

# Exam questions

1.2.2

## Multiple-choice questions

1. (a) Which of the following best describe the function of the circulatory system?

- A Protects the body by transporting white blood cells to the site of infection, helps with breathing, is an indicator of fitness
- B Transports blood around the body, helps control body temperature, protects the body by transporting white blood cells to the site of infection
- C Helps control body temperature, works via the central nervous system, is an indicator of fitness, controls movement
- D Shunts blood to working muscles, helps with breathing, controls the intake of oxygen

(1)

(b) Which of the following best describes veins?

- A Work at lower pressure than other blood vessels, have semi-permeable walls
- B Have valves, work under high pressure, transport oxygenated blood
- C Have thin walls, have valves, work at lower pressure than other blood vessels, transport deoxygenated blood
- D Transport deoxygenated blood, divide into arterioles, have walls one cell thick

(1)

(c) Which of the following best describe the pulmonary circuit?

- A Heart – pulmonary arteries – lungs – pulmonary vein – heart
- B Heart – aorta – lungs – pulmonary vein – heart
- C Heart – pulmonary arteries – capillaries – lungs – pulmonary vein – heart
- D Heart – pulmonary arteries – lungs – vena cava – heart

(1)

(d) Which of the following best describes the effects of exercise on blood flow?

- A Blood shunted to working muscles, stroke volume increases, heart rate remains constant, cardiac output increases
- B Heart beats harder, blood shunted to working muscles, stroke volume increases, blood changes colour
- C Blood shunted to working muscles, cardiac output decreases, heart rate increases, plasma is reduced
- D Heart rate increases, heart beats harder, blood shunted to working muscles, cardiac output increases

(1)

## Short-answer questions

2. What is the term that describes the amount of blood ejected from the heart in one minute? (1)
3. Blood is the transportation system of the body. Which type of blood cell is responsible for carrying oxygen around the body? (1)

## Longer-answer questions

4. What are the immediate effects of exercise on the circulatory system? (4)
5. What are the effects of regular exercise and training on the circulatory system? (3)
6. What are the long-term benefits of exercise on the circulatory system? (3)