

Transport in animals – 2020 IGCSE 0610

1. March/2020/Paper_12/No.19

Which person is most at risk from developing coronary heart disease?

	age	gender	activity level	other information
A	23	female	professional athlete	non-smoker
B	40	male	plays sport at weekends	non-smoker
C	19	female	plays sport twice a week	smokes 5 cigarettes a day
D	65	male	does no exercise	smokes 20 cigarettes a day

2. March/2020/Paper_12/No.20

The diagram shows a section through a blood vessel.



Which type of blood vessel is shown, and in which direction does the blood flow?

	type of vessel	direction of flow
A	artery	P to Q
B	artery	Q to P
C	vein	P to Q
D	vein	Q to P

3. March/2020/Paper_22/No.19

Mammals have a double circulation.

Which shows the correct sequence for the movement of blood in a mammal?

- A** body → heart → lungs → heart
- B** body → lungs → body → heart
- C** heart → lungs → body → heart
- D** heart → body → lungs → heart

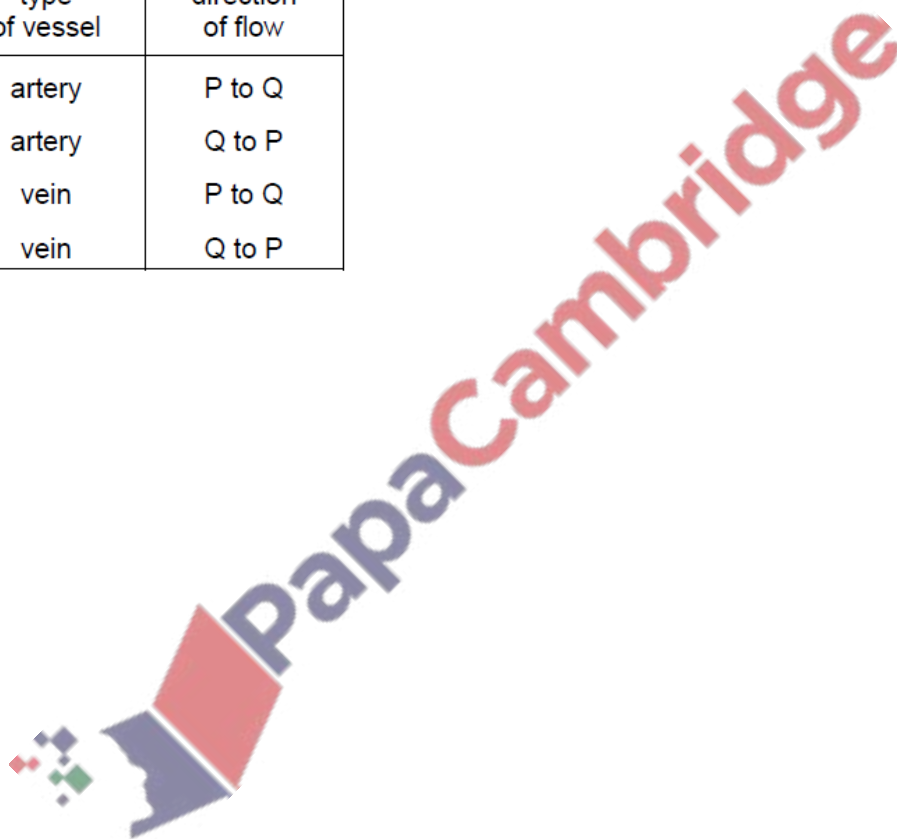
4. March/2020/Paper_22/No.20

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	type of vessel	direction of flow
A	artery	P to Q
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(a) Fig. 2.1 shows the transfer of materials between blood and tissues.

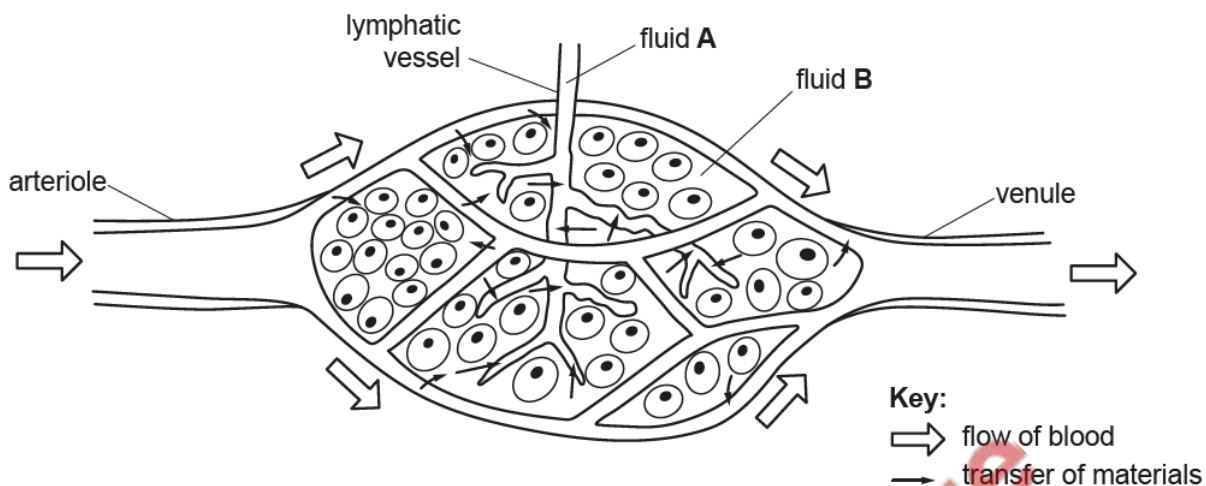


Fig. 2.1

(i) Complete Table 2.1 by:

- stating the names of the fluids
- writing **yes** if the fluid contains red blood cells or **no** if the fluid does **not** contain red blood cells.

Table 2.1

letter on Fig. 2.1	name of the fluid	contains red blood cells
A		
B		

[2]

(ii) State the name of the process by which oxygen is transferred from fluid B to the cells.

..... [1]

(iii) Explain why cells need oxygen.

.....

 [2]

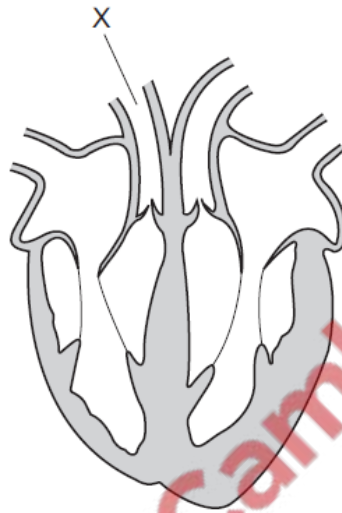
6. June/2020/Paper_11/No.15

Which blood vessel carries blood to the muscle of the heart?

- A coronary artery
- B pulmonary artery
- C renal vein
- D vena cava

7. June/2020/Paper_11/No.16

The diagram shows a section through the heart and its blood vessels.



Which row gives the vessel name and the direction of blood flow in vessel X?

	vessel name	direction of blood flow
A	aorta	towards the lungs
B	pulmonary artery	towards the lungs
C	pulmonary artery	away from the lungs
D	vena cava	away from the lungs

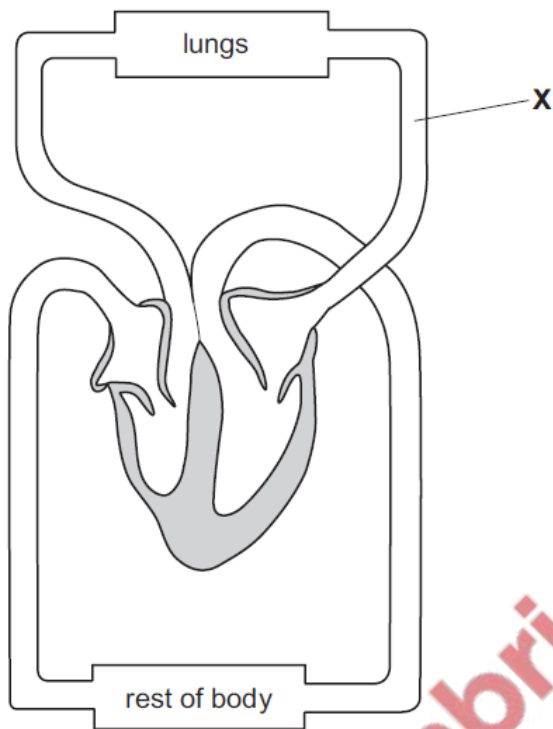
8. June/2020/Paper_12/No.15

Which blood vessel carries blood to the muscle of the heart?

- A coronary artery
- B pulmonary artery
- C renal vein
- D vena cava

9. June/2020/Paper_12/No.16

The diagram shows the human heart and main blood vessels.



What is the blood vessel labelled X?

- A aorta
- B pulmonary artery
- C pulmonary vein
- D vena cava

10. June/2020/Paper_13/No.15

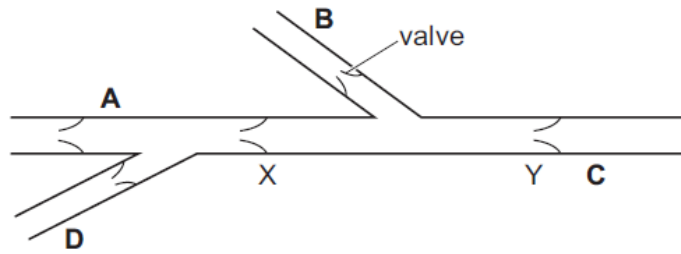
Which blood vessel carries blood to the muscle of the heart?

- A coronary artery
- B pulmonary artery
- C renal vein
- D vena cava

11. June/2020/Paper_13/No.16

The diagram shows some veins in the human arm and the valves that they contain.

If blood is squeezed out of section X–Y, where should pressure be placed on a vein to stop blood flowing into this section again?



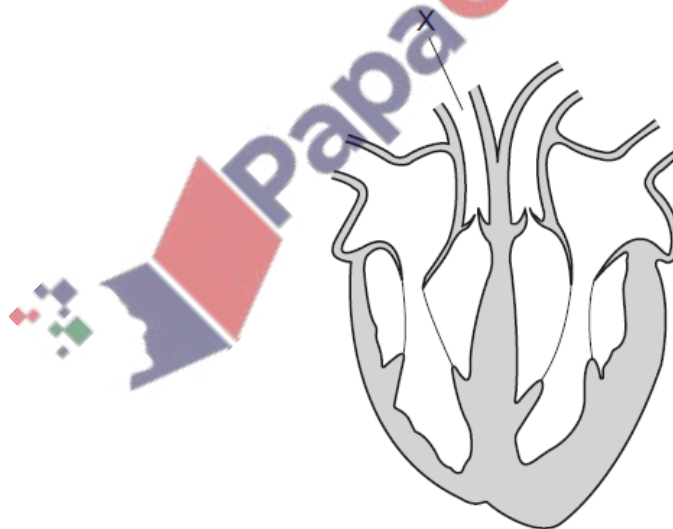
12. June/2020/Paper_21/No.17

Which pathway is taken by blood in a fish?

- A gills → heart → body → gills
- B body → gills → heart → body
- C heart → gills → body → heart
- D heart → body → gills → body

13. June/2020/Paper_21/No.18

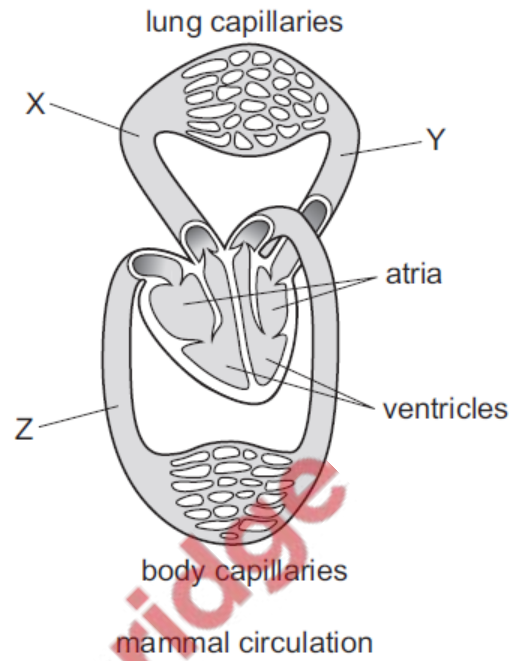
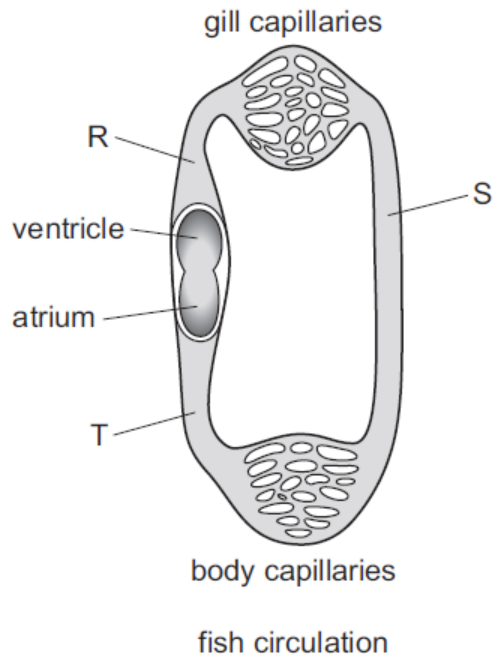
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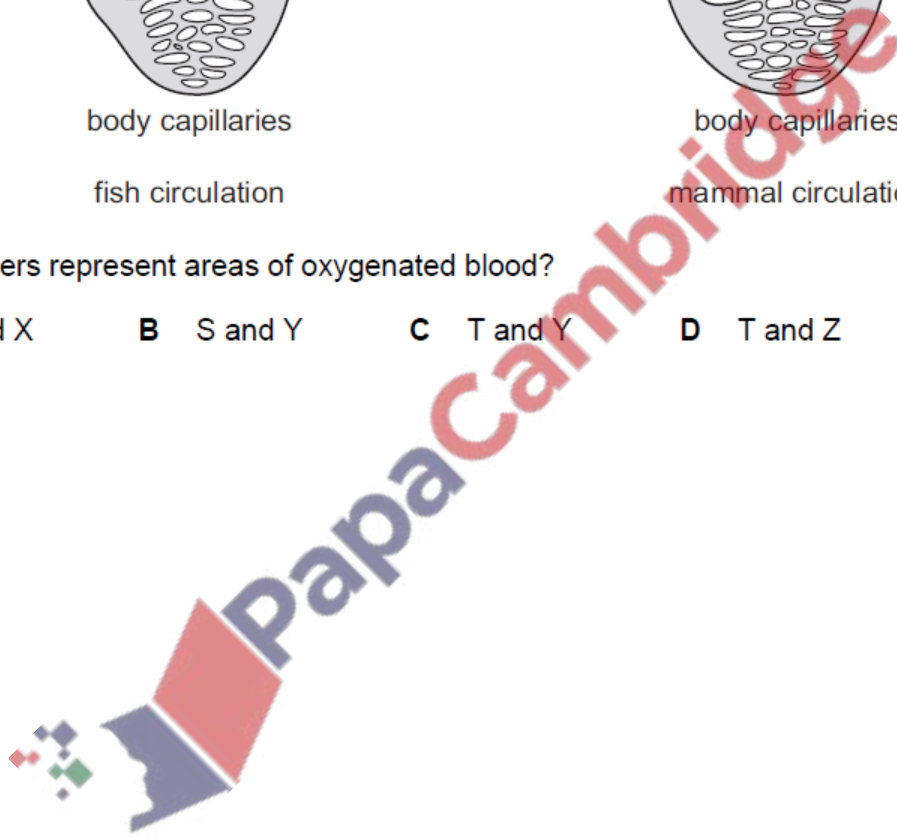
	vessel name	direction of blood flow
A	aorta	towards the lungs
B	pulmonary artery	towards the lungs
C	pulmonary artery	away from the lungs
D	vena cava	away from the lungs

The diagrams show the single circulation of a fish and the double circulation of a mammal.



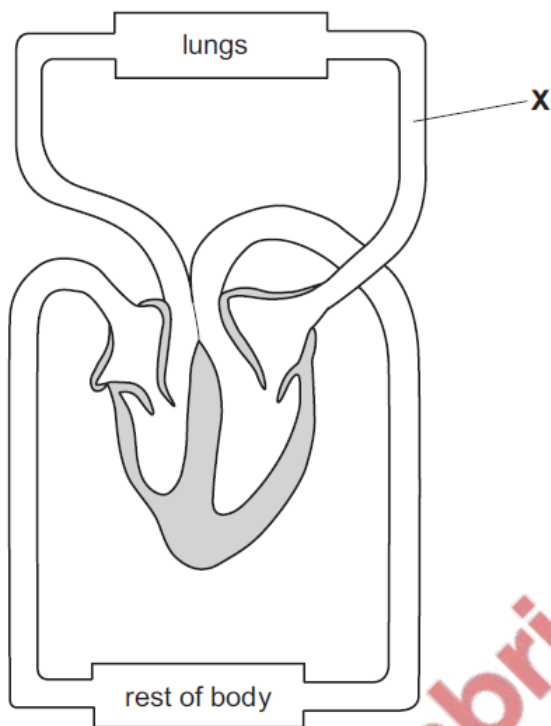
Which letters represent areas of oxygenated blood?

- A** R and X **B** S and Y **C** T and Y **D** T and Z



15. June/2020/Paper_22/No.18

The diagram shows the human heart and main blood vessels.



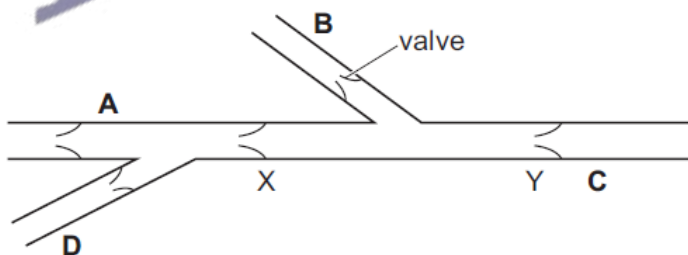
What is the blood vessel labelled X?

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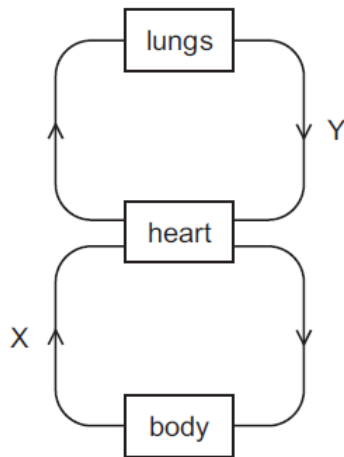
16. June/2020/Paper_23/No.17

The diagram shows some veins in the human arm and the valves that they contain.

If blood is squeezed out of section X–Y, where should pressure be placed on a vein to stop blood flowing into this section again?



The diagram shows some of the blood vessels leaving and returning to the heart.



Which row is correct for blood vessels X and Y?

	name of blood vessel X	description of oxygen content of the blood in X	name of blood vessel Y	description of oxygen content of the blood in Y
A	aorta	deoxygenated	pulmonary artery	oxygenated
B	aorta	oxygenated	pulmonary vein	deoxygenated
C	vena cava	deoxygenated	pulmonary vein	oxygenated
D	vena cava	oxygenated	pulmonary artery	deoxygenated