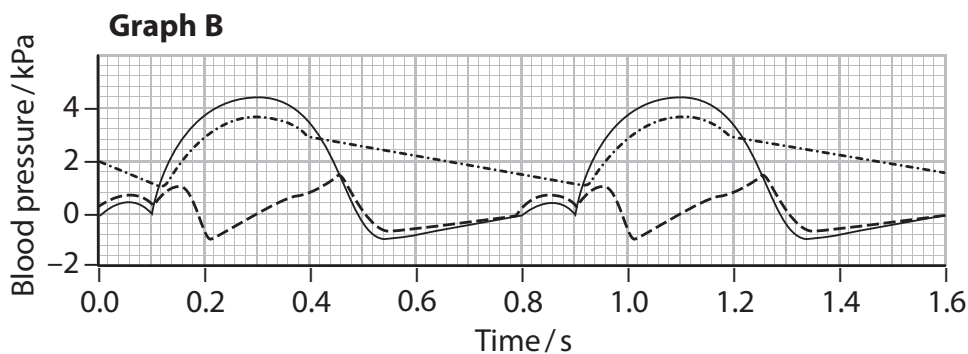
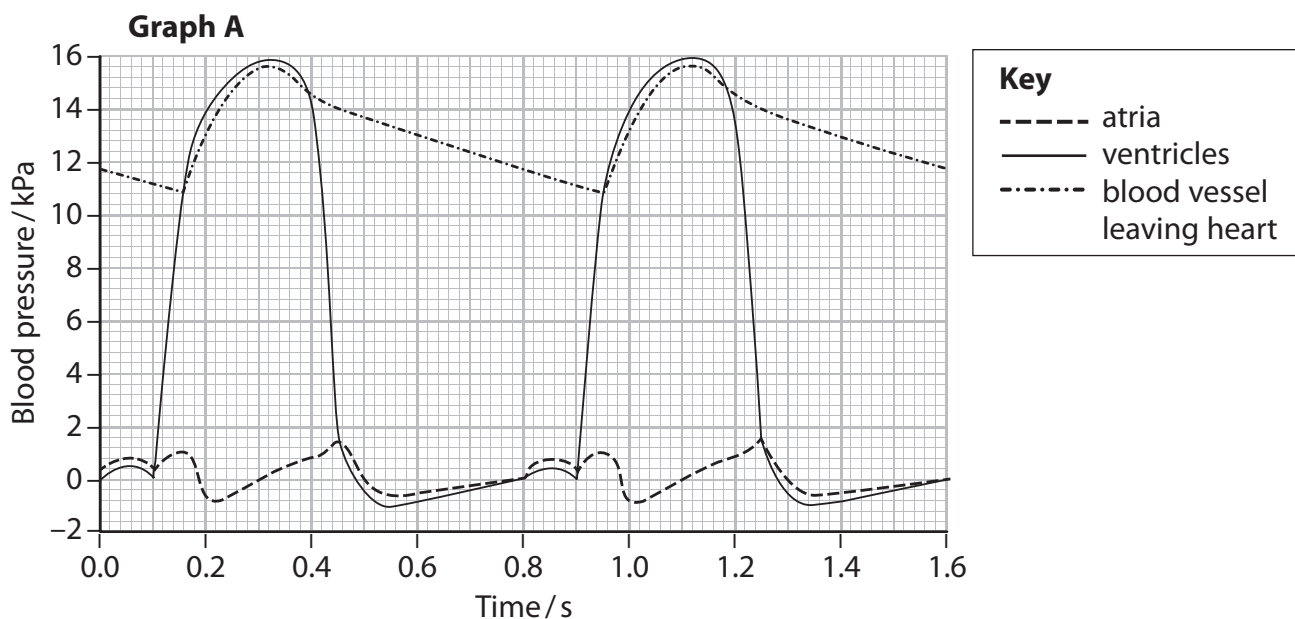


5 The pressure of the blood passing through the heart can vary.

Graph A shows the changes in blood pressure in one side of the heart. Graph B shows the changes in blood pressure in the other side of the heart over the same time period.



(a) (i) Calculate the heart rate.

(2)

Answer .....

(ii) Increased heart rate is often associated with high blood pressure.

Which of the following will reduce blood pressure?

(1)

- A anticoagulants
- B antihypertensives
- C cholesterol
- D platelet inhibitors



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(b) (i) Explain which side of the human heart is represented by graph B.

(2)

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(ii) In graph A, which blood vessel carries the blood leaving the heart?

(1)

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

(iii) In graph A, the blood pressure inside the ventricle changes between 0.0 and 0.45 seconds.

Explain how these changes in blood pressure occur in this part of the cardiac cycle.

(4)

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(c) Explain how the structure of the walls of the blood vessels carrying blood away from the heart in graph A and graph B are different.

(3)

Area with horizontal dotted lines for writing the answer.

**(Total for Question 5 = 13 marks)**

