VCE Physics: Performance descriptors

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| **PHYSICS**  **SCHOOL-ASSESSED COURSEWORK** | | | | | |
| **Performance descriptors** | | | | | |
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| ***Unit 4***  ***Outcome 3***  ***Design and undertake a practical investigation related to waves or fields or motion, and present methodologies, findings and conclusions in a scientific poster.*** | **DESCRIPTOR: typical performance in each range** | | | | |
| **Very low** | **Low** | **Medium** | **High** | **Very high** |
| Some attempt at formulation of an investigable question with very limited outline of investigation design. | Mostly appropriate formulation of an investigable question with limited outline of investigation design. | Appropriate formulation of an investigable question with sound investigation design. | Accurate formulation of an investigable question with well- constructed investigation design. | Highly proficient formulation of an investigable question with comprehensive investigation design. |
| Very limited understanding of the investigation with very limited explanation of its context, purpose, methodology and significance. | Limited understanding of the investigation with some explanation of its context, purpose, methodology and significance. | Sound understanding of the investigation with satisfactory explanation of its context, purpose, methodology and significance. | Thorough understanding of the investigation with detailed explanation of its context, purpose, methodology and significance. | Insightful understanding of the investigation with comprehensive explanation of its context, purpose, methodology and significance. |
| Some attempt at collection and use of qualitative and quantitative data to draw some conclusions. | Some appropriate collection, selection and use of qualitative and quantitative data to draw relevant conclusions. | Sufficient collection, selection and use of qualitative and quantitative data to draw justified conclusions. | Purposeful collection, selection and use of qualitative and quantitative data to draw valid conclusions. | Highly proficient collection, selection and use of qualitative and quantitative data to draw valid conclusions. |
| Very limited attempt in estimation of uncertainty in data and derived quantities. | Limited attempt in estimation of uncertainty in data and derived quantities. | Satisfactory estimation of uncertainty in data and derived quantities. | Mostly proficient estimation of uncertainty in data and derived quantities. | Highly proficient estimation of uncertainty in data and derived quantities. |
| Limited presentation of investigation results to illustrate trends, patterns and relationships with limited identification of investigation limitations. | Some presentation of investigation results in an appropriate format to illustrate relevant trends, patterns and relationships with some identification of investigation limitations. | Appropriate presentation of investigation results in an appropriate format to illustrate relevant trends, patterns and relationships with sound identification of investigation limitations and sources of error. | Accurate presentation of investigation results in an appropriate format to illustrate relevant trends, patterns and relationships with detailed identification of investigation limitations and sources of error. | Highly proficient presentation of investigation results in an appropriate format to illustrate relevant trends, patterns and relationships with insightful identification of investigation limitations and sources of error. |
| Limited description of the links between investigation findings and relevant scientific concepts, relationships and principles related to waves, fields or motion. | Some appropriate analysis of the links between investigation findings and relevant scientific concepts, relationships and principles related to waves, fields or motion. | Appropriate analysis and evaluation of the links between investigation findings and relevant scientific concepts, relationships and principles related to waves, fields or motion. | Detailed analysis and evaluation of the links between investigation findings and relevant scientific concepts, relationships and principles related to waves, fields or motion. | Sophisticated analysis and evaluation of the links between investigation findings and relevant scientific concepts, relationships and principles related to waves, fields or motion. |
| Limited coherence and cohesion in the communication of investigation aims, methodologies, findings and conclusions in scientific poster with limited referencing and acknowledgments. | Some coherence and cohesion in the communication of investigation aims, methodologies, findings and conclusions in scientific poster with some referencing and acknowledgments. | Satisfactory coherence and cohesion in the communication of investigation aims, methodologies, findings and conclusions in scientific poster with appropriate referencing and acknowledgments. | Mostly coherent and cohesive sequencing and communication of investigation aims, methodologies, findings and conclusions in scientific poster with complete referencing and acknowledgments. | Coherent and cohesive sequencing and communication of investigation aims, methodologies, findings and conclusions in scientific poster with complete referencing and acknowledgments. |

KEY to marking scale based on the outcome contributing 35marks

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| Very Low 1–7 | Low 8–14 | Medium 15–21 | High 22–28 | Very High 29–35 |