



**L-Università  
ta' Malta**

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE  
EXAMINATIONS BOARD

**SECONDARY EDUCATION CERTIFICATE LEVEL  
2024 MAIN SESSION**

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SUBJECT:	<b>Health and Social Care</b>
PAPER NUMBER:	Controlled – Unit 2
DATE:	10 <sup>th</sup> May 2023
TIME:	10:00 a.m. to 11:35 a.m.

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**THIS PAPER SHOULD BE RETURNED TO THE INVIGILATOR  
AFTER THE EXAMINATION.**

**Name of candidate** \_\_\_\_\_

**I.D. number** \_\_\_\_\_

**School** \_\_\_\_\_

**Class** \_\_\_\_\_

Answer **ALL** questions in the space provided.

**SECTION A: HUMAN ANATOMY & PHYSIOLOGY**

**Scenario:**

- Nathalie is a Second-year medical student.
- The group of Second-year medical students was asked to organise an activity with Year/Grade 8 students in middle school with the aim to help them understand the human body better.
- Nathalie needed to write out some notes prior to the activity.

**Question 1**

**C-1 (6 marks)**

a. Outline how the musculoskeletal and nervous systems interact with each other in the human body.

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(2)

b. By referring to one organ from each system, describe in more depth the interaction between musculoskeletal and nervous system.

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(2)

- The activity with the Year/Grade 8 students included jogging on the spot.
- One girl twisted her ankle and stopped jogging.

c. Explain how the musculoskeletal and nervous system interacted with each other in this situation.

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(2)

- Nathalie and the other medical students took the measurements of the vital signs of some Year/Grade 8 students.
- They also explained about the signs and symptoms that an individual has or feels when the measurement is outside the normal range.

**Question 2**

**K-4 (4 marks)**

- a. i. List **ONE** sign/symptom that might be present when the vital signs given in Table 1 are above the normal range.

Table 1: Vital Signs above normal range

Vital Sign	Sign/symptom
Pulse:	
Temperature:	

(0.5)

- ii. List **ONE** sign/symptom that might be present when the vital signs given in Table 2 are below the normal range.

Table 2: Vital Signs below normal range

Vital Sign	Sign/symptom
Blood Pressure:	
Breathing rate:	

(0.5)

- b. • Nathalie was assigned to a year 8 student named Lesley.
- She asked Lesley to sit down and remain restful.
  - She then reassured the student since he was not sure of what was expected of him.
  - She asked Lesley if he was an athlete.
  - Nathalie decided to take the temperature from the arm pit.

From the case scenario above, identify a consideration that must be taken before measuring each vital sign below.

Breathing rate: \_\_\_\_\_ (0.25)

Temperature: \_\_\_\_\_ (0.25)

Pulse: \_\_\_\_\_ (0.25)

Blood Pressure: \_\_\_\_\_ (0.25)

***This question continues on next page.***

c. Indicate **ONE** underlying factor that influences the reading of the vital signs written below.

Rapid Pulse: \_\_\_\_\_ (0.5)

High body temperature: \_\_\_\_\_ (0.5)

Low blood pressure: \_\_\_\_\_ (0.5)

Irregular Breathing: \_\_\_\_\_ (0.5)

**SECTION B: HEALTH & SAFETY**

- The Second-year medical students were given a placement in residential homes for vulnerable adults.
- The first important aspect they were exposed to is Health and Safety of both residents and staff.

**Question 3**

**K-5 (4 marks)**

a. Apart from slip-trip-fall hazards and physical hazards list **FOUR** different types of hazards that might be found in a residential home.

Hazard 1: \_\_\_\_\_ (0.25)

Hazard 2: \_\_\_\_\_ (0.25)

Hazard 3: \_\_\_\_\_ (0.25)

Hazard 4: \_\_\_\_\_ (0.25)

b. Describe the following types of hazards mentioning **ONE** associated risk for **EACH**.

Slip-trip-fall hazards: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (0.5)

Physical hazards: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (0.5)

- The management of one residential home, asked the second-year medical students to re-design the activity room.
  - This room is where vulnerable adults spend most of their time.
- c. Read the scenario below and identify **EIGHT** safety measures, that the students needed to keep in mind when re designing the room. Write your answers in the lines below.
- The activity room in the residential home was quite spacious.
  - The entrance consisted of a swinging door and adjacent to it there was a sanitizer bottle hung to the wall.
  - A First aid box was attached next to the bottle too.
  - By the wall there was a cooker hob, an electric kettle, a fire blanket and some unbreakable mugs.
  - The floor was covered with a fitted carpet, and next to the other wall there was a reclining sofa. In the middle there were six chairs placed around a round table.
  - In the corner there was a television set which had all the wires placed in a plastic trunk.

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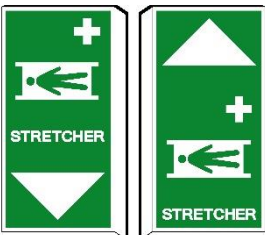
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(2)




**Question 4**

**K-6 (4 marks)**

- a. Match the signs and symbols used in Health and Social Care environment with their meaning. Write the corresponding letter in the 'Answer' column.

Signs and Symbols	Answer (A,B,C,D)	Meaning
<div style="text-align: center;">  <p>(Source: <a href="https://image.shutterstock.com">https://image.shutterstock.com</a>)</p> <p>(green rectangle with white text/picture)</p> </div>		<p><b>A</b> Mandatory Signs</p>

***This question continues on next page.***

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 (Source: <a href="https://image.shutterstock.com">https://image.shutterstock.com</a> ) (red disk with red diagonal line)	
 (Source: <a href="https://image.shutterstock.com">https://image.shutterstock.com</a> ) (blue circle with white picture)	

<b>B</b> Prohibition Signs
<b>C</b> Safe Condition Signs
<b>D</b> Warning Signs

(1)

b. Identify **FIVE** safety equipment which can be used to eliminate any risks in a residential home by circling the correct answers from the ones provided below.

Table and chairs	Safe disposal boxes	Bed side table with drawers	Hoist	Low armchair
Curtains	Antibacterial disinfectants	Door mat	Bathroom handrails	Protective wear

(1)

- c.
- The bedrooms of the residential home were being refurbished to accommodate the vulnerable adults better.
  - The water system in the rooms did not include potable water.
  - Most residents have lack of mobility.
  - Others may suffer from infectious diseases.

Considering the above scenario, determine **TWO** pieces of equipment to be installed in the bedrooms, and **TWO** symbols that must be at hand to ensure safety apart from the ones mentioned in Question 4b.

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(2)

- During the placement, Nathalie, was helping a resident called Paul.
- Paul, a resident, was 75 years old and suffered from arthritis.
- He was using a frame to walk but he spent a lot of time sitting in the armchair.

**Question 5**

**C-4 (6 marks)**

a. Apart from pressure sores, identify **FOUR** other potential health problems which Paul may end up suffering from.

Health Problem 1: \_\_\_\_\_ (0.5)

Health Problem 2: \_\_\_\_\_ (0.5)

Health Problem 3: \_\_\_\_\_ (0.5)

Health Problem 4: \_\_\_\_\_ (0.5)

- Every time Paul walks and sits back down on the armchair, his clothing tends to crumple under him.
- If the clothes are not fixed properly pressure sores might start forming.
- While Paul is watching television, he puts his feet on a stool.

b. Discuss **TWO** causes of pressure sores in Paul’s case and **TWO** areas where they are likely to develop.

Cause and area 1: \_\_\_\_\_

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(1)

Cause and area 2: \_\_\_\_\_

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(1)

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c. Explain **TWO** ways how Nathalie and the staff can help in preventing Paul from developing pressure sores.

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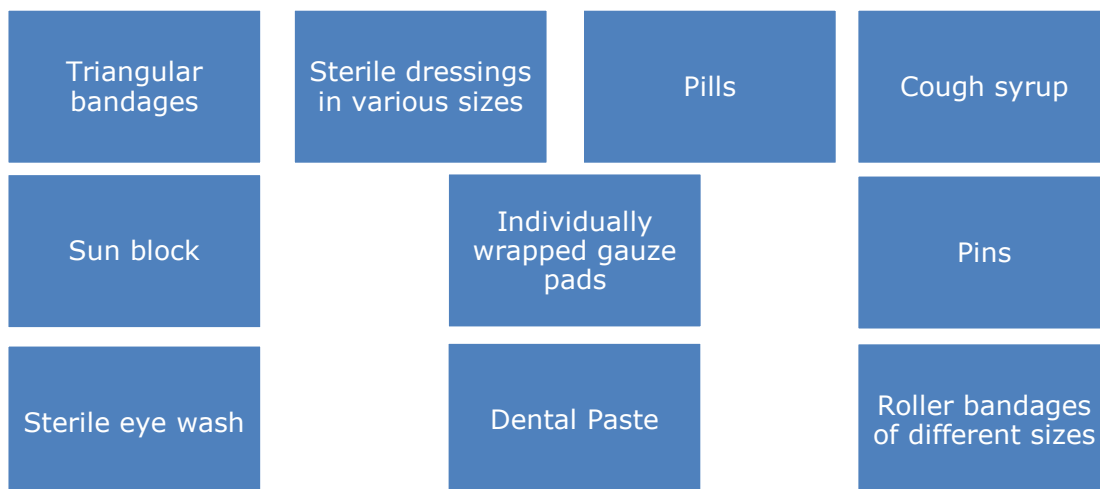
(2)

- The second-year medical students were asked to check all the First Aid boxes present in the residential home.
- They also needed to make sure that all new staff knew what the items were, and in which circumstances they are used.

**Question 6**

**K-9 (4 marks)**

a. Identify **FIVE** different items that are required in a first aid box from the ones provided below.





- Item 1: \_\_\_\_\_ (0.2)
- Item 2: \_\_\_\_\_ (0.2)
- Item 3: \_\_\_\_\_ (0.2)
- Item 4: \_\_\_\_\_ (0.2)
- Item 5: \_\_\_\_\_ (0.2)

b. Outline the function of each of the items identified in Question 6a.

- Function of item 1: \_\_\_\_\_  
\_\_\_\_\_ (0.2)
- Function of item 2: \_\_\_\_\_  
\_\_\_\_\_ (0.2)
- Function of item 3: \_\_\_\_\_  
\_\_\_\_\_ (0.2)
- Function of item 4: \_\_\_\_\_  
\_\_\_\_\_ (0.2)
- Function of item 5: \_\_\_\_\_  
\_\_\_\_\_ (0.2)

c. Describe **TWO** reasons why it is important to know how to use the items in the First Aid Box.

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(2)

- The residents were walking towards the dining area for their dinner.
- Carmen started choking while eating a piece of bread.
- Paul was walking with his Zimmer (walking) frame.
- He suddenly complained of chest pain and fell to the ground.
- In the same ward, it was noted that Ninu needed assistance as he couldn't walk.
- Nathalie and two other colleagues ran to help.

**Question 7**

**K-10 (4 marks)**

a. Outline **TWO** reasons why it is important to work in a team during an emergency.

Reason 1: \_\_\_\_\_  
\_\_\_\_\_ (0.5)

Reason 2: \_\_\_\_\_  
\_\_\_\_\_ (0.5)

b. State the **FIVE** important points of information needed when calling for help in an emergency.

Information 1: \_\_\_\_\_  
\_\_\_\_\_ (0.2)

Information 2: \_\_\_\_\_  
\_\_\_\_\_ (0.2)

Information 3: \_\_\_\_\_  
\_\_\_\_\_ (0.2)

Information 4: \_\_\_\_\_  
\_\_\_\_\_ (0.2)

Information 5: \_\_\_\_\_  
\_\_\_\_\_ (0.2)

c. From the scenario above identify **FOUR** situations why Nathalie and her colleagues need to ask help from a health care professional in this emergency scenario.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (2)

**Question 8**

**C-5 (6 marks)**

a. Identify **FOUR** different roles that Nathalie and her colleagues can assume in the above emergency.

Role 1: \_\_\_\_\_ (0.5)

Role 2: \_\_\_\_\_ (0.5)

Role 3: \_\_\_\_\_ (0.5)

Role 4: \_\_\_\_\_ (0.5)

b. While one of the staff was running for help, she had to stop due to a nosebleed. Describe the correct procedure required to deal with a nosebleed.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (2)

c. Since prior to falling Paul complained of chest pain, explain the First Aid procedure needed in this situation.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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