

# Mark Scheme (RESULTS) Summer 2008

GCE

GCE SNAB Biology (6133/02)

## GENERAL INFORMATION

The following symbols are used in the mark schemes for all questions:

Symbol	Meaning of symbol
; semi colon	Indicates the end of a marking point
eq	Indicates that credit should be given for other correct alternatives to a word or statement, as discussed in the Standardisation meeting
/ oblique	Words or phrases separated by an oblique are alternatives to each other
{ } curly brackets	Indicate the beginning and end of a list of alternatives (separated by obliques) where necessary to avoid confusion
( ) round brackets	Words inside round brackets are to aid understanding of the marking point but are not required to award the point
[ ] square brackets	Words inside square brackets are instructions or guidance for examiners

### Crossed out work

If a candidate has crossed out an answer and written new text, the crossed out work can be ignored. If the candidate has crossed out work but written no new text, the crossed out work for that question or part question should be marked, as far as it is possible to do so.

### Spelling and clarity

In general, an error made in an early part of a question is penalised when it occurs but not subsequently. The candidate is penalised once only and can gain credit in later parts of the question by correct reasoning from the earlier incorrect answer.

No marks are awarded specifically for quality of language in the written papers, except for the essays in the synoptic paper. Use of English is however taken into account as follows:

- the spelling of technical terms must be sufficiently correct for the answer to be unambiguous  
e.g. for amylase, 'ammalase' is acceptable whereas 'amylose' is not  
e.g. for glycogen, 'glicojen' is acceptable whereas 'glucagen' is not  
e.g. for ileum, 'illeum' is acceptable whereas 'ilium' is not  
e.g. for mitosis, 'mytosis' is acceptable whereas 'meitosis' is not
- candidates must make their meaning clear to the examiner to gain the mark.
- a correct statement that is contradicted by an incorrect statement in the same part of an answer gains no mark - irrelevant material should be ignored.
- .

Question Number	Answer	Mark
1(a)	<ol style="list-style-type: none"> <li>1. repetitions as part of validity (specific e.g. needed);</li> <li>2. precision / accurate with specific example reference to DV ;</li> <li>3. apparatus choice with specific example reference to DV ;</li> <li>4. variable control with specific example reference to CV ;</li> <li>5. error minimising with specific example reference to DV ;</li> <li>6. suitable range of IV example ;</li> <li>7. use of control / baseline of example ;</li> </ol>	max (3)

Question Number	Answer	Mark
1(b)	three precautions as appropriate <u>in context</u> ;;;	(3)

Question Number	Answer	Mark
2(a)	<ol style="list-style-type: none"><li>1. appropriate error described ;</li><li>2. systematic / random ;</li></ol>	(2)

Question Number	Answer	Mark
2(b)	<ol style="list-style-type: none"><li>1. basic method for elimination described ;</li><li>2. detail;</li></ol>	(2)

Question Number	Answer	Mark
2(c)	<ol style="list-style-type: none"><li>1. IV ;</li><li>2. DV ;</li><li>3. Relevant CV ;</li></ol>	(3)

Question Number	Answer	Mark
3(a)	<ol style="list-style-type: none"> <li>1. correct presentation method ;</li> <li>2. trend / pattern identified ;</li> <li>3. what this means in specific case ;</li> </ol>	(3)

Question Number	Answer	Mark
3(b)	<ol style="list-style-type: none"> <li>1. extended range of IV, with example ;</li> <li>2. more values of IV (around critical points) in original, with examples to illustrate ;</li> <li>3. repetition, to measure reliability / degree of error / error bars / SD / range ;</li> <li>4. use of more accurate / precise equipment, with example ;</li> <li>5. more skilled use of equipment, with example ;</li> <li>6. better / some control of CVs, with example ;</li> </ol>	max (4)