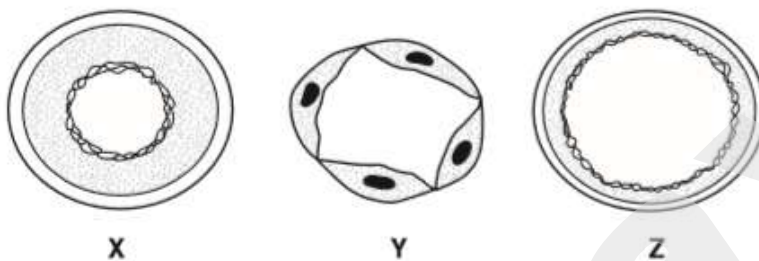


## Transport in animal

### IGCSE Biology Topical Questions Paper 1

May/June 2003

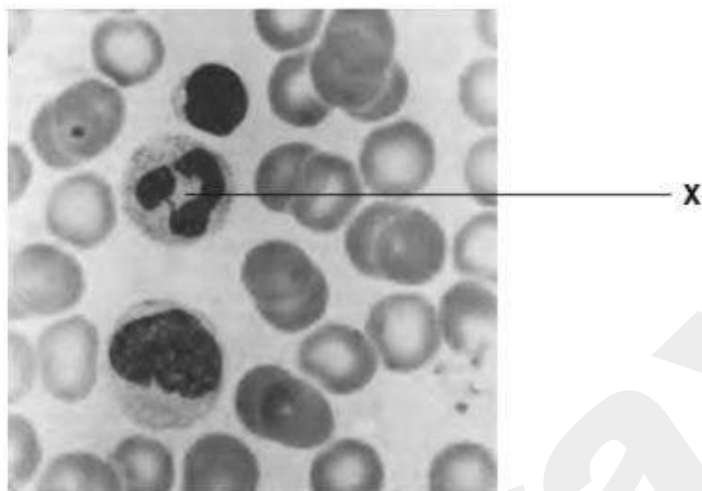
16 The diagram shows cross-sections of three types of blood vessel (not drawn to the same scale).



What is the identity of the three vessels?

	artery	capillary	vein
<b>A</b>	X	Y	Z
<b>B</b>	Y	X	Z
<b>C</b>	X	Z	Y
<b>D</b>	Y	Z	X

18 The photograph shows some blood as seen under the microscope.



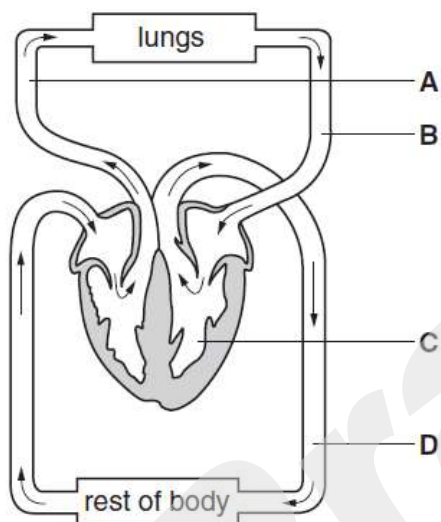
What is the function of the cell labelled X?

- A blood clotting
- B carrying oxygen
- C defending against disease
- D transporting hormones

Oct/Nov 2003

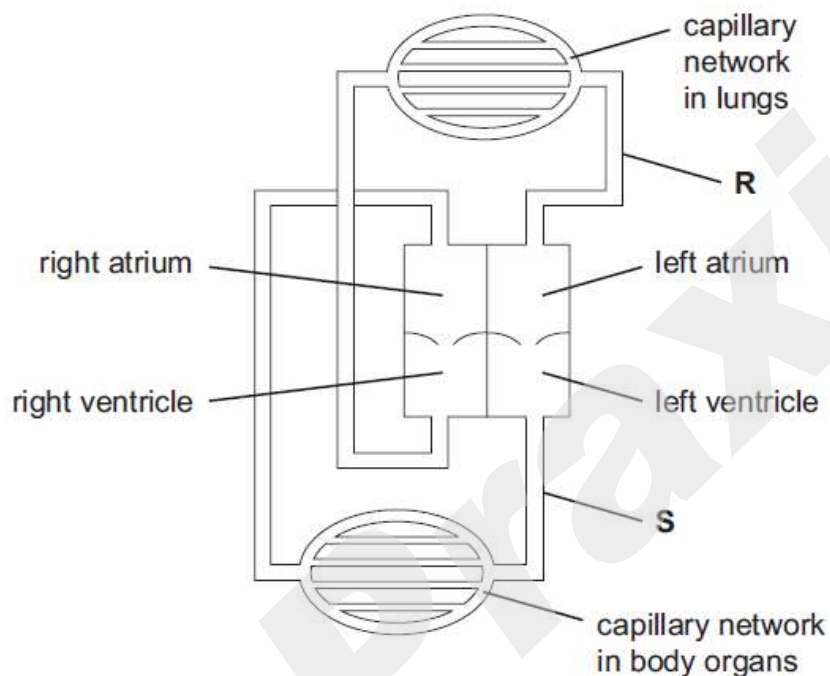
18 The diagram shows part of the human circulatory system.

Which part carries oxygenated blood at low pressure?



May/June 2004

17 The diagram shows the circulatory system of a mammal.



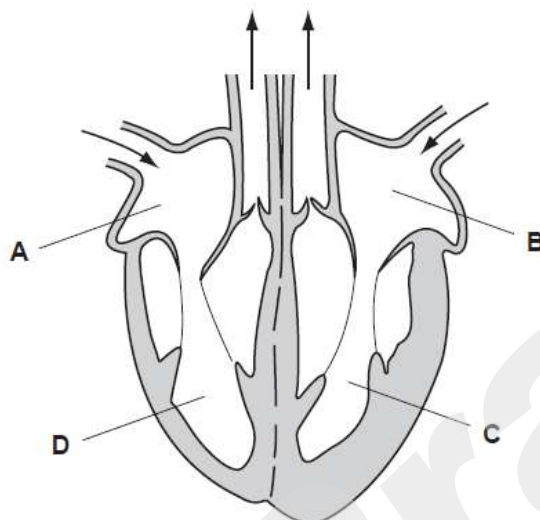
What describes the blood in vessels R and S?

	R	S
A	deoxygenated	deoxygenated
B	deoxygenated	oxygenated
C	oxygenated	deoxygenated
D	oxygenated	oxygenated

Oct/Nov 2004

17 The diagram shows the directions of blood flow through a heart.

Which chamber of the heart receives blood directly from the lungs?



18 Which of the following describes a vein?

	valves present	thick muscle tissue in wall
<b>A</b>	✓	✓
<b>B</b>	✓	x
<b>C</b>	x	✓
<b>D</b>	x	x

May/June 2005

- 18 *Double circulation* of the blood means that for every complete circuit of the body
- A atria and ventricles contract alternately.
  - B blood flows through the arteries and veins.
  - C blood flows through atria and ventricles.
  - D blood flows twice through the heart.

- 19 Which matches the component of blood to its function?

	component	function
A	plasma	carries glycogen
B	platelets	carry hormones
C	red blood cells	carry oxygen
D	white blood cells	carry nutrients

Oct/Nov 2005

- 17 Which cells pass from blood, through capillary walls, to tissues?

	white blood cells	red blood cells
A	✓	✓
B	✓	x
C	x	✓
D	x	x

key

✓ = pass

x = do not pass

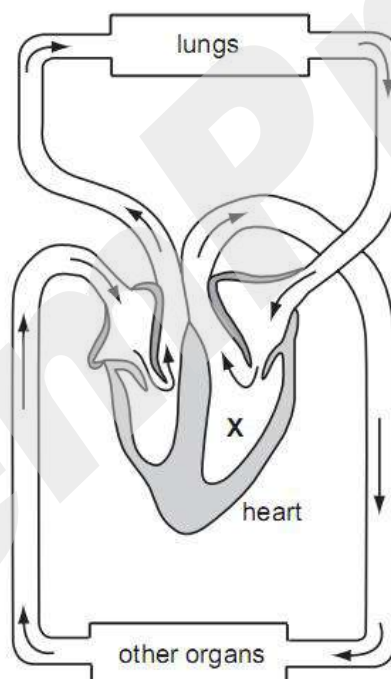
May/June 2006

18 Which shows the functions of the parts of the blood?

	red blood cells	white blood cells	platelets
<b>A</b>	antibody production	clotting	oxygen transport
<b>B</b>	clotting	oxygen transport	antibody production
<b>C</b>	oxygen transport	antibody production	clotting
<b>D</b>	oxygen transport	clotting	antibody production

Oct/Nov 2006

17 The diagram shows the circulation of blood in the body, through the heart, lungs and other organs.



What is the name of **X**?

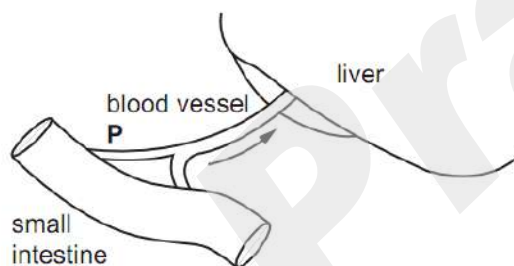
- A** left atrium (auricle)
- B** right atrium (auricle)
- C** left ventricle
- D** right ventricle

May/June 2007

- 16 What is a function of the human blood system?
- A carrying eggs from the ovary to the uterus
  - B carrying glucose from the gut to the liver
  - C carrying partly digested food from the mouth to the stomach
  - D carrying urine from the kidney to the bladder

Oct/Nov 2007

- 14 The diagram shows blood vessel **P** which carries digested food from the small intestine to the liver.



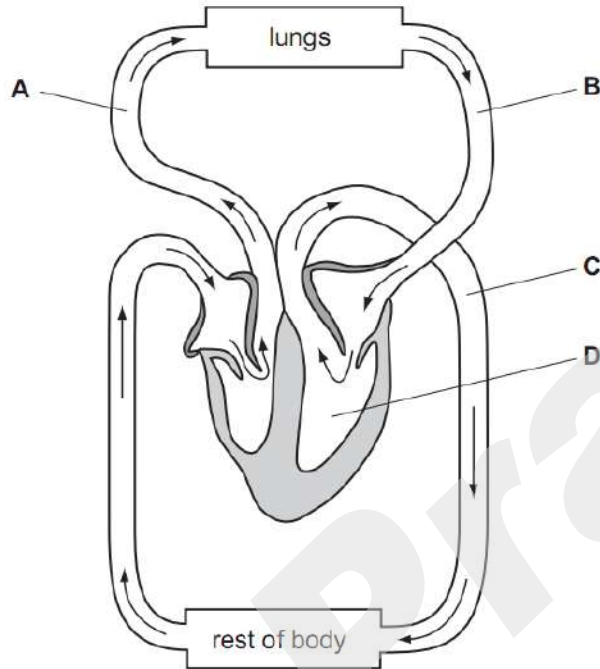
What describes the level of glucose in blood vessel **P** and the level of glycogen in the liver, shortly after a meal containing carbohydrates?

	glucose in blood vessel <b>P</b>	glycogen in liver
<b>A</b>	high	decreasing
<b>B</b>	high	increasing
<b>C</b>	low	decreasing
<b>D</b>	low	increasing



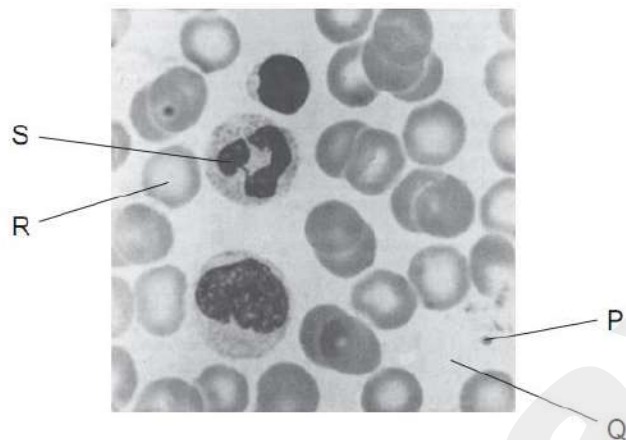
17 The diagram shows part of the human circulatory system.

Which part carries oxygenated blood at low pressure?



May/June 2008

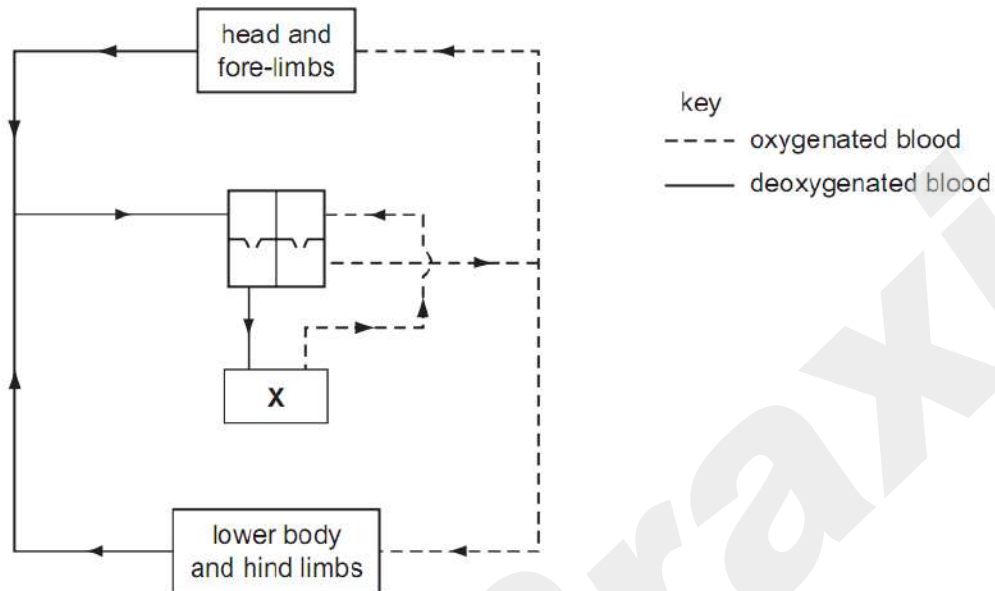
16 The diagram shows blood as seen under a microscope.



Which identifies parts P, Q, R and S of the blood?

	plasma	platelet	white blood cell	red blood cell
<b>A</b>	P	Q	R	S
<b>B</b>	Q	P	S	R
<b>C</b>	R	S	Q	P
<b>D</b>	S	R	P	Q

18 The plan shows the blood system of a mammal.

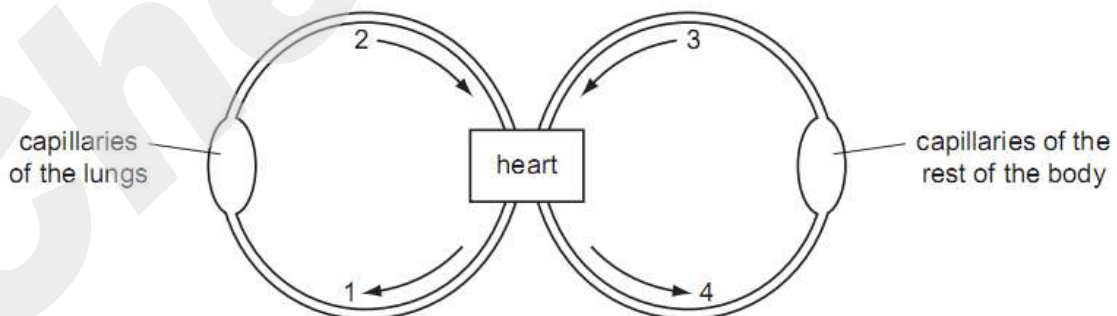


What does the part labelled X represent?

- A heart
- B kidneys
- C liver
- D lungs

Ovt/Nov 2008

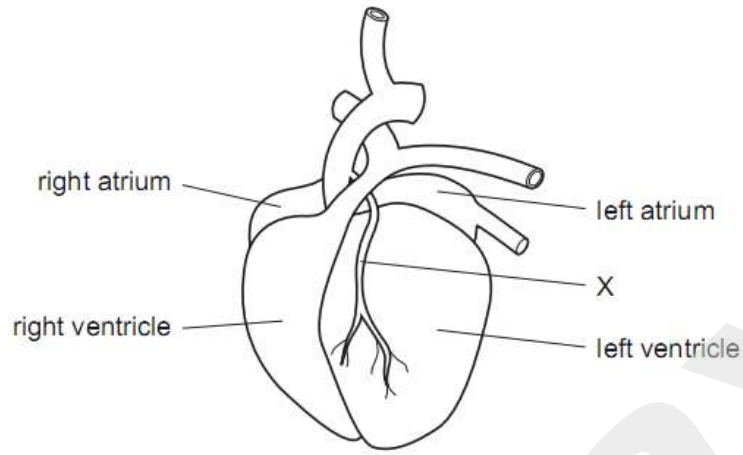
16 The diagram shows a double circulatory system.



Which two vessels carry blood at the highest pressure?

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

17 The diagram shows an external view of the human heart.

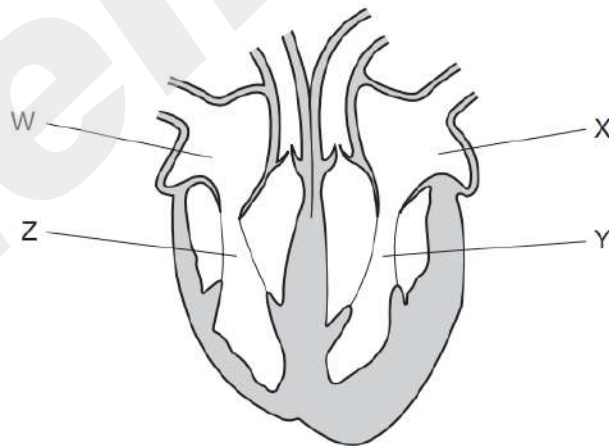


What is the name of the blood vessel labelled X?

- A coronary artery
- B hepatic artery
- C pulmonary artery
- D renal artery

May/June 2009

18 The diagram shows the human heart.



Which two chambers contract at the same time?

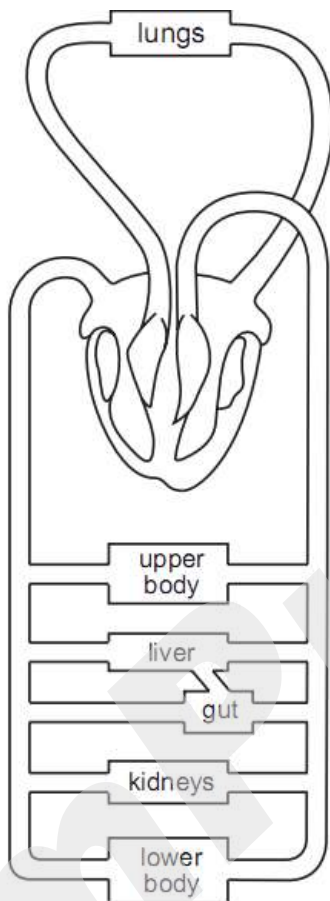
- A W and X
- B W and Z
- C X and Z
- D X and Y

Oct/Nov 2009

- 16** What describes the aortic (semi-lunar) and bicuspid (mitral) heart valves when the left ventricle is relaxing?

	aortic valve	bicuspid valve
<b>A</b>	closed	closed
<b>B</b>	closed	open
<b>C</b>	open	closed
<b>D</b>	open	open

17 The diagram shows the blood circulatory system of a human.



How many times does the blood pass through the heart on its way from the kidneys to the aorta?

- A one
- B two
- C four
- D more than four