

syllabus point will be examined. Although the same syllabus points may appear in consecutive examinations, questions will be structured in new and different contexts.

- Candidates must read questions carefully to ensure they understand the meaning of verbs used in the question. Candidates should refer to the *Glossary of key words used in the formulation of questions*, available on the course page, to aid them in knowing the difference between a question requiring them to 'name' or 'identify' compared to one requiring them to 'describe' or 'explain'.
- Candidates are encouraged to answer every question. Candidates should always put something down as an answer, even if it is an educated guess. A non-attempted question means no marks can be achieved.
- Candidates need to focus on interpreting the question and providing a concise answer, rather than simply writing down all they have learnt on the topic. Stating key terminology or memorised facts will often not answer the entire question. Instead, candidates need to engage higher-order thinking skills and apply their knowledge.
- The most thorough and complete responses in the Extended answer section of the paper are often produced by candidates who have completed a plan. Candidates should take time to plan responses and ensure all parts of the question are addressed.
- Candidates are encouraged to present annotated diagrams, charts or tables to construct responses to questions in the short and extended answer sections. This technique is particularly important in the extended answer section to help candidates write clear and precise answers and ensure that markers can easily follow and award marks for responses.

Advice for teachers

- Candidates require a detailed knowledge of all syllabus points and the ability to apply this to new and different contexts. Simple recall and rote learning of facts are not enough for candidates to gain full marks in the examination. Candidates must be able to think critically and apply their knowledge to unique scenarios.
- There were several specific syllabus points that were not answered well in this examination. Teachers should be aware of these areas and design appropriate teaching strategies around them. These include:
 - inflammation as a non-specific response
 - theory of natural selection
 - factors that produce new mutations
 - linking comparative studies of anatomy to the construction of phylogenetic trees
 - limitations in the fossil record.
- Teachers are reminded that textbooks are not the syllabus. Supplementary teaching is necessary and learning with other references and resource materials beyond the textbook is essential.
- Examination technique should be modelled and reinforced throughout the year during classroom lessons and assessments. Students need to be given ample practise at decoding extended response questions as part of their lessons and school-based assessment program. They need substantial practise in breaking down a question and identifying the question components.
- Mathematical skills are a required element in the syllabus. Students need ample practise at applying all required mathematical skills in a scientific method context.

Comments on specific sections and questions

Mean score for Section One questions ranged from 36.29% to 96.04%. Some questions were answered very successfully in this section and demonstrated an outstanding ability of factual recall of specific syllabus points such as osmoregulation, thermoregulation, immunity, adaptations to bipedalism and the divisions of the nervous system. Section Two questions had mean scores ranging from 50.47% to 68.52%. Questions relating to the structural comparisons between humans and great apes were completed the most successfully. The

Extended answer questions on Unit 3 were done very well compared to previous years, with a high overall mean score of 59.04%. Question 38 on homeostasis was the most successfully answered with a mean of 61.70%, while Question 39 had a lower mean of 55.60%. The Extended answer Unit 4 section was the most demanding section of the paper with the lowest overall mean of the four sections (39.88%). The mean scores of the Unit 4 questions were comparable at 41.85% for Question 40 and 38.54% for Question 41.

Section One: Multiple-choice (30 Marks)

This section had an overall mean of 77.06%. The maximum mark achieved in this section was 100% and the minimum mark was 0%. Generally, questions were well answered with only Questions 5, 6, 10, 22, 28 and 30 having mean scores at or below 60%. Questions 2, 4, 7, 14, 16, 17, 18, 19, 20, 21, 24, 25 and 27 were the easiest with mean scores all above 85%. Candidates performed well on straightforward recall style questions and found the more complex, multi-step questions challenging.

Section Two: Short answer (106 Marks)

This section had an overall mean of 56.50%. The maximum mark achieved on the section was 91% and the minimum mark was 0%. Questions 33, 35 and 37 all had mean scores above 55%. Question 33 focused on structural comparisons between humans and great apes and adaptations to bipedalism and was the most successfully completed question in this section. Questions 31, 32, 34 and 36 all had very similar mean scores, ranging from 50.47% to 52.85%. Question 36 on comparisons between nervous and hormonal systems, blood glucose regulation, diabetes and recombinant DNA technology was the most challenging question of Section Two. Throughout the section, candidates were able to demonstrate a good recall of basic facts and knowledge. The higher-order and application questions were successful in differentiating candidates and provided an opportunity for candidates to demonstrate their understanding of course content.

Section Three: Extended answer Unit 3 (20 Marks)

This section had an overall mean of 59.04%. The maximum mark achieved on the section was 100% and the minimum mark was 0%. Question 38 was the most successfully answered question with a mean of 61.70%, while Question 39 achieved a mean of 55.60%. Generally, candidates who attempted questions using annotated diagrams and tables were able to construct more precise and understandable responses.

Section Three: Extended answer Unit 4 (20 Marks)

This section had an overall mean of 39.88%. The maximum mark achieved on the section was 97.5% and the minimum mark was 0%. Questions 40 and 41 had comparable mean scores of 41.85% and 38.54% respectively. Generally, candidates who attempted to answer the questions using annotated diagrams and tables were able to construct more precise and understandable responses.