

# Commentary on candidate evidence - Q10(a)

## Candidate 1 — Comparing veins and arteries

This candidate was awarded **1 mark** for question 10 (a).

- ◆ 0 marks for the first two points as these are not about the structure of the vessels.
- ◆ 1 mark for comparing the presence of valves in veins and arteries correctly.
- ◆ 0 marks for the statement about the thickness of the walls, as it is unclear whether it is the thickness of the walls or their muscularity which is being compared.

## Candidate 2 — Comparing veins and arteries

This candidate was awarded **2 marks** for question 10 (a).

- ◆ 1 mark for comparing the thickness of the walls in veins and arteries correctly.
- ◆ 1 mark for comparing the presence of valves in veins and arteries correctly.
- ◆ 0 marks for direction of blood flow as this is not about the structure of the vessels.
- ◆ 0 marks for the 'channel' comparison as it is not clear what is being compared.

## Candidate 3 — Comparing capillaries and arteries

This candidate was awarded **0 marks** for question 10 (a).

- ◆ 0 marks for comparison of size of capillaries and arteries.
- ◆ 0 marks for direction of blood flow as this is not about the structure of the vessels.

## Candidate 4 — Comparing capillaries and veins

This candidate was awarded **0 marks** for question 10 (a).

- ◆ 0 marks for 3 incorrect statements about capillaries.
- ◆ 0 marks for incorrect comparative statement about veins.

## Candidate 5 — Comparing arteries, veins and capillaries

This candidate was awarded **3 marks** for question 10 (a).

- ◆ 1 mark for comparing the thickness of artery and vein walls correctly. Stating that arteries have the thickest walls indicates that the veins 'being next' must therefore be thinner than the arteries. 1 mark for comparing the presence of valves correctly.
- ◆ 1 mark for comparing the presence of muscular walls correctly.
- ◆ The mention of capillaries throughout the answer does not negate in this instance as they have correctly compared arteries and veins.

## Candidate 6 — Comparing arteries and veins

This candidate was awarded **2 marks** for question 10 (a).

- ◆ 1 mark for comparing the thickness of the walls in veins and arteries correctly.
- ◆ 0 marks for information, not comparative, about valves.
- ◆ 1 mark for comparing channel size in arteries and veins. (Additional statement at end irrelevant).

# Commentary on candidate evidence - Q12(a)(ii)

## Candidate 1

This candidate was awarded **0 marks** for question 12 (a)(ii).

- ◆ 0 marks for the first statement as it does not mention chemical energy being in the ATP.
- ◆ 0 marks for the second statement as it is too vague.

## Candidate 2

This candidate was awarded **2 marks** for question 12 (a)(ii).

- ◆ 1 marks for light trapped by chlorophyll (as energy is in the stem of the question).
- ◆ 1 mark for the sugar being used to make starch/cellulose.

## Candidate 3

This candidate was awarded **1 mark** for question 12(a)(ii).

- ◆ 0 marks as chlorophyll is not mentioned.
- ◆ 0 marks as chemical energy in ATP is not mentioned.
- ◆ 1 mark for sugar is stored as starch/made into cellulose.

## Candidate 4

This candidate was awarded **2 marks** for question 12(a)(ii).

- ◆ 1 mark for chlorophyll trapping light energy.
- ◆ 1 mark for it being changed into chemical energy in ATP.
- ◆ 0 marks for stating that the sugar can be used for muscle contraction as this does not occur in plants.

## Candidate 5

This candidate was awarded **3 marks** for question 12(a)(ii).

- ◆ 1 mark for chlorophyll trapping light energy.
- ◆ 1 mark for light energy being changed into chemical energy which is stored in ATP.
- ◆ 1 mark for the sugar being used for cell division.

## Candidate 6

This candidate was awarded **1 mark** for question 12(a)(ii).

- ◆ 1 mark for chlorophyll trapping light energy.
- ◆ 0 marks for arrow showing that chemical energy 'makes' ATP.
- ◆ 0 marks for statement that says 'then starch is made' as no link to sugar being used for this.

## Commentary on candidate evidence - Q13

### Candidate 1

This candidate was awarded **0 marks** for question 13.

Question 13	Mark	Commentary
a	0	This describes a theory, not the aim of the investigation. It has been copied verbatim from the report.
b	0	Insufficient answer.
c	0	Suitable headings, but units missing from column 2.
	0	Although all of the information is given in the columns, the information from column 2 has been duplicated in column 1. Column 2 is therefore pointless which means that column 1 is simply a list.
d	0	Not sufficient to have 'increase in their decision making' as it was the speed of their decision making which was increased.
e	0	No explanation given.
<b>Total</b>	<b>0</b>	

## Candidate 2

This candidate was awarded **4 marks** for question 13.

Question 13	Mark	Commentary
a	1	Correct aim based on information from report.
b	1	Correct identification of the dependent variable.
c	0	Suitable headings, but the abbreviation used for the unit (seconds) is not acceptable (should be 's' not 'secs').
	1	Correct information in each column.
d	0	Not sufficient to have 'improves sprinting and decision making' as it was their sprint performance and speed of decision making which showed improvement.
e	1	Correct identification of too small a sample size.
<b>Total</b>	<b>4</b>	

### Candidate 3

This candidate was awarded **1 mark** for question 13.

Question 13	Mark	Commentary
a	0	Insufficient detail given – no mention of drinking the juice or how it might make you better at sports.
b	0	Incorrect variable identified.
c	0	Heading incorrect and unit missing from column 2.
	0	Incorrect information in column 1 – ‘second sprint and rest of test’.
d	0	Reference to ‘drinking nitrate juice’ is incorrect as it was nitrate-rich juice.
e	1	Correct identification of gender imbalance in testing.
<b>Total</b>	<b>1</b>	