Scholarship

2012 Assessment Report

Biology

COMMENTARY

In 2012 successful candidates were able to apply their biological knowledge in the unfamiliar context of the question. Even if not stated in the question candidates must use the information provided in the resource material as well as their biological knowledge to answer the question. Candidates needed to address all aspects of a question equally and not focus on only one part.

Some candidates needed to ensure their script was legible. In such instances, candidates placed themselves at risk of not having all the evidence or responses acknowledged.

SCHOLARSHIP WITH OUTSTANDING PERFORMANCE

Candidates who were awarded Scholarship with Outstanding Performance typically:

- elaborated on all ideas with explanations or justifications
- analysed data correctly and elaborated on their findings
- gave more than one possible idea and explanation for biological ideas
- wrote well planned coherent answers in a logical, succinct manner and used biological terms correctly / accurately
- correctly interpreted / used the data provided
- justified their reasons in detail and linked reasons together
- identified the temporal isolating mechanism in Q1 and understood the significance of genetic drift and how it relates to genetic diversity
- linked the information in the resource material to relevant biological ideas
- displayed both depth and breadth in the answers
- addressed all aspects of the questions asked
- addressed all aspects of the resource material provided in answering the questions
- demonstrated their understanding of biological concepts by making links and justifications that weren't immediately apparent from the information given
- used appropriate technical terms which were defined and then elaborated upon in the context of the situation given in the question.

SCHOLARSHIP

Candidates who were awarded Scholarship but not Scholarship with Outstanding Performance typically:

- lacked either depth or breadth in at least one question
- elaborated on most ideas with explanations or justifications
- generally gave more than one possible idea and explanation for biological ideas
- demonstrated an understanding of core ecological and genetic concepts e.g. migration is innate and inheritable, disadvantages of the saddlebacks' niche when mammalian predators were introduced, the attributes of the genetic inheritance of dry earwax
- demonstrated an understanding of the core evolutionary concepts of each question e.g. natural selection and behavioural isolating mechanism in Q1, the significance of migration patterns and gene flow in Q2, the possible allopatric speciation and reproductive isolation due to songs in Q3
- used most of the resource material to answer the questions

- applied prior knowledge to unfamiliar concepts in a coherent manner
- identified many key aspects of each question but omitted some concepts
- described many key ideas but failed to justify them all
- lacked fluency in one or more areas of their answers
- had difficulty in answering one question or one aspect of a question
- gave answers containing little irrelevant information
- had some errors in the use of biological terms or may have included some irrelevant information or slightly confused some of their ideas.

OTHER CANDIDATES

Candidates who were not awarded Scholarship or Scholarship with Outstanding Performance typically:

- lacked depth and breadth in their answers to the questions
- did not elaborate on ideas with explanations or justifications
- wrote brief answers with insufficient information to enable assessment of their understanding
- described wrong biological ideas e.g. that birds choose where to migrate / by natural selection alleles will become more dominant
- did not recognise that sympatric speciation was occurring in Q1
- did not explain clearly the vulnerability of saddlebacks to introduced mammalian predators / competitors / deforestation or that different songs were a RIM and different islands a geographical barrier leading to allopatric speciation in Q3
- had poor understanding of how human migration could be used to explain the distribution of ear wax alleles
- did not use the resource material or simply repeated it in answering the questions
- wrote a lot of irrelevant information that did not address the question (dumping)
- did not attempt all aspects of questions or each question
- had no understanding of how bottleneck or founder effect brings about decreased biodiversity
- misunderstood evidence presented
- wrote poorly structured answers that repeated ideas but did not cover a range of concepts
- used biological terms wrongly or rarely
- focused on the selective advantage of dry ear wax
- gave responses that were poorly constructed and often contradictory.