

Examiners' Report/ Principal Examiner Feedback

March 2011

GCSE

360Science

GCSE Science
Multiple Choice Paper B1b (5006/01)

GCSE Biology
Multiple Choice Paper B1b (5026/01)

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Publications Code UG026957

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5006 Science/ 5026 Biology (B1b) Examiners' Report

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Foundation Tier

Overall, candidates accessed the paper well across the foundation tier. Candidates were less clear on information based around involuntary responses with only 34% of them able to identify the correct answer. Methods of disease transmission were well understood with over 85% of candidates able to correctly identify direct transmission methods of disease transmission. The eye is once again a problem for foundation candidates with only 55% of them able to identify the iris correctly and 39% of candidates able to understand the role of the pupil in the eye. There is also a serious lack of understanding of the iris reflex and accommodation in the eye which are difficult concepts for foundation tier candidates. Simple mathematical calculations continue to be a problem with only 34% of candidates able to calculate a multiplication sum from readings on a graph although the interpretation of graphical data is a strength of both tiers. It was pleasing to note that candidates have a better understanding of the parts of the blood in this paper than in previous exam sessions, with more than 80% of candidates able to correctly identify the role of red blood cells. The crossover questions highlighted the correct tiering of candidates with foundation tier candidates scoring about 25% lower than higher tier candidates.

Higher Tier

The paper performed well overall, with candidates able to access the earlier questions much better and with higher percentages than the latter questions. The questions on neurones were well attempted with over 80% of higher tier candidates able to correctly identify the synapse but it was a little disappointing to note that only 31% of candidates were able to correctly identify the method of transmission across the synapse by chemical transmission. While the basic process of glucose regulation is well understood the actual conversion of glucose to glycogen to be stored in the liver caused candidates some problems, with only 38% of higher tier candidates able to answer correctly. The interpretation of graphical information was good especially when related to drug usage, and candidates knowledge of the effects of various legal and illegal drugs was excellent. As is usually the case the questions on the menstrual cycle and in particular the roles of LH and FSH proved to be a problem even for more able candidates, with only 35% of higher tier candidates able to correctly identify the role of these hormones in fertility treatment. More able candidates showed a good knowledge of the role of phagocytes and lymphocytes in the body. Over 50% of candidates gained marks in this area.

Grade Boundaries

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