



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 11 May 2022

9.00 am–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 (d) | |
| 1 (b) | | 4 (a) | |
| 1 (c) | | 4 (b) | |
| 1 (d) | | 4 (c) | |
| 1 (e) | | 4 (d) | |
| 2 (a) | | 4 (e) | |
| 2 (b) | | 5 (a) | |
| 2 (c) | | 5 (b) | |
| 3 (a) | | 5 (c) | |
| 3 (b) | | 5 (d) | |
| 3 (c) | | TOTAL MARK | |

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

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

1 (a) An individual agrees to receive treatment in the full knowledge of any consequences.

What type of consent is this?

[1 mark]

1 (b) Body temperature can be measured on an individual's forehead and rectally.

Explain **two (2) other** methods of measuring an individual's body temperature.

[6 marks]

Method 1

Method 2

1 (c) Explain how levels of activity can affect body temperature.

[4 marks]

Question 1 continues on the next page.

DO NOT WRITE IN THIS SPACE

PAST PAPER

1 (d) Thermoregulation and glucoregulation are homeostatic mechanisms.

Explain the process of homeostasis.

[6 marks]

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DO NOT WRITE IN THIS SPACE

1 (e) Identify the primary hormone in osmoregulation **and** briefly describe its function. **[3 marks]**

Primary hormone _____

Description _____

2 (a) Identify the **two (2)** valves that separate the atria and ventricles **and** describe **one (1)** of these valves. **[4 marks]**

Valve 1 _____

Valve 2
Description
of valve 1
or 2 _____

Question 2 continues on the next page.

DO NOT WRITE IN THIS SPACE

2 (b) Measuring blood pressure gives two readings. One of these readings is diastolic blood pressure.

Name the **other** reading of blood pressure **and** explain the meaning of this reading.

[4 marks]

Blood pressure reading

Explanation

2 (c) Analyse how the structure of the respiratory system assists with inhalation and exhalation.

[12 marks]

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3 (a) Identify the general term for the small components that make up a cell, **and** describe these components. **[3 marks]**

Name of components _____

Description of components _____

3 (b) Monitoring and assisting diagnosis are two reasons for the accurate and timely recording of physiological measurements.

Identify **two (2) other** reasons for the accurate and timely recording of physiological measurements **and** explain **one (1)** of these reasons.

[4 marks]

Reason 1 _____

Reason 2 _____

Explanation of reason 1 **or** 2 _____

3 (c) Explain how medication may affect physiological measurements. **[9 marks]**

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3 (d)

Explain the process of mechanical digestion.

[4 marks]

4 (a)

Which structure in the female reproductive system produces egg cells?

Describe **one (1) other** function of this structure.

[3 marks]

Structure

Function

4 (e) Identify **and** describe the component of the skin that detects changes to the external temperature.

[3 marks]

Component _____

Description _____

5 (a) Identify the **two (2)** actions of antagonistic muscle pairs **and** briefly describe **one (1)** of these actions.

[3 marks]

Action 1 _____

Action 2 _____

Brief description of action 1 **or** 2 _____

5 (b) Agonist and antagonist are roles of muscles.

Identify **one (1) other** role of muscles **and** explain this role.

[4 marks]

Role _____

Explanation of role _____

5 (c) Discuss how the structure of the appendicular skeleton assists body movement. **[9 marks]**

5 (d) The ribs and sternum are components of the axial skeletal system.

Identify **one (1) other** component of the axial skeletal system **and** describe the function of this component.

[4 marks]

Component

Description of function

This is the end of the external assessment.

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