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| **YR** | **Ppr** | **Mks.** | **Topic No.** | **Question** |
| 2016 | 1 | 1 | 2.1.6 | Which of the following applies to hemoglobin? (iron compound) |
| 2016 | 1 | 1 | 2.1.1 | What are the principle structures of the ventilatory system? |
| 2016 | 1 | 1 | 2.1.1 | Which of the following is the correct order for carbon dioxide moving from the pulmonary artery to the atmosphere? |
| 2015 | 1 | 1 | 2.1.1 | Which is a principle structure of the ventilatory system? |
| **2014** | **2** | **1** | **2.1.1** | **List two principal structures of the ventilatory system.** |
| 2016 | 1 | 1 | 2.1.2 | What are the functions of the nose during inspiration? |
| 2015 | 1 | 1 | 2.1.2 | Which of the following is a/are function(s) of the conducting airways? |
| 2016 | 1 | 1 | 2.1.3 | Which combination is used to calculate vital capacity? |
| 2015 | 1 | 1 | 2.1.3 | What is vital capacity (VC)? |
| 2015 | 1 | 1 | 2.1.3 | What is the definition of inspiratory reserve volume (IRV)? |
| 2014 | 1 | 1 | 2.1.3 | Which statement defines vital capacity? |
| 2014 | 1 | 1 | 2.1.3 | What is vital capacity? |
| **2012** | **2** | **1** | **2.1.3** | **State the relationship between inspiratory reserve volume (IRV) and tidal volume during exercise.** |
| **2012** | **2** | **3** | **2.1.3** | **Suggest reasons for the difference in the value of maximal volume expired for cycle ergometry and treadmill running.** |
| 2009 | 1 | 1 | 2.1.3 | Which combination of the following lung volumes would allow you to calculate the residual lung volume. |
| 2009 | **2** | **1** | **2.1.3** | **Define Stroke Volume.** |
| 2016 | **2** | **6** | **2.1.4** | **Explain the mechanics of pulmonary ventilation in the human lungs at rest.** |
| 2016 | **2** | **2** | **2.1.4** | **Explain the mechanics of inhalation in the human lungs.** |
| 2015 | **2** | **4** | **2.1.4** | **Explain the mechanics of exhalation in the human lungs during the initial stages of sub-maximal exercise.** |
| 2014 | **2** | **6** | **2.1.4** | **Explain the mechanics of pulmonary ventilation in the human lungs during high intensity exercise.** |
| 2011 | **2** | **6** | **2.1.4** | **Explain the muscular mechanics involved in ventilation.** |
| 2009 | 1 | 1 | 2.1.4 | Which of the following describes the correct mechanical features of inspiration. |
| **2016** | **2** | **1** | **2.1.5** | **State the receptor in the aorta which responds to carbon dioxide and pH levels in the blood.** |
| 2016 | 1 | 1 | 2.1.5 | What does the elevated breathing rate after exercise allow the body to do? |
| 2014 | 1 | 1 | 2.1.5 | Which is responsible for an increase in ventilation during exercise? |
| **2014** | **2** | **5** | **2.1.5** | **Outline how both the nervous system and the chemical composition of blood control the rate of breathing during exercise.** |
| 2014 | 1 | 1 | 2.1.5 | What can cause low pH levels in the blood during aerobic exercise? |
| 2012 | 1 | 1 | 2.1.5 | What causes ventilation to increase during exercise? |
| **2011** | **2** | **2** | **2.1.5** | **Outline the control of ventilation during exercise.** |
| 2013 | 1 | 1 | 2.1.5 | Which stimulus increases ventilation rate and depth? |
| 2016 | 1 | 1 | 2.1.6 | What percentage of oxygen in the blood is transported by hemoglobin as oxyhemoglobin within red blood cells? |
| **2014** | **2** | **3** | **2.1.6** | **Outline the role of hemoglobin in the transportation of gases in the body of a trained athlete.** |
| **2013** | **2** | **3** | **2.1.6** | **Outline the role of hemoglobin in oxygen transport.** |
| **2012** | **2** | **2** | **2.1.6** | **Outline the role of hemoglobin in oxygen transportation when playing sport.** |
| 2011 | 1 | 1 | 2.1.6 | What is the main role of haemoglobin during exercise? |
| **2016** | **2** | **5** | **2.1.7** | **Explain the process of gaseous exchange between the lungs and pulmonary capillaries at rest and during exercise.** |
| **2016** | **2** | **4** | **2.1.7** | **Describe the process of gaseous exchange at the alveoli.** |
| 2015 | 1 | 1 | 2.1.7 | Which gases are exchanged at the alveoli? |
| **2014** | **2** | **4** | **2.1.7** | **Explain the process of gaseous exchange between the lungs and pulmonary capillaries.** |
| **2013** | **2** | **6** | **2.1.7** | **Explain the process of gasesous exchange at the alveoli.** |

List two principal structures of the ventilatory system.

State the relationship between inspiratory reserve volume (IRV) and tidal volume during exercise.

Suggest reasons for the difference in the value of maximal volume expired for cycle ergometry and treadmill running.

Define Stroke Volume.

Explain the mechanics of pulmonary ventilation in the human lungs at rest.

Explain the mechanics of inhalation in the human lungs.

Explain the mechanics of exhalation in the human lungs during the initial stages of sub-maximal exercise.

Explain the mechanics of pulmonary ventilation in the human lungs during high intensity exercise.

Explain the muscular mechanics involved in ventilation.

State the receptor in the aorta which responds to carbon dioxide and pH levels in the blood.

Outline how both the nervous system and the chemical composition of blood control the rate of breathing during exercise.

Outline the control of ventilation during exercise.

Outline the role of hemoglobin in the transportation of gases in the body of a trained athlete.

Outline the role of hemoglobin in oxygen transport.

Outline the role of hemoglobin in oxygen transportation when playing sport.

Explain the process of gaseous exchange between the lungs and pulmonary capillaries at rest and during exercise.

Describe the process of gaseous exchange at the alveoli.

Explain the process of gaseous exchange between the lungs and pulmonary capillaries.

Explain the process of gasesous exchange at the alveoli.