



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

Unit title: DM3.1 Anatomy and physiology
for health and social care

Assessment code: HSC/SAE
Paper number: PAST PAPER

Wednesday 27 January 2021 9.00 –11.00 am

Time allowed: 2 hours

Learner Instructions

- Use black or blue ink. If you write your answers in pencil they will not be marked.
- 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.
- 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 100.

Please complete the details below clearly and in BLOCK CAPITALS.

Learner name _____

Centre name _____

Learner number

Centre number

To be completed by the Examiner			
Question	Mark	Question	Mark
1 (a)		3 (b)	
1 (b)		3 (c)	
1 (c)		3 (d)	
1 (d)		4 (a)	
1(e)		4 (b)	
1(f)		4 (c)	
2 (a)		4 (d)	
2 (b)		5 (a)	
2 (c)		5 (b)	
2 (d)		5 (c)	
3 (a)		5 (d)	
			TOTAL MARK

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

1 (c) Blood is made up of **four (4)** components.

Write the name of the missing blood component in the table below.

[1 mark]

	Platelets
Red blood cells	Plasma

1 (d) Explain the structure **and** function of the component you named in **1(c)**.

[3 marks]

Question 1 continues on the next page.

1 (f) Identify **one (1)** valve in the heart **and** explain the structure **and** function of this valve.

[3 marks]

Valve _____

Explanation _____

Please turn over for the next question.

DO NOT WRITE IN THIS SPACE

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2 (b) There are **four (4)** main roles of muscles.

Write the name of the missing role of muscles in the table below.

[1 mark]

Agonist	Antagonist
	Synergist

2 (c) Describe the function of the role of muscles you named in **2(b)**.

[3 marks]

2 (d) Fibrous and synovial are **two (2)** types of joint in the human body.

Identify **and** describe the **other** type of joint.

[4 marks]

Joint _____

Description _____

3 (a) Identify the hormone in osmoregulation **and** describe the function of this hormone.

[3 marks]

Hormone _____

Description _____

3 (b) Body temperature is maintained through the process of thermoregulation.

Discuss the process of thermoregulation.

[9 marks]

DO NOT WRITE IN THIS SPACE

3 (c) Identify **one (1)** of the main hormones in glucoregulation **and** explain the role of this hormone.

[4 marks]

Hormone _____

Explanation _____

3 (d) Negative feedback is **one (1)** homeostatic mechanism.

Identify the **other** homeostatic mechanism **and** explain the function of this mechanism.

[4 marks]

Homeostatic mechanism _____

Explanation _____

4 (a) Identify **two (2)** layers of the skin **and** briefly describe **one (1)** of these layers.

[3 marks]

Layer 1 _____

Layer 2 _____

Description _____

DO NOT WRITE IN THIS SPACE

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Question 4 continues on the next page.

4 (c) Phagocytes are concerned with innate immunity. Lymphocytes are concerned with adaptive immunity.

Identify **one (1)** type of lymphocyte **and** describe its function.

[4 marks]

Type of lymphocyte _____

Function _____

4 (d) Bone supports structure and attaches muscles to the body.

Identify **and** explain **one (1) other** function of bone.

[4 marks]

Function _____

Explanation _____

5 (c) The Peripheral Nervous System (PNS) is made up of **two (2)** nervous systems.

Name the **two (2)** nervous systems that make up the PNS **and** describe **one (1)** of these systems.

[4 marks]

System 1 _____

System 2 _____

Description _____

Question 5 continues on the next page.

