

ADVANCED SUBSIDIARY GCE
APPLIED SCIENCE
Unit 4: Cells and Molecules

G623/INST

INSTRUCTIONS FOR TEACHERS

To be opened on receipt

Plan for an investigation – for issue on or after Friday 13 March 2009

Question Paper:

FRIDAY 22 MAY 2009 (Morning)

Duration: 45 minutes



- This document is for the **Head of Centre** and for the use of the **Science teacher**.
- Copies of the Plan for an Investigation accompany the packet containing these instructions.
- These packets should be issued to the Science teacher immediately they arrive at the centre, but **they must be kept in a secure place at all times**.
- This document consists of **4** pages. Any blank pages are indicated.

PLAN FOR AN INVESTIGATION

The Plan for an Investigation should be issued to candidates on or after the date shown on the front of this document. The candidates' Plans must be collected in, on or before the date of the examination. These arrangements may be made at the discretion and convenience of the centre.

It should be recognised that the Plan for an Investigation contributes 50% to the assessment of this Unit and candidates should therefore be guided to spend an appropriate amount of time on the work. Candidates should be given **between 7 and 10 days** to complete it.

The mark scheme for the Plan for an Investigation is given in the Specification and a copy of these criteria is provided to candidates to assist them in their work.

Candidates must be given access to laboratory space and facilities in order to be able to carry out preliminary work which will help in constructing their Plan. However, it should be noted that the responsibility for Health and Safety during this period rests with the centre, and the attention of teachers is drawn to the Health and Safety section in the Specification. Access to suitable library and other resources may also be required and, while time at home or in private study will be necessary to complete the task to a high standard, sufficient work must be completed under direct supervision to allow the teacher to authenticate the work with confidence as that of the candidates concerned. Many centres find that this can best be managed by allowing candidates a set period of time to research the topic but requiring the Plan to be written under supervision. The supervising teacher should complete the statement of authentication for each candidate on the front cover page of the Plan. Details should be provided to the Examiner of any assistance given to candidates.

After candidates' work has been collected, it must be kept securely until the date of the examination (or must be collected on the day of the examination) and must be included with the scripts for the examination when these are despatched to the Examiner. Please tie together **loosely** (or use a treasury tag) the Plan for an Investigation and the examination paper for each candidate **with the Plan for an Investigation on the top**.

Guidance for Teachers/Tutors on Authenticating Work

The work submitted by candidates for assessment must be entirely their own.

Candidates may however:

- quote from books or any other source; this should be referenced in the work and all sources acknowledged;
- receive guidance from someone other than their teacher/tutor; the course teacher must be informed of the name of the person giving external guidance and the nature of the assistance given;
- produce work at a location away from the examination centre provided that the work remains under the supervision of the teacher/tutor.

In cases of privately entered candidates or distant-tutored candidates, the centre must ensure that:

- the teacher/tutor has acquainted themselves thoroughly with the general standard of candidates' work before accepting work for assessment;
- sufficient on-going regular monitoring of candidates' work has taken place.

Before authenticating work, the teacher/tutor should ask themselves the following basic questions:

- Has the **Declaration by candidate** been signed by the candidate?
- Was at least part of the work done under my direct supervision?
- Did I check the work during its production?
- Is the standard of finished work consistent with my professional judgement of the candidate's ability?

If you have answered 'YES' to the above questions you may authenticate the work.

The following notes for guidance are issued to candidates:

- 1 Your Plan should have a clear and helpful structure and should be illustrated by diagrams, tables, charts, graphs etc. as appropriate. Remember that these can often be used to replace words in the text. Diagrams should be relevant to the content of your Plan and positioned appropriately. Labels on diagrams, flow charts or tables should be clear and concise. Large blocks of text should be included in the word count.
- 2 You should take care to use technical and scientific terms correctly and to write in clear and correct English.
- 3 Your Plan should be hand-written or word-processed on A4 paper, which should have a hole punched at the top left-hand corner. Pages should be numbered and should have a clear margin on the right hand side. You should write (or print) on **one** side of the paper only and each sheet should be marked with your centre number and candidate number.
- 4 You should show that you have consulted an appropriate range and variety of sources. At the end of your Plan you should list clearly the sources you have used. You should refer to these references in your Plan where appropriate. Where you have incorporated material which has been copied directly from a source such as a book or the Internet, this must be acknowledged in your Plan and details included in the references at the end. However, it should be noted that the inclusion of copied material will not in itself gain credit. The list of references should not be included in the word count.
- 5 Your Plan should be based on the use of standard equipment, apparatus, chemicals and other materials available in a school or college science laboratory.
- 6 Your Plan should be about **800** to **1000** words. A Plan that is in excess of **1000** words is likely to have poor structure and unselective choice of material, so that full credit may not be available. You should indicate the number of words in the margin of the Plan at approximately **100** word intervals.
- 7 When you have finished, tie the pages loosely together (or use a treasury tag), with this sheet on the top, so that the pages turn over freely. Your centre will give you the date by which your Plan must be handed in.

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