



Biology Leaving Certificate Higher Level

Past Exam Questions on:

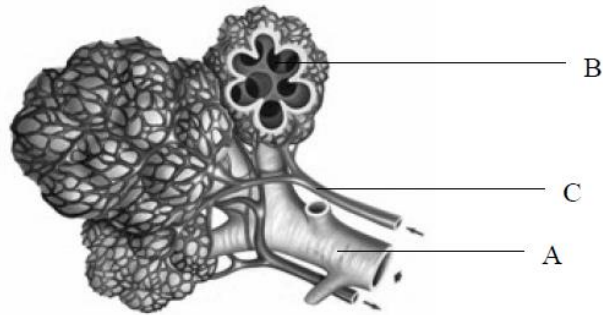
Human Breathing

Q 6 2010

7. (a) (i) Name the cavity of the body in which the heart and lungs are located.....
- (ii) State **one** way in which heart muscle differs from other muscles in the body.....
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- (b) Answer the following questions in relation to a dissection that you carried out to investigate the structure of an ox's or a sheep's heart.
- (i) Describe the steps that you followed in order to identify and display the inner structures of the heart. Use suitably labelled diagrams if necessary.
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- (ii) What did you do in order to expose a semi-lunar valve?
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- (iii) In the space below draw and label sufficient of your dissection to show the tricuspid valve, the right atrium and the right ventricle.

Q11(c) 2009

(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)

Q13(b&c) - 2007

- (b)
 - ⊖ Draw a large diagram of the human breathing system. Label the trachea, bronchus and lung.
 - (ii) State the function of the following: epiglottis, larynx.
 - (iii) Describe briefly the role of the diaphragm and intercostal muscles in inhalation.
In your answer refer to volume and thoracic air pressure. (27)
- (c) Give **three** ways in which an alveolus is adapted for efficient gas exchange.
Name the process involved in the passage of gas between the alveolus and the blood.
Name a breathing disorder.
In the case of the breathing disorder that you have named in (iii) state:
 1. a cause,
 2. a means of prevention,