

**GCSE PE PLCs 1.2.3 A healthy active lifestyle and  
your respiratory system End of Unit Exam**

**1** Which **one** of the following statements accurately explains an effect of smoking on the respiratory system? (1)

- A** Cigarette smoke increases the amount of oxygen carried in the blood by haemoglobin
- B** Sprinters who smoke notice a greater effect on their performance than endurance athletes who smoke
- C** If a performer is a heavy smoker it will slow their recovery whatever their event
- D** Oxygen supply to the body is not affected by smoking

**2** Which **one** of the following is **not** an effect of smoking on the respiratory system? (1)

- A** High blood pressure
- B** Emphysema
- C** Bronchitis
- D** Lung cancer

**3** Oxygen debt can occur as a result of exercise.  
State whether oxygen debt occurs as a result of aerobic or anaerobic respiration. (1)

**4** Which of the following is a long-term effect of participation in exercise and physical activity on the respiratory system? (1)

- A** Increase in blood flow to the lungs
- B** Increase in oxygen debt
- C** Increase in vital capacity
- D** Increase in breathing rate

**5** Oxygen debt can occur as a result of exercise.  
When is oxygen debt 'paid back'? (1)

**6** Oxygen debt can occur as a result of exercise. Give an example of when the following performers would experience oxygen debt in their activity.

- (i) A runner in a 1500 metres race. (1)
- (ii) A player in a game of tennis. (1)
- (iii) A boxer in a boxing match. (1)

**7** Although not illegal, smoking can have dangerous side effects on the body.  
(a) name the **two** body systems that can be seriously damaged by cigarette smoke (2)  
(b) state a health risk associated with smoking for each of these systems. (2)

**8** Apart from the obvious health risks, why are sports performers advised not to smoke? (1)

9 An oxygen debt can occur when working hard during physical activity. Explain the term 'oxygen debt'. (3)

10 Describe the impact of drugs on the respiratory system

- Impact of alcohol
  - Impact of smoking cigarettes
- (4)

11 A healthy, active lifestyle will have an impact on the body systems. Describe some of the effects of participation on the body's respiratory system. In your answer you may consider:

- the immediate and short-term effects of participation on the body's respiratory system
  - the effects of regular participation and long-term effects on the body's respiratory system.
- (6)

**Total marks;** 26 marks