

Assessment Report

New Zealand Scholarship Biology 2016

Standard 93101

Part A: Commentary

In general, candidates used the resource material together with their knowledge to answer the questions. Many did not give justified opinions, simply stating an opinion without supporting it with a reasoned argument or evidence.

Candidates are advised to write as legibly as possible, making use of asterisks, or similar, as they make new points. Additional information is best added at the end rather than attempting to squeeze it between the lines or needing to draw arrows to different parts.

Part B: Report on performance standard

Candidates who were awarded **Scholarship with Outstanding Performance** commonly:

- planned their response very well and with thoroughness
- gave detailed answers to all three questions
- addressed all bullet points or aspects of each question
- answered with depth and breadth
- wrote clearly without ambiguity
- wrote concisely in a logical manner
- demonstrated their knowledge of biological concepts by making links and justifications that were not immediately apparent from the given resource information
- provided fluent answers without irrelevant information
- used correct biological terms throughout their responses
- justified their opinions with sound reasoning
- interpreted each question correctly.

Candidates who were awarded **Scholarship** commonly:

- showed evidence of planning
- wrote detailed answers to at least two of the three questions
- demonstrated good knowledge of some of the concepts necessary to answer the three questions. For example:
 - compared and contrasted differences between both bird species using the evidence provided in the resources
 - knew the difference between human impact and intervention
 - correctly used the terms habitat and niche, or gene and allele
 - organised their answers, for instance, discussing survival and evolution in separate paragraphs
 - applied evolutionary principles to the rim-egg laying intervention and accurately discussed changes to allele frequencies
 - accurately applied the evolutionary principles in the context of the Orca
 - recognised that the Orca had not yet speciated and that they are sympatric species
 - correctly explained natural selection in terms of the behaviour
 - wrote about structural and behavioural reproductive isolating mechanisms
 - gave more than one possible justified opinion on the future of evolution
 - presented a well-planned argument for which genus the species naledi should be placed in and considered arguments for both genera
 - supported arguments with their own knowledge and with named species and data from the given resource information
 - understood that Australopithecines were also bipedal and genus Homo, advanced bipedal
 - using the evidence, justified why the position of the species naledi, was early rather than old or recent
 - attempted the implications of the three positions early, old or recent
 - understood hominin refers to all human ancestors (not just genus Homo)
- linked their ideas well
- addressed many aspects of each question
- used biological terminology accurately
- justified their descriptions with clear reasons.

Other candidates commonly:

- had limited planning
- failed to answer one or more questions
- failed to make links or justify their evidence
- wrote correct biology but with no relevance to the question
- gave generalised answers rather than in context
- gave ideas and reasons that were unclear
- demonstrated poor or incorrect biological knowledge. For example:
 - did not understand the difference between human impact and human intervention
 - confused habitat and niche
 - incorrectly stated that birds rim-egg laid to remove harmful alleles because they could smell or sense the defects

- incorrectly stated that bottleneck or inbreeding caused more harmful alleles (not that they were more likely to be expressed)
- confused inbreeding with interbreeding
- mistook limited flight capacity for flightlessness
- confused gene with allele
- incorrectly assumed that humans kept the robins in captivity
- spent too much time writing about how the Chatham Island Black Robin and Tomtit arrived at the Chatham Islands (main population versus island population)
- wrote about R strategies versus K strategies
- wrote about general evolutionary mechanisms rather than specifically about the evolution of orca
- did not realise that the Orca are sympatric subspecies
- incorrectly assumed that the Orca are separate species
- were unable to distinguish between population and species
- did not state their opinion and, in instances where they did, they did not justify them
- assumed that whaling of the Orca still occurs
- explained 'adaptation' rather than answering the question about how the adaptation evolved
- gave incorrect reasoning for the divergence of the Orca, for example, different water temperatures or tectonic plate movements
- gave general, irrelevant knowledge about human evolution
- used the information in the question without integration with their own knowledge when justifying their arguments
- did not plan well so changed their mind after beginning to write the answer leading to confused arguments about which genus H.naledi belonged to
- incorrectly stated that genus Homo were the first bipedal or Homo erectus was the first bipedal
- were unable to distinguish between hominin, Homo and hominid
- incorrectly stated that all hominins are bipedal
- did not understand the implications that the positioning of H naledi would have on the current understanding of hominin evolution
- incorrectly used the term hominin to mean the Homo genus
- failed to logically develop their arguments and failed to justify ideas
- repeated information
- did not answer what was asked and included irrelevant information.

[Subject page](#)
