1.2.3

Exam questions

Multiple-choice questions

1. **(a)** Parts of the respiratory system include:

- ☐ **A** Lungs, heart, kidneys, trachea
- ☐ **B** Mouth, alveoli, pancreas, lungs
- ☐ **C** Nose, bronchi, diaphragm, pelvis
- ☐ **D** Alveoli, bronchi, diaphragm, trachea

(1)

(b) Which of the following gives the correct order of inspiration?

- ☐ **A** Intercostal muscles contract, diaphragm pulls down, air pressure reduced, air sucked into lungs, chest expands
- ☐ **B** Air sucked into lungs, chest expands, diaphragm pulls down, intercostal muscles contract, air pressure reduced
- ☐ **C** Diaphragm pulls down, intercostal muscles contract, air pressure reduced, air sucked into lungs, chest expands
- ☐ **D** Air pressure reduced, intercostal muscles contract, air sucked into lungs, chest expands, diaphragm pulls down

(1)

(c) Which of the following gives the correct effects of exercise on breathing?

- ☐ **A** Tidal volume increases, increased carbon dioxide exhaled, breaths per minute increases
- ☐ **B** Tidal volume decreases, increased carbon dioxide inhaled, residual volume increases
- ☐ **C** Vital capacity increases, residual volume increases, tidal volume decreases
- ☐ **D** Breaths per minute increases, residual volume stays the same, tidal volume decreases

(1)

Short-answer questions

2. How much do the carbon dioxide levels change from inhaled to exhaled air?

(1)

3. Where do the branches of the bronchi (the bronchioles) lead to?

(1)

4. What is the formula for anaerobic exercise?

(1)

5. What kind of respiration do the following athletes use?

(a) Marathon runner

(b) Squash player

(2)

Longer-answer questions

6. Aerobic respiration is one way energy is released.

(a) Explain what aerobic respiration is.

(b) Which athletes utilize this form of respiration?

(c) Give the equation for this form of respiration.

(3)

7. Explain the composition of inspired and expired air.

(4)

8. What are the immediate effects of exercise on the respiratory system?

(6)

9. What change happens to an athlete's breathing due to anaerobic respiration and why?

(2)

10. As a performer increases their fitness levels, what effect does this have on the delivery of oxygen?

(3)