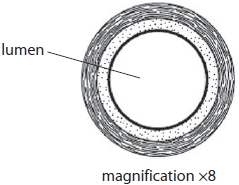
**Y11 Cycle 1 Week 4 Separate Science Homework – Recall Questions**

**Q1.** Figure 13 shows a cross-section of a blood vessel.



**Figure 13**

(i)  The diameter of the lumen in Figure 13 is 25.0 mm

What is the actual diameter of the lumen of this blood vessel?

**(1)**

   **A**    3.1 × 10–2 m

   **B**    3.1 × 10–3 m

   **C**    2.0 × 10–2 m

   **D**    2.0 × 10–3 m

(ii)  Which blood vessel delivers deoxygenated blood to the heart?

**(1)**

   **A**    aorta

   **B**    pulmonary artery

   **C**    pulmonary vein

   **D**    vena cava

(iii)  Capillary walls are much thinner than the wall of the blood vessel in Figure 13.

The lumen of a capillary is also much smaller.

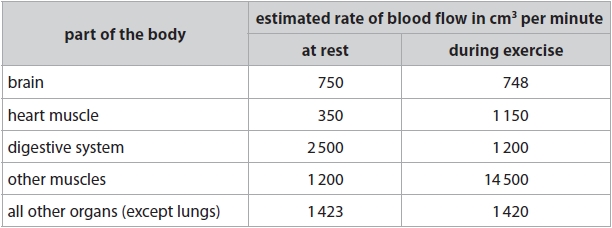
Explain how each of these features of the capillary helps it to function efficiently.

**(2)**

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**Q2.** Figure 10 shows the estimated blood flow through some parts of the body when a person is at rest and during exercise.



**Figure 10**

The stroke volume is the amount of blood leaving one chamber of the heart per beat.

From which chamber of the heart does this volume of oxygenated blood flow?

**(1)**

   **A**    left atrium

   **B**    left ventricle

   **C**    right atrium

   **D**    right ventricle

 **Q3. Answer the question with a cross in the box you think is correct . If you change your mind about an answer, put a line through the box  and then mark your new answer with a cross .**

(i)  Which part of the blood causes blood to start clotting?

**(1)**

   **A**    erythrocytes

   **B**    lymphocytes

   **C**    platelets

   **D**    antibodies

(ii)  Give **one** advantage of a blood clot forming.

**(1)**

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**Q4.** (i)  Complete the sentence by putting a cross () in the box next to your answer.

A group of the same type of cells, such as red blood cells, is known as

**(1)**

   **A**    an organ

   **B**    an organ system

   **C**    an organism

   **D**    a tissue

(ii)  In humans, each mature red blood cell does not have a nucleus.

Suggest why not having a nucleus in a red blood cell is an advantage.

**(2)**

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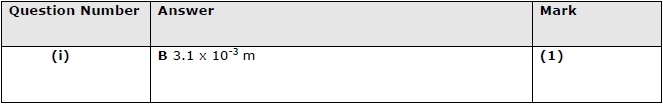
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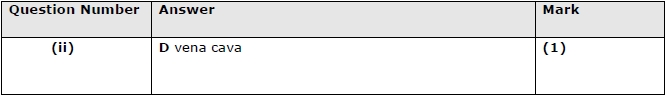
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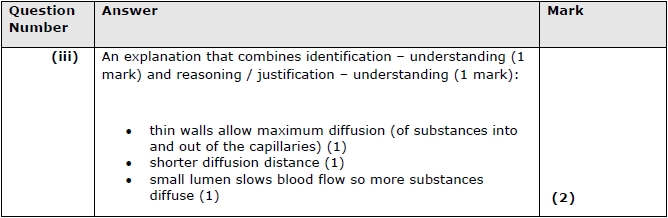
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**Mark Scheme**

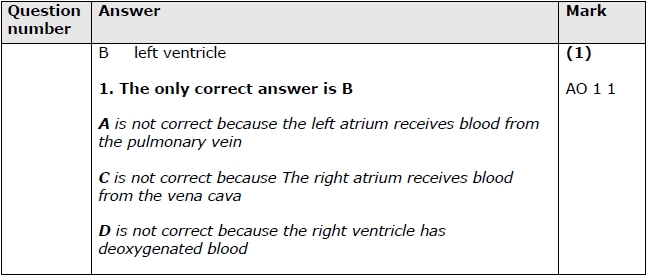
Q1.



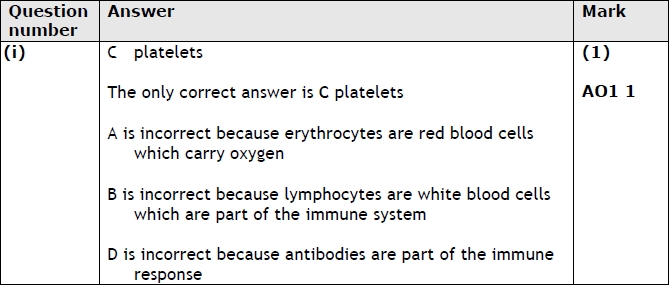


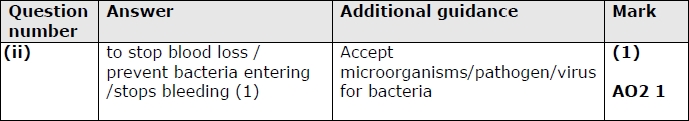


**Q2.**



**Q3.**





**Q4.**

