

NCFE

CACHE

NCFE CACHE Level 3 Extended Diploma in Health and Social Care (Adults) (Northern Ireland) (603/5355/7)

NCFE CACHE Technical Level 3 Extended Diploma in Health and Social Care (601/8435/8)

Unit title: Anatomy and physiology for health and social care

Assessment code: **HSCNI/SAE**

Time allowed: **1 hour 30 minutes**

Paper number: **Past Paper**

Time: **9.00am – 10.30am**

Assessment date: **Wednesday 17 May 2023**

Learner instructions

- Use black or blue ink.
- Answer **all** questions.
- Read each question carefully.
- You **must** write your responses in the spaces provided.
- You may do rough work in this answer book. Cross through any work you do not wish to be marked.
- If you use a supplementary answer booklet, you must add your learner name, learner number and centre number to the front cover of the booklet. Insert your supplementary answer booklet inside this question paper at the end of your test.
- All of the work you submit **must** be your own.

Learner information

- The marks available for each question are shown in brackets.
- The maximum mark for this paper is 80.

Do not turn over until the invigilator tells you to do so.

Please complete / check your details below

Learner Name:

Centre Name:

Learner Number:

Centre Number:



Section A

This section has a possible 20 marks.

Answer **all** questions in the spaces provided.

1 (a) Which **one (1)** of the following pieces of equipment is used to measure respiratory rate?

[1 mark]

- A Pulse oximeter
- B Sphygmomanometer
- C Thermometer
- D Watch

Answer _____

1 (b) Taking in oxygen is one function of respiration by the lungs.

Identify the **other** function of respiration.

[1 mark]

1 (c) Identify **three (3)** structures of the respiratory system involving the passage of air that are after the trachea.

[3 marks]

1 _____

2 _____

3 _____

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1 (d) Explain the process of gaseous exchange within the lungs.

[4 marks]

1 (e) Identify the **two (2)** muscles of respiration **and** describe the structure and / or function of **one (1)** of these muscles.

[5 marks]

Muscle 1 _____

Muscle 2 _____

Description of muscle _____



1 (f) Explain how ventilation is controlled.

[6 marks]

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Section B

This section has a possible 20 marks.

Answer **all** questions in the spaces provided.

Charlie is 5-years-old. Charlie’s health visitor raised concerns when Charlie showed delay learning to walk, run and ride a tricycle. Charlie has also been prone to falls and trips. Following a referral to a specialist, Charlie has been diagnosed with muscular dystrophy (MD).

2 (a) Discuss the likely effects of muscular dystrophy on Charlie’s wellbeing.

[12 marks]

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2 (b) Two types of movement are available at the elbow joint. One is flexion.

Identify the **other** type of movement.

[1 mark]

2 (c) Agonist and synergist are two roles of muscles.

Identify **two (2) other** roles of muscles **and** describe **one (1)** of these roles of muscles.

[4 marks]

Role 1 _____

Role 2 _____

Description of role _____

2 (d) There are **two (2)** types of muscle fibres.

Identify **one (1)** of these muscle fibre types **and** explain the function of this muscle fibre type.

[3 marks]

Muscle type _____

Explanation of function _____



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Section C

This section has a possible 20 marks.

Answer **all** questions in the spaces provided.

Natalia is a 50-year-old care assistant who works with people in late adulthood. Natalia has recently experienced health problems resulting in her undergoing tests. Following the results of these tests she has been diagnosed with cardiovascular disease.

- 3 (a)** Discuss the likely effects of cardiovascular disease on Natalia's cognitive and emotional wellbeing.

[9 marks]

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3 (c) Identify the smallest type of blood vessels **and** describe these blood vessels.

[4 marks]

Smallest blood vessels _____

Description _____

3 (d) Identify **three (3)** valves in the heart.

[3 marks]

1 _____

2 _____

3 _____

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Section D

This section has a possible 20 marks.

Answer **all** questions in the spaces provided.

4 (a) Identify the hormone produced in the ovaries.

[1 mark]

- A Insulin
- B Oestrogen
- C Testosterone
- D Thyroxine

Answer _____

4 (b) When the external temperature increases, thermoregulation is used to keep the body cooler.

Identify **three (3)** mechanisms that are used to keep the body cooler **and** explain the function of **one (1)** of these mechanisms.

[5 marks]

Mechanism 1 _____

Mechanism 2 _____

Mechanism 3 _____

Explanation _____

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4 (c) Identify **three (3)** ways to use a thermometer to take a person's temperature. **[3 marks]**

1 _____

2 _____

3 _____

4 (d) Explain the role of negative feedback in homeostasis. **[6 marks]**

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4 (e) Stress can affect physiological measurements.

Identify **four (4)** physiological measurements affected by stress **and briefly** explain the effect that stress has on **one (1)** of these measurements.

[5 marks]

Measurement 1	_____
Measurement 2	_____
Measurement 3	_____
Measurement 4	_____
Brief explanation	_____

This is the end of the external assessment.

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To be completed by the examiner			
Question	Mark	Question	Mark
1 (a)		3 (a)	
1 (b)		3 (b)	
1 (c)		3 (c)	
1 (d)		3 (d)	
1 (e)		4 (a)	
1 (f)		4 (b)	
2 (a)		4 (c)	
2 (b)		4 (d)	
2 (c)		4 (e)	
2 (d)			
		TOTAL MARK	

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