

Test yourself

The Cardiovascular System

1. What is the correct order that an electrical impulse travels through the heart? **(1)**

Sinoatrial node	Bundle of His	Atrioventricular node	Purkinje fibres
Atrioventricular node	Sinoatrial node	Bundle of His	Purkinje fibres
Sinoatrial node	Atrioventricular node	Bundle of His	Purkinje fibres
Atrioventricular node	Sinoatrial node	Purkinje fibres	Bundle of His

2. Which of the following does not play a role in the transportation of oxygen? **(1)**

Plasma

Haemoglobin

Mitochondria

Platelets

3. Explain the process of venous return and the mechanisms used to support the process. **(4)**
4. Describe how blood is redistributed to the working muscles. **(3)**
5. Define the term 'stroke volume' and explain how this is affected by exercise. **(3)**
6. Health professionals believe that people who adopt an active lifestyle over a number of years will gain many positive health benefits. Evaluate the impact of endurance activities on the cardiovascular system. **(8)**

The Respiratory System

1. Which of the following statements is incorrect? **(1)**

Tidal volume is the volume of air breathed in or out in one breath

Residual volume is the amount of air that remains in the lungs after maximal expiration

Inspiratory reserve volume is volume of air that can be forcibly expired after a normal breath

Expiratory reserve volume is volume of air that can be forcibly expired after a normal breath

2. Which of the following do not affect neural control of breathing? **(1)**

Proprioceptors

Baroreceptors

Stretch receptors

Chemoreceptors

3. Explain the passage of air into the body. **(4)**
4. Gas exchange and oxygen delivery influence performance in sport activities. Explain how oxygen diffuses from the lungs into the blood and it is transported to the tissues. **(4)**
5. Evaluate the impact of long term aerobic training and lifestyle choices on the efficiency of the respiratory system. **(8)**

The Neuromuscular System

1. Which of the following sports is most likely to use slow twitch muscle fibres? **(1)**

Basketball

Road Cycling

Football

Long Jump

2. An isometric contraction is: **(1)**

When there is a concentric muscle contraction

When there is an eccentric muscle contraction

When there is no change in length of the muscle under tension

When there is a sudden relaxation of the muscle contraction

3. Describe the characteristics of the main muscle fibre type used by track endurance athletes. **(4)**
4. Using sporting examples, analyse how the structural characteristics of muscle fibres enable the fibres to be better suited to specific sports. **(8)**

The Musculoskeletal System and Analysis of Movement in Physical Activities

1. Which of the following is a hamstring muscle? **(1)**

Rectus femoris

Biceps femoris

Vastus lateralis

Vastus medialis

2. Which of the following statements is correct? **(1)**

Abduction and adduction occur in a frontal plane about a sagittal axis

Abduction and adduction occur in a transverse plane about a sagittal axis

Abduction and adduction occur in a frontal plane about a longitudinal axis

Abduction and adduction occur in a transverse plane about a longitudinal axis

3. The picture below shows the release phase of a basketball free throw. Using the picture, identify the joint action, main agonist and the type of muscle contraction occurring at the elbow joint as the basketball players prepares to release the ball. **(3)**



4. When performing the downward phase of a press up, identify the agonist and antagonist and muscle contraction **(3)**
5. Using practical examples, describe the types of muscular contraction. **(4)**
6. Describe the function of a ball and socket joint. **(2)**
7. Using sport examples, explain the joint actions available within the body across the planes of movement and the axes of rotation. **(8)**