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GCSE COMPUTING

A452 Practical Investigation

**CONTROLLED ASSESSMENT
MARK SCHEME**

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- This document consists of **8** pages. Any blank pages are indicated.
- **MAXIMUM MARKS 45.**

Teachers are responsible for ensuring that assessment is carried out against the Controlled Assessment set for the relevant examination series (detailed above).

Assessment evidence produced that does not reflect the relevant examination series will not be accepted.

The assessment grids are intended to allow assessors to support their decisions by providing best fit.

A. Practical Investigation

0–15 marks

Under this category you should provide evidence of the practical investigation you carried out.

Marks			
Marking criteria	0–5	6–10	11–15
Practical investigation AO2 – 10 marks AO3 – 5 marks	<p>There may be limited evidence of any practical investigation.</p> <p>The evidence supplied is minimal with limited relevance to the set task.</p> <p>The practical evidence may be largely the result of group or teacher led activity with limited input from the student.</p> <p>0 = no response or responses not worthy of credit</p>	<p>There is evidence of a practical investigation.</p> <p>The evidence supplied is documented clearly and is relevant to the set task.</p> <p>There is evidence of individual research beyond the group activity and any teacher led activity.</p> <p>The practical investigations show signs of planning but there may be omissions made in assessing the consequences.</p>	<p>There is evidence of a well-structured practical investigation.</p> <p>The evidence supplied is well organised and clearly relevant to the set task.</p> <p>There is extensive evidence of individual practical investigation beyond the group activity and any teacher led activity.</p> <p>The practical investigation shows clear signs of planning and a structured approach, providing a complete investigation of the set topic area.</p> <p>The practical investigation has been carried out with skill and due regard to safety issues.</p>

B. Effective and efficient use of techniques**0–10 marks**

Under this category you should show effective use of the skills you have developed to produce the solutions to the identified problems.

Marks			
Marking criteria	0–3	4–7	8–10
Effective and efficient use of techniques AO2 – 10 marks	The techniques used will produce partially working solutions to a small part of the problem. 0 = no response or responses not worthy of credit	The techniques will be used appropriately giving working solutions to most of the parts of the problem. Some parts of the solution may be executed in a partial or inefficient manner.	The techniques are used appropriately in all cases giving an efficient, working solution for all parts of the problem.

C. Technical Understanding**0–10 marks**

You should present the evidence behind your investigation and apply the evidence in order to support your analysis of the scenario.

You will be expected to use appropriate technical vocabulary in a way that indicates that the principles are understood.

Marks			
Marking criteria	0–3	4–7	8–10
Technical understanding AO1 – 4 marks AO2 – 3 marks AO3 – 3 marks	<p>The candidate demonstrates a limited understanding of the technical issues related to the scenario.</p> <p>Little detail is presented.</p> <p>There is limited indication of any evidence provided being analysed.</p> <p>There is limited use of technical terminology.</p> <p>0 = no response or responses not worthy of credit</p>	<p>The candidate demonstrates a reasonable understanding of the technical issues related to the scenario.</p> <p>The amount of detail presented is adequate to support the arguments.</p> <p>There is some analysis carried out on the evidence collected.</p> <p>Technical terminology is for the most part used appropriately.</p>	<p>The candidate demonstrates a thorough and secure understanding of the technical issues related to the scenario.</p> <p>A wide range of relevant and detailed information is presented.</p> <p>The evidence which has been collected is fully analysed.</p> <p>Technical terminology is used correctly. At the top end of the band, this will be extensive and confidently used.</p>

D. Conclusions and Evaluation

0–10 marks

Marks			
Marking criteria	0–3	4–7	8–10
<p>Conclusions and Evaluation</p> <p>AO1 – 3 marks AO2 – 3 marks AO3 – 4 marks</p>	<p>Conclusions are limited with little justification.</p> <p>The solution is presented with limited evidence of testing.</p> <p>Information may be ambiguous or unclear.</p> <p>There is limited reference to evidence.</p> <p>The evidence of written communication is limited with little or no use of specialist terms.</p> <p>There are many errors in spelling, punctuation and grammar.</p> <p>The evaluation may be simplistic with little or no relevance.</p> <p>0 = no response or responses not worthy of credit</p>	<p>The material has structure and coherence with justifiable conclusions being reached although there may be some omissions.</p> <p>There is evidence that the solutions have been tested for basic functionality.</p> <p>Candidates have produced a sound evaluation which reviews some aspects of the task.</p> <p>There is evidence of good written communication using some specialist terms.</p> <p>There are few errors in spelling, grammar and punctuation.</p> <p>Specialist terms are used appropriately and for the most part correctly.</p>	<p>Thorough and convincing conclusions have been reached, which are borne out by the research carried out by the candidate.</p> <p>The solutions are fully tested and there is little doubt that the solutions presented are fully functional.</p> <p>This material has been presented in a clear and relevant way which is simple to navigate.</p> <p>A high level of written communication is obvious throughout the task and specialist terms/technology with accurate spelling is used.</p> <p>Grammar and punctuation are consistently correct.</p> <p>The evaluation is relevant, clear, organised and presented in a structured and coherent format.</p>

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