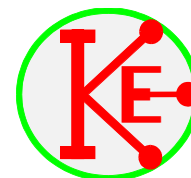


Answering exam questions.



There is no secret to doing well in Physics examinations. You just need to:-
do as many past paper questions as possible as revision,
answer the question that you are asked,
keep to time.

Most examination questions will start with command words that tell you what you must do.
Common ones are listed below in order of difficulty:-

Command	What it means
List	Recall items and write them in the form of a list – no need to go in detail.
State	Write what you are asked about in a clear, simple and ‘to the point’ way. Do not explain or clarify, or ‘waffle’.
Give	Outline your points briefly.
Outline	Give the main features or general idea.
Define	This should be a memory test. Write down the exact meaning of words, terms, etc you have learned. Give formulae if appropriate. Do not waffle unless desperate.
Recall	You are expected to retrieve from your memory facts that are relevant to a given situation.
Describe	State what it is by giving a complete picture. A more detailed version of ‘State’.
Distinguish	You can only distinguish between things, so there will to be two or more things given in the question. Write about the features of each of the things that make them different from each other.
Explain why	Often candidates give a description instead of explaining. Aim to write three sentences. The first should make your point. The second should qualify your first and a third should be used to clarify the other two using an example.
Explain how something works	List the sequence of operations in a logical order, amplifying each step as necessary
Identify	Apply your knowledge selectively to the context or the situation described in the question. Avoid ‘waffle’.
Illustrate	Clarify or explain using examples. If there’s a scenario, give a relevant example. If not, pick whichever you like. Depending on the question you could draw a diagram or do a quick calculation as a way of illustrating.
Apply	Showing how theory works in practice. Give examples.
Calculate	Do the maths and show your workings Formula, Substitution, Answer
Estimate	Same as Calculate but no need to use exact numbers.
Demonstrate or Show that	You need to show or prove something to be true, beyond any doubt, or show that it applies in the situation described, by giving evidence.
Use	Requires you to apply your knowledge and understanding of physics, including formulae, to a given situation.

Analyse	This is asking you to examine something in detail. Break it down into smaller parts and give detailed explanations with examples if appropriate. Give facts rather than opinions. Avoid 'waffle'.
Examine	Inspect carefully or look at in detail; investigate.
Classify	This is asking you to arrange or put things into groups or classes. You will need to explain why you have put each in a particular list and not one of the others.
Compare and Contrast	Explaining how things are similar and how they are different (similarities and differences). For example, compare and contrast a pig and a dog – they both have four legs (similarity) but one barks and the other grunts (difference).
Summarise	Giving the important ideas in brief. Look at the number of marks to see how many points to include. Don't 'waffle'.
Discuss	This requires you to write a few sentences, for example, to describe an application of physics or explain a given situation using principles of physics.
Review	Giving an overview of ideas and establishing their qualities, features, advantages and disadvantages.
Interpret	Explain your view of facts and ideas and how they relate to one another. 'Interpret' is often the second stage of 'analyse'.
Explore	This requires you to use information that is provided, together with your own knowledge of physics, to solve a problem or explain a given situation.
Investigate	You are expected to have carried out an experiment to achieve outcomes that use this keyword. Consequently you may be asked to describe experiments or interpret experimental data for outcomes using this keyword. You may also be asked questions related to experimental work, for example, evaluating the validity of conclusions that are based on experimental data.
Evaluate	This has two meanings which will depend on the nature of the question. 1). This will be asking you to perform a calculation if numerical information is given. Show all working. 2). This is asking you to judge the worth, importance or value of something, often by comparison with something else. Think of this as a higher level discussion. E.g. evaluate the outcome of your experiment.
Suggest / recommend	Give your view. This is normally the last requirement in a question because you first need to identify, explain and evaluate before you can recommend or suggest a way forward.

For the exam:-

Know when it is – exact dates and times.

Prepare your equipment the day BEFORE the exam:-

pens, soft pencils, calculators, rubbers, rulers, ID card etc

Arrive ahead of time and go to the toilet!

Read the instructions for the paper – note number of marks and time allowed.

Aim for 1 mark per minute

Write clearly so that the examiner can read your response.

Attempt all questions, **NO** answer always means **NO** marks