

Transport in animals – 2020 IGCSE 0610

1. Nov/2020/Paper_11/No.19

The table shows some features of blood vessels.

Which row shows the features of a vein?

	direction of blood flow	size of the central hole (lumen)	thickness of wall
A	away from the heart	large	thick
B	away from the heart	small	thick
C	towards heart	small	thin
D	towards heart	large	thin

2. Nov/2020/Paper_11/No.24

The amount of urea in the blood increases as it passes through organ X.

What is organ X?

- A** heart
- B** kidney
- C** liver
- D** pancreas

3. Nov/2020/Paper_12/No.20

Some functions of blood are listed.

- 1 antibody production
- 2 blood clotting
- 3 oxygen transport
- 4 phagocytosis

What are functions of white blood cells?

- A** 1 and 2 **B** 1 and 4 **C** 2 and 3 **D** 3 and 4

4. Nov/2020/Paper_13/No.19

In a mammal, what ensures the blood flows one-way round the circulatory system?

- A** brain
- B** capillaries
- C** lungs
- D** valves

5. Nov/2020/Paper_13/No.20

Which structure separates the right and left sides of the heart?

- A coronary artery
- B one-way valve
- C right atrium
- D septum

6. Nov/2020/Paper_21/No.17

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Which row shows the features of a vein?

	direction of blood flow	size of the central hole (lumen)	thickness of wall
A	away from the heart	large	thick
B	away from the heart	small	thick
C	towards heart	small	thin
D	towards heart	large	thin

7. Nov/2020/Paper_21/No.18

Where are valves found that prevent blood from flowing in the wrong direction?

- A capillaries and arteries
- B lungs and veins
- C heart and capillaries
- D heart and veins

8. Nov/2020/Paper_22/No.17

What ensures that blood flows in one direction in the human circulatory system?

- A diffusion of carbon dioxide
- B diffusion of oxygen
- C thick walled arteries
- D valves

9. Nov/2020/Paper_22/No.18

The diagrams show four components of blood.

Which component produces antibodies?



10. Nov/2020/Paper_23/No.17

In a mammal, what ensures the blood flows one-way round the circulatory system?

- A brain
- B capillaries
- C lungs
- D valves

11. Nov/2020/Paper_23/No.18

Which row correctly identifies the blood vessels?

	largest internal space (lumen)	thickest muscular wall	transports blood towards the heart
A	pulmonary artery	capillary	pulmonary vein
B	pulmonary artery	pulmonary vein	capillary
C	pulmonary vein	capillary	pulmonary artery
D	pulmonary vein	pulmonary artery	pulmonary vein

(a) (i) Table 5.1 shows some statements about arteries, capillaries and veins.

Place ticks (✓) in the boxes to show which statements are correct for arteries, capillaries and veins.

One has been done for you.

Table 5.1

statements	arteries	capillaries	veins
carry blood away from the heart	✓		
supply cells with nutrients and remove waste products			
return blood to the heart			
have a thick wall containing muscle and elastic tissue			
have a thin wall containing muscle and elastic tissue			
have a very thin wall with no muscle or elastic tissue			

[5]

(ii) State **one** other way in which the structure of a vein is different from an artery.

..... [1]

(b) Oxygen moves from the blood into body cells.

Carbon dioxide moves from body cells into the blood.

(i) State the name of the process in a cell that uses oxygen and releases carbon dioxide.

..... [1]

Fig. 5.1 is a drawing representing the movement of molecules into and out of an animal cell.

The number of dots represent the concentrations of molecules inside and outside the cell.

The arrows show the direction of movement of the molecules.

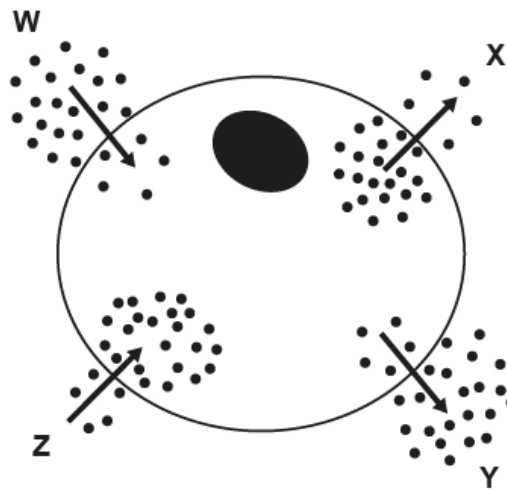


Fig. 5.1

- (ii) State the letter(s) that represent the movement of:
molecules by active transport
- molecules by diffusion

[2]

[Total: 9]

