

Human Breathing System

Question 1

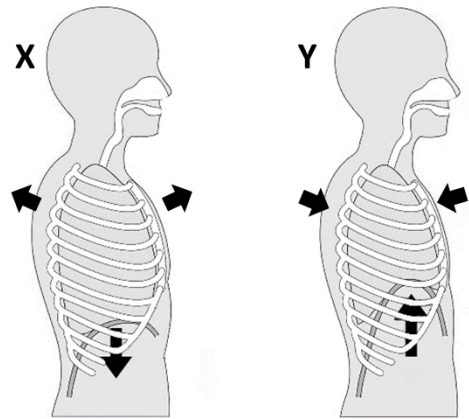
(c) Answer the following questions in relation to your knowledge of the human circulatory and breathing systems.

(ii) **In your answerbook**, sketch the structure of an alveolus and its associated blood supply.

On your diagram, clearly indicate the overall directions in which oxygen and carbon dioxide are moving.

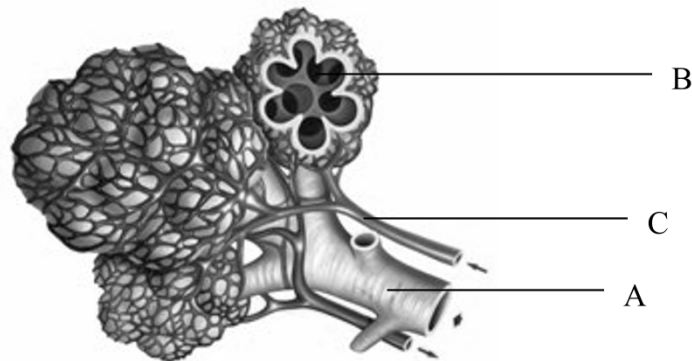
(iii) The diagrams (X and Y) show the two stages of breathing with the arrows representing the body movements involved in breathing.

1. State which diagram (X or Y) represents inhalation.
2. Explain in detail how you know inhalation is occurring in this diagram.



Question 2

(c)



The diagram shows microscopic detail from a human lung.

- (i) Name the parts labelled A, B and C.
- (ii) Give **two** features of the structures in the diagram that allow for efficient gas exchange.
- (iii) Name a disorder of the breathing system and say how it may be:
 1. Caused.
 2. Prevented.
 3. Treated.
- (iv) Which gas, dissolved in the blood, can trigger deeper or faster breathing? (24)