VCE Physics: Performance descriptors

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| **PHYSICS****SCHOOL-ASSESSED COURSEWORK** |
| **Performance descriptors** |
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| ***Unit 3******Outcome 1******Analyse gravitational, electric and magnetic fields, and use these to explain the operation of motors and particle accelerators and the orbits of satellites.*** | **DESCRIPTOR: typical performance in each range** |
| **Very low** | **Low** | **Medium** | **High** | **Very high** |
| Very limited understanding and use of the field model in describing gravitational, electrical and magnetic fields in some contexts with very limited identification of links between ideas. | Limited understanding and use of the field model in analysing and explaining gravitational, electrical and magnetic fields in some contexts with some identification of links between ideas. | Satisfactory understanding and use of the field model in analysing and explaining gravitational, electrical and magnetic fields in a broad range of contexts with some explanation of links between ideas. | Well-developed understanding and use of the field model in analysing and explaining gravitational, electrical and magnetic fields in a broad range of contexts with detailed explanation of links between ideas. | Comprehensive understanding and use of the field model in analysing and explaining gravitational, electrical and magnetic fields in a broad range of contexts with insightful explanation of links between ideas. |
| Very limited use of the field model to explain the operation of motors and/or particle accelerators and/or satellite orbits.  | Limited use of the field model to explain the operation of motors and/or particle accelerators and/or satellite orbits.  | Adequate use of the field model to explain the operation of motors and/or particle accelerators and/or satellite orbits.  | Well-articulated use of the field model to explain the operation of motors and/or particle accelerators and/or satellite orbits.  | Integrated and insightful use of the field model to explain the operation of motors and/or particle accelerators and/or satellite orbits.  |
| Very limited collection of relevant data. | Limited collection of relevant data. | Appropriate collection of relevant data. | Purposeful collection of relevant data. | Highly proficient collection of relevant data. |
| Very limited analysis and interpretation of relevant experimental results and statement of their significance. | Limited analysis and interpretation of relevant experimental results and statement of their significance. | Sound analysis and interpretation of relevant experimental results and statement of their significance. | Well-developed analysis and interpretation of relevant experimental results and statement of their significance. | Highly proficient analysis and interpretation of relevant experimental results and explanation of their significance. |

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|  | Very limited analysis and application of data from experiments, texts, tables, graphs and diagrams to answer questions and to draw conclusions. | Limited analysis and application of data from experiments, texts, tables, graphs and diagrams to answer questions and to draw valid conclusions. | Sound analysis and application of complex data from experiments, texts, tables, graphs and diagrams to answer questions and to draw valid conclusions. | Well-considered analysis and application of complex data from experiments, texts, tables, graphs and diagrams to answer questions and to draw valid conclusions. | Integrated and insightful analysis and application of complex data from experiments, texts, tables, graphs and diagrams to answer questions and to draw valid conclusions. |
| Very limited use of physics terminology, units, representations and conventions in explaining qualitative and quantitative concepts. | Some appropriate use of physics terminology, units, representations and conventions in explaining qualitative and quantitative concepts.  | Appropriate use of most physics terminology, units, representations and conventions in explaining qualitative and quantitative concepts.  | Effective and appropriate use of physics terminology, units, representations and conventions in explaining qualitative and quantitative concepts. | Proficient and highly appropriate use of physics terminology, units, representations and conventions in explaining qualitative and quantitative concepts.  |

KEY to marking scale based on the outcome contributing 30 marks

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| Very Low 1–6 | Low 7–12 | Medium 13–18 | High 19–24 | Very High 25–30 |