habit you need to do it for 21 days at stretch, and it will eventually become a habit – be it a good habit or a bad habit.

Make it a habit of revising important formulae and concepts in the morning, especially those which you studied the previous day. Follow this tip and it will work wonders.

Harsh Singh (IT BHU 2006) told me once that he was having a hard time memorizing reaction reagents in Organic Chemistry. He was frustrated as he could not remember any reactions and their reagent effects. But he was determined to succeed.

Instead of losing hope, he would daily spend 30 mins at night before sleeping and 15 mins after the woke up the next day to just go through his reagent notes. This was so helpful for him that he not only topped the Organic Chemistry part test of FIITJEE but also cleared IIT JEE with a good rank.

e) Set a time duration to everything you do – Our brain is a funny object! If you tell it that you have just 1 hour to study a chapter, it will give you reverse feedback and make sure that you finish it in not more than an hour.

However, if you set aside 4 hours for something that could be done easily in 1 hour, our brain will be slow in that process and it will end up making you take those 4 hours to complete the task – what a waste of time.

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## 2. Follow a Schedule, Make a Plan



### *Make a To-Do List*

Remember, I told you about making a habit in the last point. Right from tomorrow, when you get from bed, make it an habit to spend 15 – 30 minutes to plan your day.

Planning your day will set the fact in your brain that you have X number of tasks to complete and thereby you will waste much less time. See, how time management and planning your day are so related!

Here is how you can plan your day in 7 easy steps:

2.1. First, get a calendar, a dairy and a pen – to make a planner to routine up your time. You could also use mobile apps like Wunderlist or Any.DO.

Always remember you have to utilize every bit of time you have got. Check your dates and make an organized plan for your upcoming preparations which is going to save a lot of time of yours, after all time is our personal asset we can't waste it right?

Eliminate the wastage of time from your schedule like watching movies, sticking to your phone for a long time etc. And you will see that you are gaining control over your time easily.

BONUS: You can [Download our Study Planners for JEE Main & Advanced](#) 2016, 2017

2.2 You have to wisely plan your schedule. You have to mark your priorities first the work you cannot skip like lunch, classes and seminars.

2.3 Point out a long time of your day for studying which will be your main job for these days. You will be mostly busy during the day with School, Classes – so allot time for after evening for your self-study.

Take a short break period between every other subject you study and a little for reviews.

2.4 Your Health and fitness are crucial for a good preparation. Keep some time aside for yoga or exercises which will reduce your stress and help you to relax.





*Find out time to play or exercise daily*

You will be surprised to know that bad health is one of the [top reasons why hard working students fail to secure top Ranks](#) in JEE Main!

2.5 Plan your activities wisely as well as logically like, take a copy of your notes with you whenever you visit cafeteria. You can use note taking mobile apps as well.

2.6 Sometimes when you fell sleepy between your schedule don't just lie down and let yourself fall asleep instead take a break and walk to the library. Power naps are something that you might consider, though.

My friend Ruthika (IIT Bombay 2005) gave me a great tip about sleeping during these rigorous JEE Preparations. She said she slept for 6 hours at night, then 1 hour in the mid morning and 1 hour after coming from school. Here is what her sleep schedule looked like:

- 10pm to 4am – 6 hour sleep
- 8am to 9 am – 1 hour sleep
- 5am to 6am – 1 hour sleep

2.7 Don't rush to study all the time instead get enough sleep which will refresh your mind and body and will help you to work more effectively.



*Sleep Well, Sleep Tight!*

I cannot stress the importance of planning your day more. It is the most important thing.

Last week, I met up with an ex-student of mine who confessed to me that he could have easily gotten a better rank and could have studied his dream branch (Comp. Sci at IIT Delhi) had he planned his days carefully and not wasted his time by studying haphazardly.

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### **3. Know the syllabus and the exam pattern well (including weightage)**

The JEE Main and Advanced Syllabus is vast and in order to get a very good rank you must make sure that you go through all the 3 subjects and have almost equal command over all of them.

You should study all the important topics first and then solve ample problems in order to gain mastery over them. Certain topics in the JEE Main & Advanced syllabus has more weightage over others, so

laying more stress on these important topics will help you score more marks in the actual exam and thus fetching you a top rank!

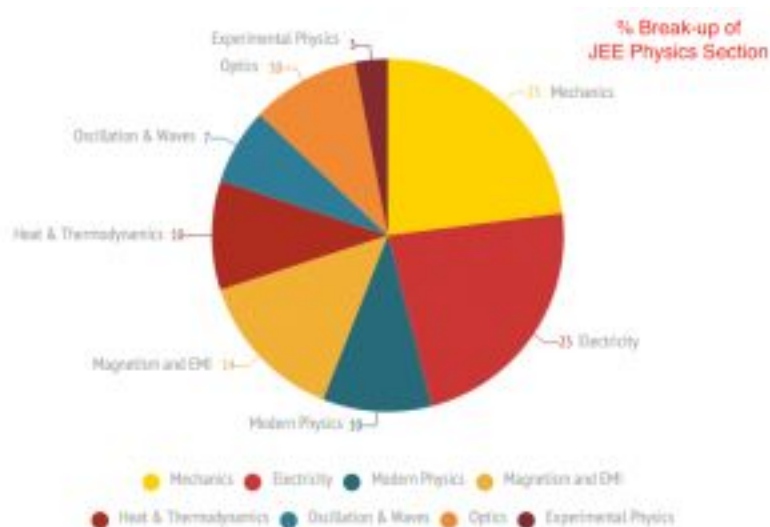
The tough topics obviously have more weightage so without any concession you ought to study them properly. Also, this would let you divide your time well in advance among the various subjects.

Before you start your preparation you must go through the [List of most important topics in JEE Main & Advanced](#). Apart from these you should also study the Expected chapter weightage in the JEE Main syllabus which can be found [here](#).

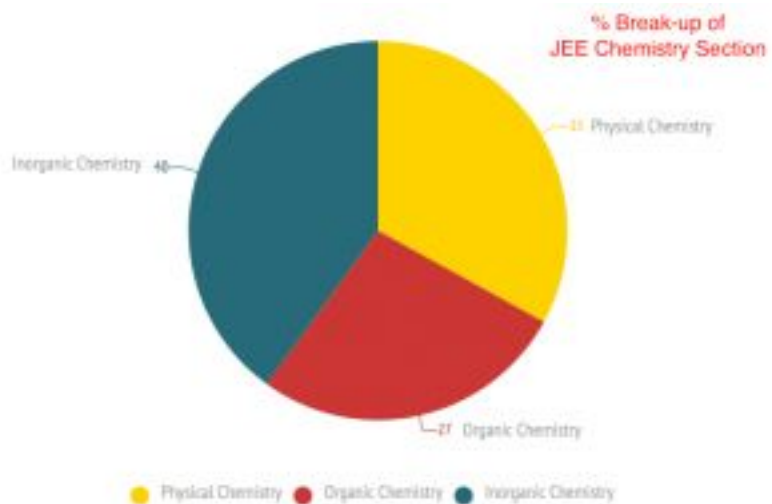
Paper pattern for Online & Pen-Paper JEE Main Exam:

- Objective type question with multiple choices – 4 marks for correct answer, -1 mark for wrong answer
- Equal weightage to all 3 subjects – Physics, Chemistry & Maths
- Total time duration – 3 hours

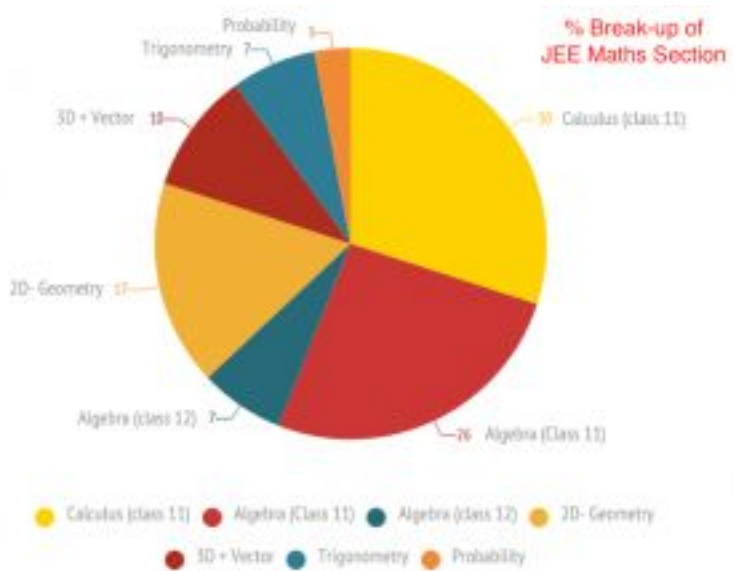
Shown below are graphs of sectional breakups of Physics, Chemistry & Mathematics: (You can click / tap on the images to enlarge them)



*JEE Main & Advanced – Physics Weightage*



*JEE Main & Advanced – Chemistry Weightage*



*JEE Main & Advanced – Maths Weightage*

[Graph source](#)

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## 4. Coaching Classes – Online or Offline?

Coaching classes are a crucial part of your JEE Preparation. Be it Main or Advanced, having crystal clear concepts will always help you in scoring high and getting that extra edge over others in the exam.

Back in the day when I was preparing for IIT JEE, I and other JEE aspirants all across India had access to only physical coaching centers. It used to be the best option to prepare for JEE exams back then. But now you have access to study materials and lectures right at your finger tips, thanks to the online revolution in India.

According to some [stats](#), 45 – 50% students are now opting for Online Coaching classes as compared to the physical media such as coaching classes and study centers.

Let us quickly go over the pros and cons of both these types of coaching classes.

Advantages of Online Classes for JEE:



Study at your own pace

- Refer to video lectures over and over again
- Study from the comfort of your home, no need to travel to the coaching centers
- Track your progress easily using online tools
- Ask multiple questions & doubts
- Online study groups promote quick interaction

### Disadvantages of Online Classes for JEE:

- No face-to-face interaction with other students
- Easy to lose track get lost in the overwhelming syllabus

### Advantages of Offline Classes for JEE:



- Direct interaction with the teacher
- Interaction and networking with fellow students
- Set schedule for going through different topics

### Disadvantages of Offline Classes for JEE:

- Can't ask lot of doubts to the teacher owing to time limitations
- Traveling to and from the coaching institute will make you tired and is a big waste of time

Whatever it is, in both the media of coaching, the student, that is you have to devote time separately for self-study. After learning new concepts in the coaching class, you must try to apply these concepts and solve ample problems.

Prof. Raman Khanna who is a well known figure in JEE coaching thinks that students can benefit by joining either mode of coaching – online or offline. Since the exam is very competitive, it is

recommended that you join atleast one form of coaching. Although, it is not uncommon to find JEE top rankers who did not take any coaching at all and did just self-study.

Remember, the JEE Main exam will have only and only problems to solve – no theory questions!

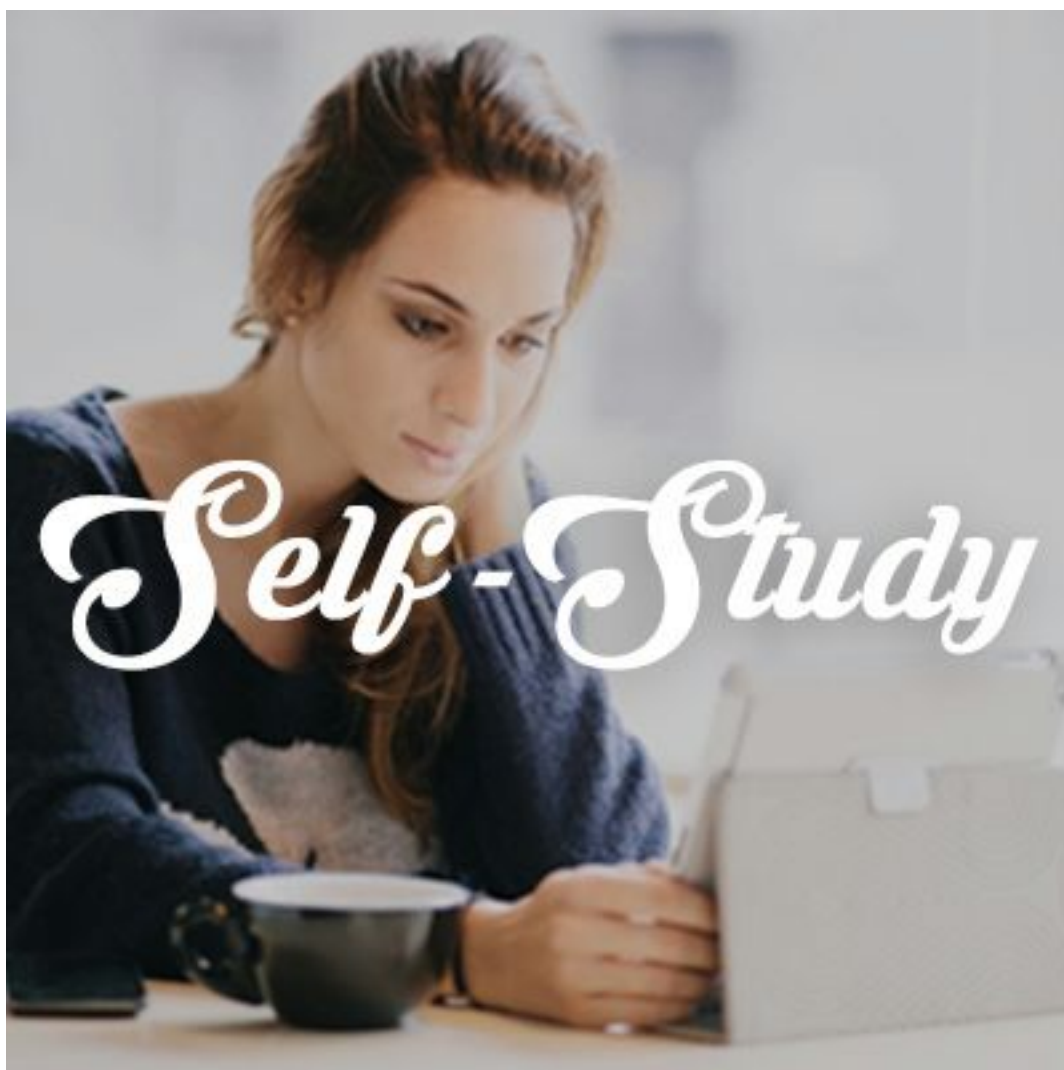
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## **5. Study concepts, solve problems, look at solutions**

No matter how many coaching classes you join or how many more study materials / books you buy, you have to spend time studying these materials and lecture notes.

Self-study is one of the most important aspects of your JEE Main & Advanced preparation.

The more time you devote towards clearing your concepts in various topics of Physics, Chemistry and Maths – the better are your chances of getting a top rank in the JEE



Lay more stress to those important topics in the three subject which carry the most weightage. You can check the graphs above in Section 3 to find out which topic has how much weightage. You can also take a look at our [JEE Main & Advanced Subject topic Weightage breakdown](#) post.

NCERT books are a must of starting and finishing your JEE Preparation. You can also refer to [additional books for more concept clearing](#) and strengthening your fundamentals.

Now comes the most important part after you finish studying – problem solving and concept building. You should solve as many problems as you can after going through a topic. The more you practice, the more your foundation becomes stronger.



Our [practice platform](#) has more than 7500 great questions that you can try for free. And once you are done solving, you can go through the expert's solution right then and there. Go through these solutions to learn how to approach different types of problems and also try to pick the tips & tricks mentioned in the solutions.

Looking through solutions is a good way to learn different methods of solving questions. But you should refer solutions only after you try the question sincerely as your first attempt.

### Group Study

Studying in groups can be another effective way to study, provided you find the right partner to study with. Studying in groups can also accelerate your JEE preparation and you can see yourself achieving more in less time.



You can join our Private Facebook Groups at these links:

- [Private group for Physics Prep – JEE 2016, 2017](#)

[JEEMainOnline.in](#) - Go get that EnJEEneering degree!

- [Private Chemistry group for JEE Prep](#)

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## 6. Solve previous years' papers

Always remember, there is nothing called a new question. The JEE Main or Advanced examiners have to test students year after year on the same concepts in order to establish the credibility of the student as to whether or not he or she is capable of making it to the IIT or NITs!

And, questions do repeat.

More than that, solving previous year's JEE question papers help you understand the mindset of the teachers and professors who actually set these questions for the Mains or Advanced exam.



Apart from this, you get additional confidence by solving questions that had appeared on an actual JEE Exam which is a testimony to the fact that you will be able to tackle similar problems in your JEE exam pretty easily.

I got a chance to work with a professor during my time at IIT Bombay for one of his research projects. Gradually I found out that he was also involved in the JEE paper setting committee many years ago. He told me a very important thing that I remember till this date:

“Concepts never change, problems change. And with so many years that are passing by since the first JEE took place, I try to test students on the same concepts year after year”

Annandam Neelamekam was a top ranker in IIT JEE. I do not remember the exact year, but I guess it was 2002. He told me once that he had to take care of a dying family business in addition to JEE prep – the only way he managed to get a good rank was by solving past year’s papers after studying the concepts!

You can look for [books that have compiled previous years’ JEE Papers](#) in all the three subjects with detailed solutions.

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## 7. Take time-bound practice test series

“Practice makes a man perfect” – is a very old saying that is valid in any field of life. You want to be a good singer? You need to practice a lot first!

Same applies to your JEE Main preparation. The only way you can work your way through to a top rank in the JEE Main or advanced exam is to practice a lot.

The practice makes you perfect quote is actually [backed scientifically](#)! Our brain has a special type of brain tissue called myelin, that plays a key role in helping us acquire and master skills. It has been proven in a research that any neural activity in the brain that has been induced by practicing something, causes the growth of Myelin – the very tissue that helps us master something.



But, note that practicing blindly won't cut it. You have to practice those problems which test your concepts in a challenging way. Vince Lombardi, world famous American Football player and coach, once said – "Practice does not make perfect. Only perfect practice makes perfect."

Practicing daily is very important for your entire JEE Preparation. You can use our free [Practice Platform](#) to solve unlimited questions of varied difficulty levels and sharpen your skills.

Apart from practicing single questions you should also take full length time-bound part tests to gauge your progress and also work on your speed – like how fast you can solve a problem and how well you can finish your exam in time.

You should also join an All India Test Series to test yourself against 10,000 other smart students on an all India level. This will help you find out where you stand in reality – what all topics you are weak in and where you need to work harder.

However, remember to practice both tough as well as easy problems. Don't get carried away trying to solve just the tough ones.



Nehal Rathore, IIT Ropar focused on practicing just the tough problems and paid the price. He says that he had a solid preparation and practiced very tough problems for JEE. According to him, he totally neglected solving some simple problems and as a result he started thinking in a complicated way even

for simple questions. You know what, he lost time, marks and eventually rank in the JEE Main due to this!

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## 8. Follow the toppers, find a Mentor – “you become whom you hang out with”

This is a well known [fact](#) that “You are the Average of the 5 People You Spend the Most Time With”. So, you want to get All India Rank 1 in JEE Main or advanced? Then hang out with people who have been there and done that before.

You want to score the highest marks in your JEE Exam? You should probably be friends with the students who are otherwise famous as “toppers” or “bond”.

If they do not think you are worthy of their friendship then do not lose hope, do something good for them – like complement them for their hard-work and knowledge, praise their efforts and let them know about your desire of getting helped! Keep yourself at it, they are surely going to change their ways



Finding yourself a great [mentor](#) is something that you should do right away. Students who have cleared JEE Main or advanced or IITJEE in the past are usually very helpful in guiding their juniors at clearing the exam.



*5 things that a mentor does for you!*

Benefits of having a mentor are many fold, such as:

1. You will not have to waste time trying to study a topic which you gradually find out that it has very less weightage. A mentor can tell that to your right away
2. Motivation is another reason why you should have a Mentor. You will always remain motivated by hearing stories about your mentor as to what all he / she does at IIT or what they are currently doing after graduating from IIT
3. You get First-hand tips about JEE preparation – what works and what does not.

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## **9. Health is wealth**

The most crucial factor in your entire JEE Main exam is nothing but your health. If you stay healthy throughout the entire 1 or 2 year preparation period for JEE up to the actual exam date, then you can expect the best rank provided you gave your best on the final exam.



If you are not healthy, you will come across so many distractions that your preparation will not be as effective as it would have been otherwise.

Eat properly and like I mentioned once already – get proper sleep. Don't go to bed right after having dinner. Make sure you give your self 90 minutes to 2 hours after dinner and before calling it a night.

Here are some proven health tips that you might want to keep in mind:

- Take out 30 mins to 45 mins from your schedule to do some light exercise or play games like Badminton, football or cricket.
- Take bath regularly
- Eat more green leafy vegetables and proteins
- Drink enough water regularly
- Avoid processed food like chips, soft drinks, kurkure etc. These can be consumed once in a while.

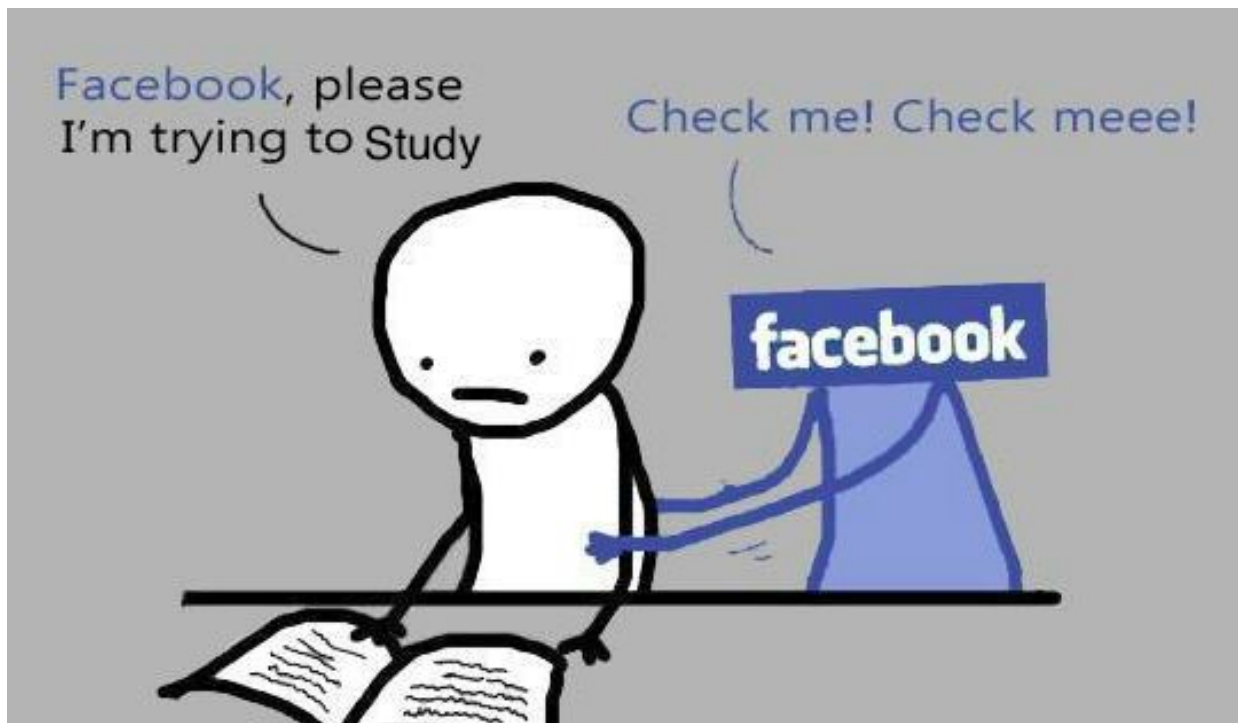
[More here](#)

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## 10. Limit Distractions like Whatsapp, Facebook, Instagram

With so many online portals these days like Facebook, Whatsapp chat, Instagram, LinkedIn and Instagram – it is very easy to waste time and completely get lost in them. These distraction can negatively affect your preparation and let you down in a Big way.



Although Facebook Groups are an effective way to keep in touch with 1000's of students preparing for JEE Main & Advanced but you should make sure that you limit your usage of these platforms to a bare minimum every day.

If you are not able to control your urge to check Facebook or Instagram frequently on your laptop, then you should use this cool application called [StayFocussd](#) or [SelfControl App](#). These applications will help you block these websites for specific time period during the day.

You can also block usage of certain applications on your smartphone using apps [that are available](#) on the Android Play store or iPhone App Store.

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## 11. Retrospect your day

After you have finished studying for the day, spend 10 – 15 minutes thinking what have you achieved during the entire day. Lay stress on things like:

1. Where did you waste your time most?
2. How can you optimise your time better for tomorrow?
3. Could you achieve your plan for the day?
4. If not, how can you tweak your timings to study more effectively?

Thinking about things like these will not only help you keep your preparation in check for the coming 2 years, it will also help you in the long run to become an organised individual!

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Do let me know what do you think about the tips that I mentioned above. You can contact me directly on my email [shruti@jeemainonline.in](mailto:shruti@jeemainonline.in) or post a comment below.