



L-Università  
ta' Malta

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE  
EXAMINATIONS BOARD

**SECONDARY EDUCATION CERTIFICATE LEVEL  
2025 MAIN SESSION**

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SUBJECT:	<b>Agribusiness</b>
PAPER NUMBER:	Controlled – Unit 2
DATE:	8 <sup>th</sup> May 2024
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.

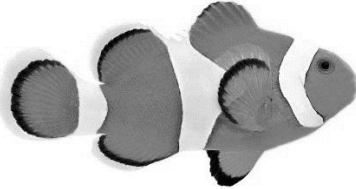
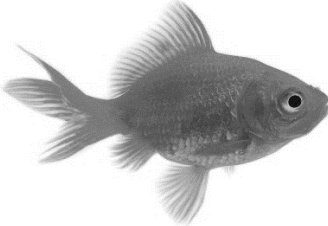
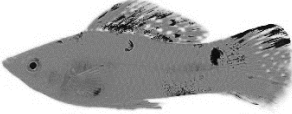
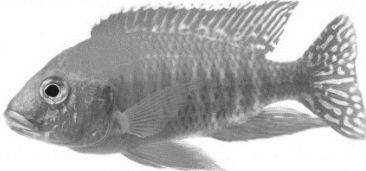
**Scenario**

- With the increase in population and urbanisation, nations and corporations are looking constantly towards improving the knowledge in the following areas which are directly linked to this paper:
  - Aquatic setups and fish breeding.
  - Protected cultivation systems.
  - Plant protection products.
  - Effective plant propagation.

**Question 1**

**K-1 (4 marks)**

a. Match the **FOUR** fish species in Figure 1 to their respective habitat, by drawing a line between them.

Fish species	Habitat
Clownfish 	marine tropical
Goldfish 	cold fresh water
Molly 	tropical stone-scaped fresh water
Dwarf African cichlid 	brackish

(1)

Figure 1: Fish and their habitats  
 (Source: <https://www.mysis.com>)



**Question 2**

**C-2 (6 marks)**

- a. Figure 3 shows a Tilapia, a cichlid that reaches a size of 60cm. A guide book suggests the minimum volume of 2000 litres to keep 1 male and 3 females. Justify this aquarium size with reference to the **TWO** points mentioned below.

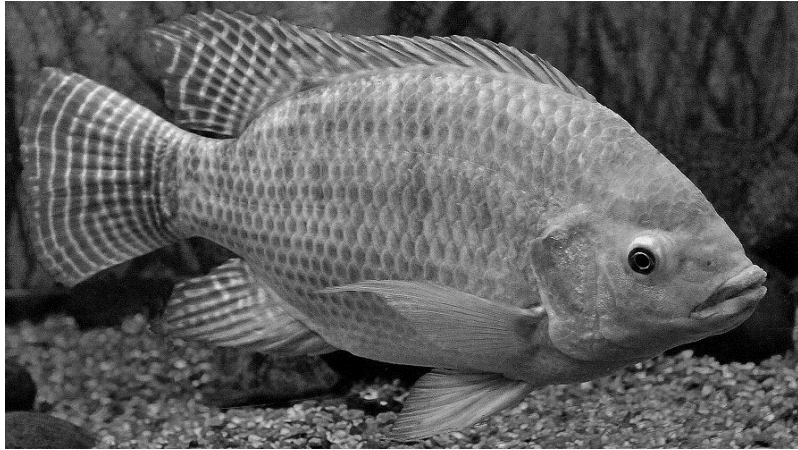


Figure 3: Tilapia  
(Source: <https://phys.org>)

i. Fish size: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (1)

ii. Aggression: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (1)

- b. One of the benefits of performing a water change is to replenish trace minerals. Explain **TWO** other benefits of a water change of a fish tank.

Benefit 1: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (1)

Benefit 2: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (1)





**Question 5**

**C-3 (6 marks)**

a. An example of a protected cultivation is an indoor vertical hydroponic farm. For control, farmers artificially adjust the environment of the farm. Explain how the following parameters can be modified in a protected cultivation.

i. Heat (increase and decrease): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (1)

ii. Light (increase and decrease): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (1)

b. Compare **TWO** characteristics of drip irrigation and mister/fogger irrigation systems.

Comparison of characteristic 1: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (1)

Comparison of characteristic 2: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (1)

c. Discuss how an increase in temperature can be used to control growth rate and germination in horticulture.

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

***Please turn the page.***

**Question 6**

**C-4 (6 marks)**

a. Distinguish between synthetic chemicals and chemicals derived from natural products.

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(2)

b. Discuss good practices when applying plant protection measures.

Use of PPE: \_\_\_\_\_

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(0.5)

Keeping records: \_\_\_\_\_

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(0.5)

Observe recommendations on label: \_\_\_\_\_

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(0.5)

Apply during favourable weather: \_\_\_\_\_

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(0.5)









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