Command terms for physics

Students should be familiar with the following key terms and phrases used in examination questions, which are to be understood as described below. Although these terms will be used frequently in examination questions, other terms may be used to direct students to present an argument in a specific way.

These command terms indicate the depth of treatment required.

**Assessment objective 1**

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| **Command term**  | **Definition**  |
| **Define**  | Give the precise meaning of a word, phrase, concept or physical quantity.  |
| **Draw**  | Represent by means of a labelled, accurate diagram or graph, using a pencil. A ruler (straight edge) should be used for straight lines. Diagrams should be drawn to scale. Graphs should have points correctly plotted (if appropriate) and joined in a straight line or smooth curve.  |
| **Label**  | Add labels to a diagram.  |
| **List**  | Give a sequence of brief answers with no explanation.  |
| **Measure**  | Obtain a value for a quantity.  |
| **State**  | Give a specific name, value or other brief answer without explanation or calculation.  |
| **Write down**  | Obtain the answer(s), usually by extracting information. Little or no calculation is required. Working does not need to be shown.  |

**Assessment objective 2**

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| **Command term**  | **Definition**  |
| **Annotate**  | Add brief notes to a diagram or graph.  |
| **Apply**  | Use an idea, equation, principle, theory or law in relation to a given problem or issue.  |
| **Calculate**  | Obtain a numerical answer showing the relevant stages in the working.  |
| **Describe**  | Give a detailed account.  |
| **Distinguish**  | Make clear the differences between two or more concepts or items.  |
| **Estimate**  | Obtain an approximate value.  |
| **Formulate**  | Express precisely and systematically the relevant concept(s) or argument(s). |
| **Identify**  | Provide an answer from a number of possibilities.  |
| **Outline**  | Give a brief account or summary.  |
| **Plot**  | Mark the position of points on a diagram.  |

**Assessment objective 3**

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| **Command term**  | **Definition**  |
| **Analyse**  | Break down in order to bring out the essential elements or structure.  |
| **Comment**  | Give a judgment based on a given statement or result of a calculation.  |
| **Compare**  | Give an account of the similarities between two (or more) items or situations, referring to both (all) of them throughout.  |
| **Compare** **and contrast**  | Give an account of similarities and differences between two (or more) items or situations, referring to both (all) of them throughout.  |
| **Construct**  | Display information in a diagrammatic or logical form.  |
| **Deduce**  | Reach a conclusion from the information given.  |
| **Demonstrate**  | Make clear by reasoning or evidence, illustrating with examples or practical application.  |
| **Derive**  | Manipulate a mathematical relationship to give a new equation or relationship.  |
| **Design**  | Produce a plan, simulation or model.  |
| **Determine**  | Obtain the only possible answer.  |
| **Discuss**  | Offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Opinions or conclusions should be presented clearly and supported by appropriate evidence.  |
| **Evaluate**  | Make an appraisal by weighing up the strengths and limitations.  |
| **Explain**  | Give a detailed account including reasons or causes.  |
| **Hence**  | Use the preceding work to obtain the required result.  |
| **Hence or otherwise**  | It is suggested that the preceding work is used, but other methods could also receive credit.  |
| **Justify**  | Give valid reasons or  |
| **Sketch**  | Represent by means of a diagram or graph (labelled as appropriate). The sketch should give a general idea of the required shape or relationship, and should include relevant features.  |
| **Solve**  | Obtain the answer(s) using algebraic and/or numerical and/or graphical methods.  |
| **Suggest**  | Propose a solution, hypothesis or other possible answer. |
| **Sketch**  | Represent by means of a diagram or graph (labelled as appropriate). The sketch should give a general idea of the required shape or relationship, and should include relevant features.  |
| **Solve**  | Obtain the answer(s) using algebraic and/or numerical and/or graphical methods.  |
| **Suggest**  | Propose a solution, hypothesis or other possible answer. |