

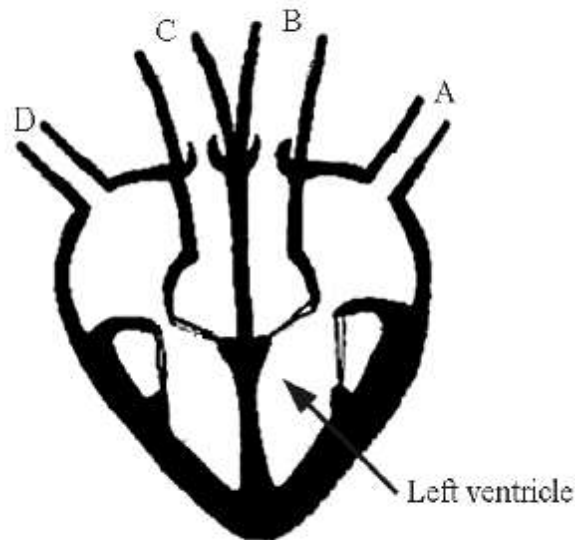


**Science Revised Syllabus  
Junior Certificate  
Higher Level**

**Past Exam Questions on  
B Circulatory System and Blood**

**Q2 Part (b) 2013**

- (b) Four blood vessels are attached to the heart. These blood vessels are labelled A, B, C and D in the diagram.



Select any two of the blood vessels A, B, C or D from the diagram.  
Identify your selection in each case by using the appropriate letter.  
Name the blood vessels selected.  
Give the direction of movement of blood into *or* out of the heart in each case.  
State if the blood is oxygenated *or* deoxygenated in each case. (18)

Identify \_\_\_\_\_

Name \_\_\_\_\_

Direction \_\_\_\_\_

Oxygenated *or* deoxygenated \_\_\_\_\_

Identify \_\_\_\_\_

Name \_\_\_\_\_

Direction \_\_\_\_\_

Oxygenated *or* deoxygenated \_\_\_\_\_

**Q1 Part (b) 2012**

(b) Why is blood considered to be a tissue?

Why? \_\_\_\_\_

Name a substance transported by blood.

Name \_\_\_\_\_

Q2 Part (a) 2011

Question 2

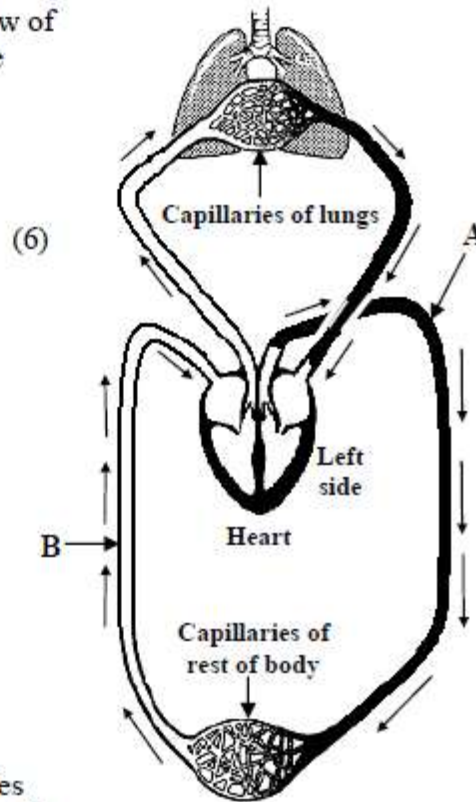
(39)

(a) The simplified diagram shows the flow of blood through the lungs, heart and the rest of the body.

(i) Name the blood vessels labelled A and B.

A \_\_\_\_\_

B \_\_\_\_\_



Capillaries are small blood vessels.

(ii) Describe two changes in the composition of blood after it has passed through the capillaries of the lungs shown. (6)

1 \_\_\_\_\_

2 \_\_\_\_\_

\_\_\_\_\_

What feature of capillaries allows these changes to happen? (3)

\_\_\_\_\_

(iii) Name the chamber of the heart that pumps blood to the lungs. (3)

\_\_\_\_\_

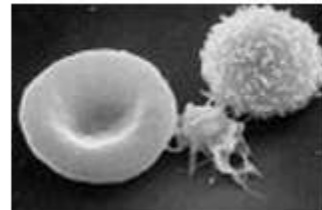
**Q1 Part (d) 2009**

- (d) Label clearly the *pulmonary artery* with an A, and the *pulmonary vein* with a V in the diagram of the heart.



**Q1 Part (b) 2008**

- (b) The photograph shows a red blood cell and a white blood cell taken using an electron microscope. Give one *function* for each type blood cell.

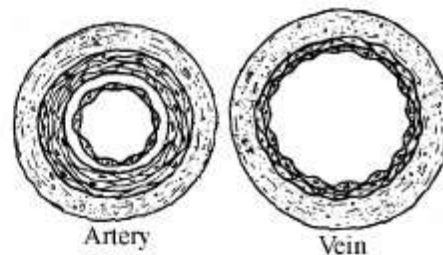


Red blood cell \_\_\_\_\_

White blood cell \_\_\_\_\_

**Q1 Part (f) 2008**

- (f) The diagram shows cross sections of an artery and of a vein. Why do *arteries* have much thicker walls than veins?



Why? \_\_\_\_\_

Give one other *structural difference* between arteries and veins.

Difference \_\_\_\_\_

Q2 2006

(b) Blood is a liquid tissue. The diagram shows blood viewed through a microscope.

(i) Name any two components of blood shown in the diagram. (6)



Component 1 \_\_\_\_\_

Component 2 \_\_\_\_\_

(ii) Give the *function* of each of the components of blood you have named. (6)

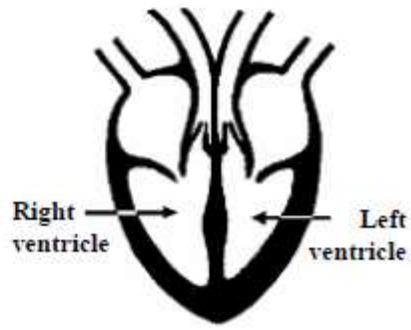
Function of 1 \_\_\_\_\_

Function of 2 \_\_\_\_\_

(iii) The diagram shows the human heart.

Why has the left ventricle got a *thicker wall* than the right ventricle?

(3)



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(c) The diagram shows a person's *pulse rate* being taken.

(i) *What causes a person's pulse?*

(3)

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(ii) *How is a person's pulse rate measured using this method?*

(6)

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(iii) An athlete's resting pulse rate is 58. After 10 minutes strenuous exercise their pulse rate was 120. After resting for 5 minutes their pulse rate reduced to 63. *Clearly account for the rise and fall in pulse rate experienced by the athlete.*

(6)

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