Scholarship

2014 Assessment Report

Biology

COMMENTARY

The candidates who were successful integrated the information provided in the context of the question with their biological knowledge to fully answer all aspects of every question. Many candidates did not address all aspects of a question and placed more emphasis on only any one part. In 2014 there were a lot of candidates who wrote very little or were unable to demonstrate understanding of biological concepts. There were many candidates who did not complete all questions. Candidates need to ensure that their script is legible. Where it was not, evidence may have been missed or not acknowledged.

SCHOLARSHIP WITH OUTSTANDING PERFORMANCE

Candidates who were awarded Scholarship with Outstanding Performance typically:

- wrote detailed answers which consistently addressed all three questions
- addressed all bullet points or aspects of each question (breadth) in great detail (depth)
- demonstrated their knowledge of biological concepts by making links and justifications that were not immediately apparent from the given information
- applied a wide variety of biological concepts to logically answer the questions
- wrote fluently and coherently
- analysed the resource material and integrated it logically and coherently with their biological knowledge to form an in-depth response
- demonstrated clear understanding of the concepts of selective breeding, inbreeding, depression, natural selection and mutations as agents of change in the gene pool leading to fitness of individuals in a population by presenting an integrated response
- were able to communicate a clear understanding of the biology of the organisms concerned.

SCHOLARSHIP

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

- addressed the questions and attempted to answer all parts of the question but displayed weakness in addressing the resource material or biological knowledge in some areas
- lacked depth or breadth in some aspect of their answers
- used the resource information but did not always accurately and fully link it to the different concepts to show in-depth understanding to gain Outstanding
- lacked fluency or coherency in one of their answers
- applied thorough understanding of biological concepts to the context of the question
- included materials that were biologically accurate and appropriate
- wrote detailed answers to two of the three questions
- structured their answers in a logical sequence
- demonstrated good knowledge of the concepts necessary to answer the three questions
- linked mutations that have affected human evolution
- accurately compared the two weta groups with an in-depth response.

OTHER CANDIDATES

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

- had a poor understanding of genetics concepts especially selective breeding
- failed to answer one or more questions
- wrote a lot of information that did not relate to the question
- lacked fluency and coherency in most of their answers
- failed to address the question
- failed to address how bulldogs evolved from wolves
- addressed how the wetas in NZ and Australia separated, which was not asked for
- wrote about hominin dispersal theories
- wrote about the mutations collectively rather than individually
- did not use the resource information to answer the question
- wrote generally about evolutionary concepts
- thought bulldogs were bred straight from wolves
- failed to realise the bulldog standard would be compromised by breeding out some of the disorders
- failed to compare the niche of the two wetas in relation to their distributions
- realised the mutations had an immediate consequence but failed to relate that consequence to an aspect of cultural evolution
- failed to acknowledge female dogs don't have testes
- did not plan their answers
- repeated themselves and did not write a clear, logical and succinct answer
- produced indecipherable writing
- confused interbreeding and inbreeding
- failed to link information or justify ideas
- used the terms gene and allele incorrectly
- confused dominance of an allele with how common it is
- demonstrated a poor understanding of the causes of mutations being random and spontaneous and not as a result of being needed
- wrote that inbreeding causes an increase in mutations.