

Commentary on candidate evidence

Question	Response	Max Mark	Mark awarded	Comments
1(a)(i)	1	1	0	The use of 'decide' negates an otherwise correct response.
5(c)	1	1	0	The additional information given negates the otherwise correct response, as damaged cells are replaced not repaired.
5(c)	2	1	0	As cells are mentioned in the stem of the question, the use of 'they' implies that damaged cells can be repaired, which is incorrect.
5(d)	1	2	0	The description for lymphocytes is insufficient as there is no mention of them producing antibodies. 'Eat' is an unacceptable response and as 'destroy' is in the stem of question it is insufficient on its own.
5(d)	2	2	2	The additional information about antibodies is correct and does not therefore negate the otherwise correct response. The description of engulfing and digesting is an acceptable response for phagocytes. The incorrect spelling of phagocytosis

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				does not negate the otherwise correct response.
5(d)	3	2	0	<p>It is not clear that the lymphocytes are producing the antibodies in this response.</p> <p>As consume is equivalent to 'eat', this is an unacceptable description for phagocytes.</p>
6 (c)	1	4	1	<p>The mark was awarded for the following:</p> <p>Point 3 – as the candidate has stated that glucagon is transported to the liver.</p> <p>Marks were not awarded for the following:</p> <p>Point 1 – as it is not clear that the pancreas produces/releases glucagon.</p> <p>Point 2 – as the pancreas does not transport the hormone through the bloodstream.</p> <p>Point 4 – as glucagon does not directly turn glycogen into glucose.</p>
6 (c)	2	4	2	<p>The marks were awarded for the following:</p> <p>Point 2 – although the wrong hormone has been identified (insulin), they have correctly stated that it travels in the blood.</p> <p>Point 3 – although the wrong hormone has been identified (insulin), they have correctly stated that it travels to the liver.</p>

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				<p>Marks were not awarded for the following:</p> <p>Point 1 – as they have stated that the pancreas releases insulin.</p> <p>Point 4 – as the incorrect hormone has been identified, only the marks for points 2 and 3 could be accessed.</p>
7(a)(i) &(ii)	1	2	1	<p>The mark was not awarded for part (i), as the candidate incorrectly uses the term phenotype in place of allele.</p> <p>The mark was awarded for part (ii), as other than the term phenotype being used incorrectly (as in part (i)), the response is correct. The error carried through is not penalised again.</p>
8(c)	1	1	0	The reference to gas exchange negates this response, as it is not applicable to a villus.
9(c)	1	2	2	<p>The first mark was awarded for point 1 of the marking instructions as the candidate described a difference in the rate of production.</p> <p>The second mark was awarded for point 2 of the marking instructions as 'took longer to decrease' is an equivalent to 'decreases slower'.</p>

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12(d)(i)	1	1	0	The candidate has not mentioned the presence/absence of these species in their response.
13(a)(ii)	1	1	1	The candidate has clearly stated that light and carbon dioxide are required for photosynthesis. The additional information does not negate the otherwise correct response.

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13(a)(iii)	1	1	1	<p>The candidate has correctly identified that two variables have been altered.</p> <p>'CO₂ absorber' is equivalent to 'a chemical is absorbing carbon dioxide'.</p>
15(b)	1	4	3	<p>Marks were awarded for the following:</p> <p>Point 1 – 'plasmid is extracted from bacterial cell' or 'plasmid is cut open'.</p> <p>Point 2 – 'gene is inserted into the plasmid'.</p> <p>Point 3 – the modified 'plasmid is inserted into host bacterial cell' as this is a different cell from the original.</p> <p>The mark was not awarded for the following:</p> <p>Point 4 – as there is one correct mention and one incorrect mention of the use of enzymes.</p>
15(b)	2	4	1	<p>The mark was awarded for the following:</p> <p>Point 2 – 'required gene ... is placed in the plasmid'.</p> <p>Marks were not awarded for the following:</p> <p>Point 1 – the biology is incorrect. A section from the plasmid in the bacterial cell is not extracted.</p> <p>Point 3 – as the candidate response suggests the plasmid is</p>

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				<p>placed back into the original bacterial cell.</p> <p>Point 4 – as the use of enzymes is not included in the response.</p>