PACE Educational Trust

PACE Junior Science College

Andheri | Dadar | Borivali | Nerul | Powai | Thane

HSC EXAM AND IMPORTANT POINTS

CHEMISTRY PAPER

- ✓ Only the definitions and laws need to be memorized. Explanations can be written in own words remembering the key words.
- ✓ For mcq's write option as well as its answer eg. i (a) methane.
- ✓ Questions can be done in any order.
- ✓ Attempt sub questions together.
- ✓ Use logs for calculations, answer should be accurate Up to 2 places after decimal.
- ✓ You can do extra questions, your best ones will be considered.
- ✓ For numerical, write each formula
- ✓ Write point wise.
- ✓ Attempt all questions, as for incorrect questions you will get bonus marks.
- ✓ Answers should be according to text book.
- ✓ All inorganic reactions must be balanced.
- ✓ All organic reactions should be balanced unless they are not balanced in the textbook.
- ✓ Proper conditions are to be written for organic reactions.
- ✓ For reactions of 1 mark, no description is required, but for more marks description using key words should be written.
- ✓ In chemistry part 2. There are many out of syllabus questions given in exercises, only those questions can be asked if their answers are in the textbook.
- ✓ For example in the textbook, in the chapter of Aldehydes, Ketones and Carboxylic acids, under the section of aldol condensation ,only four examples have been discussed ,but in the exercise Q.9,page 480, eleven different examples have been asked. No need to learn these examples.
- ✓ Do only those in text questions which are straight forward and within the scope of textbook.
- ✓ Do not learn complicated structures of molecules in the chapters of Biomolecules and Chemistry in Everyday life. Eg. Omit the structures like: Morphine, Codeine, Heroin, Penicillin, Chlordiazepoxide, DNA, RNA, Cholesterol, Testosterone etc, Learn simple structures like aspirin, BHA, BHT, Equanil, Glucopyranose, Frutofuranose, maltose, Cellobiose etc.
- ✓ In Chemistry Part 1, in exercise questions many questions are missing, example the construction and working of SHE in electrochemististry, such questions can be asked.
- ✓ Do textbook numerical thoroughly, values in numerical can be changed.
- ✓ Graph of Ellingham diagram, not to be learnt

PHYSICS PAPER

Physics. It's a love or hate thing, and if you're doing it for the HSC, hopefully you love it! To smash physics, you need to not only be able to understand some pretty difficult physical concepts, but crucially, be able to explain them. You also need the ability to reason, alongside some pretty neat maths skills.

Physics is not the easiest subject, but if you can do well, it's likely to scale very nicely for you and contribute towards a high ATAR. With just a little time left before the exam, I thought I'd cover a few things that got me through!

1. Practice the multiple choice section

Do a practice of the multiple choice segment, randomly generated from past questions of the HSC Board.

2. Rely on the syllabus

The HSC Physics test, like every other HSC subject, will be determined by the syllabus. Often, you will find that the exam questions that you get are just a rewording of the syllabus dot points. Compared to English or Maths, each HSC Science subject has a syllabus that is far more prescriptive. That is, everything which you can and will be examined on is clearly stated on the syllabus. So know it, go through it and tick off each point!

3. Thought experiments

Be comfortable with thought experiments i.e. when you use your imagination to test a concept in your head. Think of Einstein's famous relativity thought experiment with the train and the speed of light. I actually had a question in my HSC physics exam asking me to explain that particular thought experiment with diagrams – so make sure you know it just in case!

4. Key terms

Make sure you understand key words such as 'discuss,' 'analyse' and 'explain.' These words are used consistently in all exams, so double check their meanings in the HSC Text book. You need to know them in order to give the type of response that the markers are looking for

5. Draw diagrams like a boss

If the question does not specifically ask you to draw a 3D diagram, then it's best to just draw a simple 2D diagram. If you have to draw a labelled diagram, then make sure you label all the critical parts (no harm in labeling extra). Even if not requested, use a diagram in any answer if you think it helps illustrate what you're talking about. Finally, make sure you draw the diagram and labels in pencil so that mistakes can be easily rubbed out.

6. Show working

If the question requires some sort of working with numbers, make sure you show every step of working, and check which units you're using!