

0 6

Blood is transported around the body in blood vessels.

0 6 . 1

Draw **one** line from each type of blood vessel to the structure of the blood vessel.**[2 marks]****Type of blood vessel****Structure of blood vessel**

Artery

One cell

Capillary

Muscle
tissue

Vein

Muscle
tissue

0 6 . 2

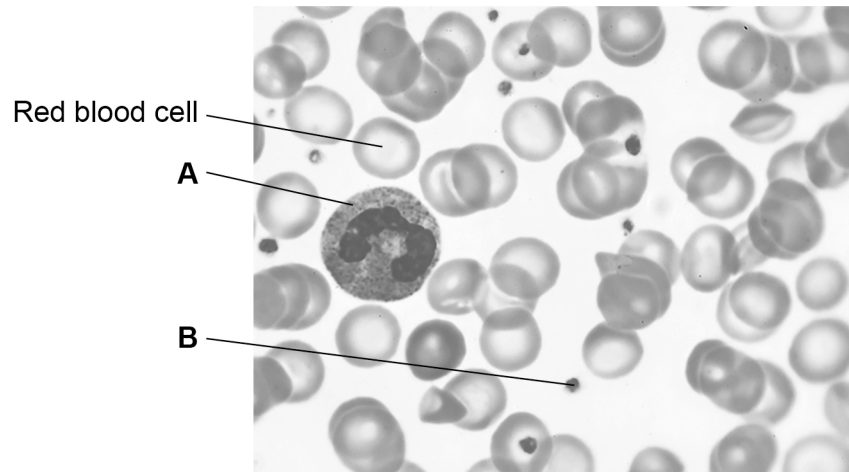
Explain how the structure of an artery is related to its function.

[2 marks]

Turn over ►

Figure 9 shows blood viewed through a microscope.

Figure 9



0 6 . 3 Name **A** and **B** in **Figure 9**.

[2 marks]

A _____

B _____

0 6 . 4 A red blood cell:

- has no nucleus
- contains a red pigment called haemoglobin.

Suggest how these adaptations help the red blood cell carry out its function.

[2 marks]

No nucleus _____

Haemoglobin _____



0 6 . 5 The blood components are carried around the body in the liquid part of the blood.

What is the liquid part of the blood called?

[1 mark]

Tick (✓) **one** box.

Cell sap

Plasma

Saliva

Urine

Table 2 shows the results of a man's blood test.

Table 2

Blood component	Patient results	Normal range
Red blood cells	4.8	4.5 to 6.5
Lymphocytes	2.6	1.0 to 4.0
Neutrophils	5.1	1.8 to 7.5
Platelets	50	140 to 400

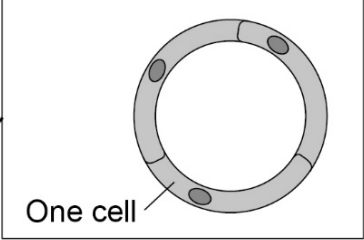
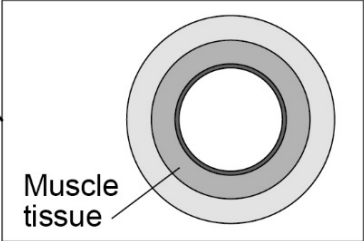
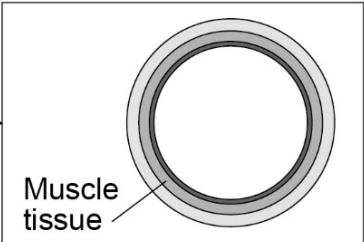
0 6 . 6 Which component of the man's blood is **not** within the normal range?

[1 mark]

0 6 . 7 Suggest a symptom the man might show.

[1 mark]



Question	Answers	Extra information	Mark	AO / Spec. Ref.
<p>06.1</p>	<p>all lines correct = 2 marks 1 or 2 lines correct = 1 mark</p> <p>Type of blood vessel</p> <div style="display: flex; flex-direction: column; align-items: flex-start; gap: 20px;"> <div style="display: flex; align-items: center; gap: 10px;"> <div style="border: 1px solid black; padding: 5px; width: 100px; text-align: center;">Artery</div> <div style="border-left: 1px solid black; border-right: 1px solid black; height: 100px; margin-left: 10px;"></div> </div> <div style="display: flex; align-items: center; gap: 10px;"> <div style="border: 1px solid black; padding: 5px; width: 100px; text-align: center;">Capillary</div> <div style="border-left: 1px solid black; border-right: 1px solid black; height: 100px; margin-left: 10px;"></div> </div> <div style="display: flex; align-items: center; gap: 10px;"> <div style="border: 1px solid black; padding: 5px; width: 100px; text-align: center;">Vein</div> <div style="border-left: 1px solid black; border-right: 1px solid black; height: 100px; margin-left: 10px;"></div> </div> </div>	<p>Structure of blood vessel</p> <div style="display: flex; flex-direction: column; align-items: center; gap: 20px;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">  <p>One cell</p> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">  <p>Muscle tissue</p> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">  <p>Muscle tissue</p> </div> </div> <p>additional line from a box on the left negates the credit for that box</p>	<p>2</p>	<p>AO2 4.2.2.2</p>

06.2	any one from: <ul style="list-style-type: none"> • thick(er) (muscle) walls / tissue (1) to push blood (all) around the body (1) <p>or</p> <ul style="list-style-type: none"> • thick(er) elastic walls / tissue (1) to maintain / withstand high (blood) pressure or to retain / regain shape (1) <p>or</p> <ul style="list-style-type: none"> • narrow lumen (1) to maintain high (blood) pressure (1)	allow to withstand high (blood) pressure do not accept to pump blood (all) around the body	2	AO1 4.2.2.2
06.3	(A) – white (blood) cell(s) (B) – platelet(s)	allow any named white (blood) cell(s)	1 1	AO2 4.2.2.3
06.4	(no nucleus) more space for haemoglobin / oxygen (has haemoglobin) to bind / carry oxygen	allow to carry more oxygen ignore carries carbon dioxide	1 1	AO3 4.1.1.2 4.1.1.3 4.2.2.3
06.5	plasma		1	AO1 4.2.2.3
06.6	platelets		1	AO3 4.2.2.3

06.7	<p>any one from:</p> <ul style="list-style-type: none"> • (continued) bleeding • (more) bruising 	<p>allow described allow blood does not clot (at cuts)</p> <p>allow ecf from answer to question 06.6</p>	1	AO3 4.2.2.3
Total			11	