



L-Università  
ta' Malta

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE  
EXAMINATIONS BOARD

**SECONDARY EDUCATION APPLIED CERTIFICATE LEVEL  
2023 SUPPLEMENTARY SESSION**

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SUBJECT: **Agribusiness**  
PAPER NUMBER: Synoptic – Unit 2  
DATE: 2<sup>nd</sup> November 2023  
TIME: 11:30 a.m. to 1:35 p.m.

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

**For examiners' use only:**

Question	1	2	3	4	5	6	Total
Score							
Maximum	6	8	8	12	8	8	50

Answer **ALL** questions in the space provided. You may answer either in English or in Maltese.

**Scenario**

- John and Mark are business partners in a pet shop.
- John runs the horticultural section of the pet shop and Mark is in charge of the animal section including the animal grooming parlour at the back of the pet shop.
- On a daily basis, customers ask John and Mark questions related to their area of expertise.

**Question 1**

**K-2 (6 marks)**

a. Name **FOUR** types of fertiliser utilised in horticulture.

Fertiliser type 1: \_\_\_\_\_ (0.5)

Fertiliser type 2: \_\_\_\_\_ (0.5)

Fertiliser type 3: \_\_\_\_\_ (0.5)

Fertiliser type 4: \_\_\_\_\_ (0.5)

b. Outline **TWO** benefits of organic matter in the soil bed.

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

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

c. Describe the following **TWO** irrigation systems suitable for gardens.

Drippers:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (1)

Sprinklers:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (1)





6

**Question 2**

**K-3 (8 marks)**

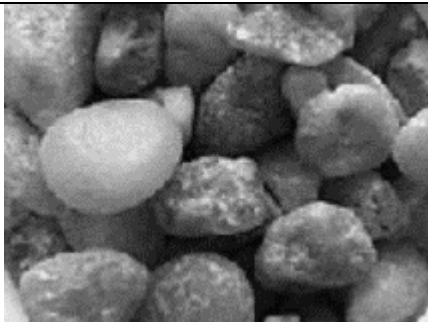
- a. Identify the **FOUR** tools used in pruning shown in Table 1.
- b. Outline the function of the **FOUR** tools used in pruning shown in Table 1.

Table 1: Tools used in pruning

Tool	a. Name	b. Function
 <p>Pruning tool 1 (Source: <a href="https://www.bahco.com/">https://www.bahco.com/</a>)</p>	<p>(0.5)</p>	<p>(0.5)</p>
 <p>Pruning tool 2 (Source: <a href="https://hindustanagropower.com">https://hindustanagropower.com</a>)</p>	<p>(0.5)</p>	<p>(0.5)</p>
 <p>Pruning tool 3 (Source: <a href="https://malta.desertcart.com/">https://malta.desertcart.com/</a>)</p>	<p>(0.5)</p>	<p>(0.5)</p>
 <p>Pruning tool 4 (Source: <a href="https://www.amazon.com">https://www.amazon.com</a>)</p>	<p>(0.5)</p>	<p>(0.5)</p>

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



	<hr/> <p style="text-align: right;">(1)</p>
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Substrate 2  
(Source: <https://theaquariumguide.com>)

b. Name **TWO** different aquascaping styles.

Landscape style 1: \_\_\_\_\_ (1)

Landscape style 2: \_\_\_\_\_ (1)

c. Describe the décor and types of plants needed for the **TWO** styles named in Question 3b.

Décor and types of plants for landscape style 1: \_\_\_\_\_

\_\_\_\_\_

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

Décor and types of plants for landscape style 2: \_\_\_\_\_

\_\_\_\_\_

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

8

**Question 4**

**C-2 (12 marks)**

a. Outline **TWO** filtration types.

Filtration type 1: \_\_\_\_\_

\_\_\_\_\_

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

Filtration type 2: \_\_\_\_\_

\_\_\_\_\_

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

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

b. Give **TWO** justifications for the use of a construction material for a 1000 litre aquarium with a 100 cm height made from 20 mm acrylic housing goldfish. Give your justifications with respect to size and safety respectively.

Justification 1: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (2)

Justification 2: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (2)

c. Discuss **FIVE** design parameters from the list below, for a goldfish aquarium requested by a client.

dimensions	material	filtration system	décor
lighting system		plants	substrate

Design parameter 1: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (0.8)

Design parameter 2: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (0.8)

Design parameter 3: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (0.8)

Design parameter 4: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (0.8)

Design parameter 5: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (0.8)

12

**Question 5**

**K-7 (8 marks)**

a. Name **FOUR** different coat types.

Type 1: \_\_\_\_\_ (0.5)

Type 2: \_\_\_\_\_ (0.5)

Type 3: \_\_\_\_\_ (0.5)

Type 4: \_\_\_\_\_ (0.5)

b. Outline the **FOUR** grooming preparation routines.

Routine 1: \_\_\_\_\_  
\_\_\_\_\_ (0.5)

Routine 2: \_\_\_\_\_  
\_\_\_\_\_ (0.5)

Routine 3: \_\_\_\_\_  
\_\_\_\_\_ (0.5)

Routine 4: \_\_\_\_\_  
\_\_\_\_\_ (0.5)

c. Describe **TWO** non-coat grooming procedures.

i. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ii. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (4)

8

**Question 6**

**K-8 (8 marks)**

a. Identify the following pet nursing equipment used for the checking of vital health parameters.



Pet nursing equipment 1  
(Source: <https://www.aliexpress.com/>)

Name of equipment:

\_\_\_\_\_ (1)



Pet nursing equipment 2  
(Source: <https://www.shutterstock.com>)

Name of equipment:

\_\_\_\_\_ (1)

b. Outline **TWO** reasons why it is important to carry out an animal health check.

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

Reason 2: \_\_\_\_\_  
\_\_\_\_\_ (1)

c. Describe **ONE** common disease/condition and **ONE** common parasite for cats.

Disease/Condition : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (2)

Parasite : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (2)

8