Name: _____

1.2 The Cardiovascular System
1.3 The Respiratory System

Date:

Time: 40 minutes

Total marks available: 35

Total marks achieved: _____

Percentage: _____

1.Which one of the following describes residual volume? **(1 mark)**

A) The volume of air that can be forcibly expired following a normal breath
B) The volume of air that can be forcibly inspired following a normal breath
C) The volume of air that remains in the lungs after maximum expiration
D) The volume of air breathed in or out per breath

2. Which of the following shows the correct order that is followed by the conduction system of the heart? **(1 mark)**

A) Purkinje Fibres, Bundle of HIS, SA Node, AV Node
B) AV Node, SA Node, Bundle of HIS, Purkinje Fibres
C) AV Node, SA Node, Purkinje Fibres, Bundle of HIS
D) SA Node, AV Node, Bundle of HIS, Purkinje Fibres

3. **Starling's Law** outlines that during exercise there will be an increase in stroke volume? Explain the factors leading to this increase in stroke volume? **(3 marks)**

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4. If a performer exercises in warm conditions, cardiovascular drift can occur. Explain the process that leads to cardiovascular drift? **(4 marks)**

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Location	**Partial Pressure of Oxygen (P02)**	**Partial Pressure of Carbon Dioxide (PC02)**
Alveoli	100 mm Hg	40 mm Hg
Blood Capillary	40 mm Hg	46 mm hg

5. The table above shows the partial pressure of oxygen at the site of the lungs. Using the data from the table, explain how diffusion occurs at the site of the lungs**. (3 marks)**

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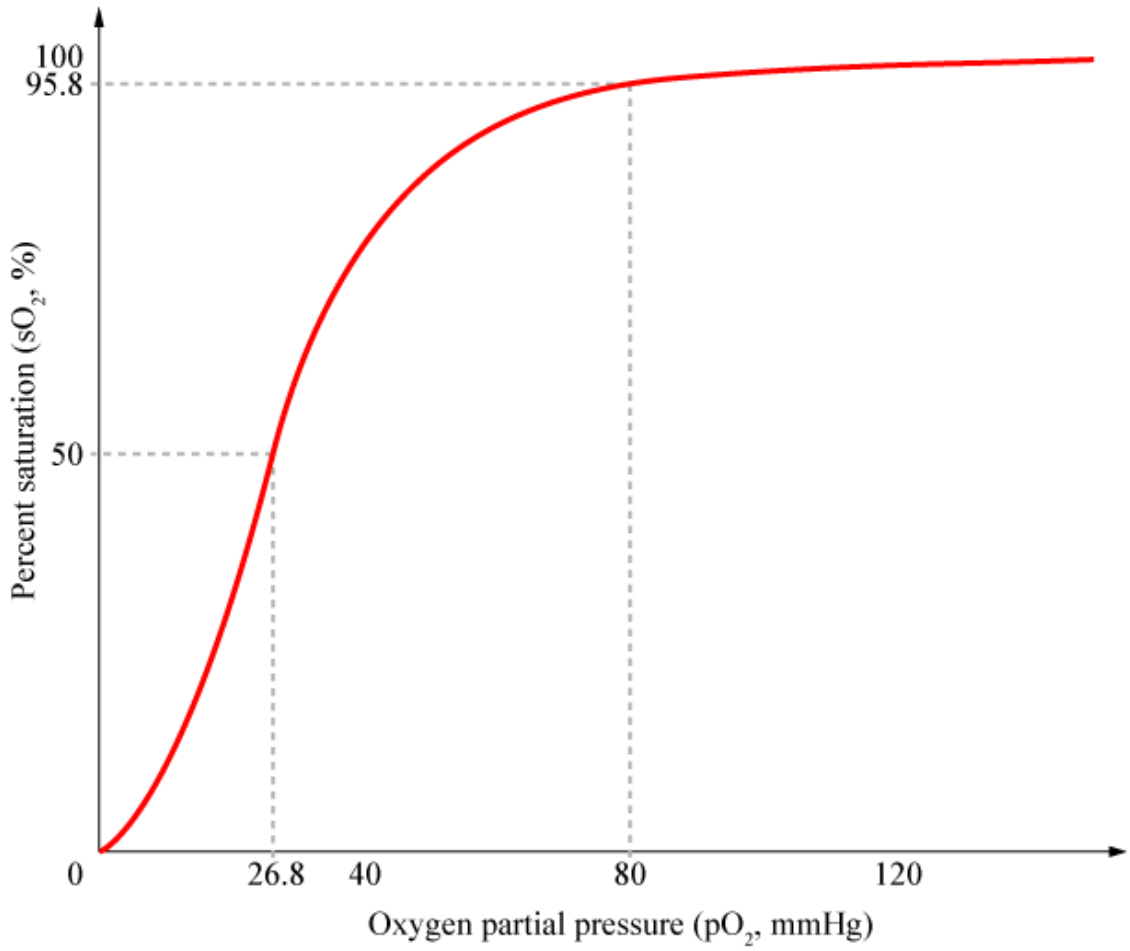

6. The graph outlined above shows the dissociation curve. Explain what the dissociation curve is and discuss the changes that occur to this curve during exercise. **(8 marks)**

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7. An elite swimmer begins a 400m race. Explain the different receptor systems present in the swimmer's body and evaluate how they can have an effect on performance in **swimming**. **(15 marks)**

End of Test