



L-Università
ta' Malta

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE
EXAMINATIONS BOARD

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

SUBJECT: **Agribusiness**
PAPER NUMBER: Synoptic – Unit 1
DATE: 2nd November 2023
TIME: 8:30 a.m. to 10:35 a.m.

**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	12	8	8	8	8	50

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

Vocational Scenario:





- Peter and Rita are shop owners. Peter runs the horticultural section of the shop and Rita is in charge of the animal section.
- Both are engaged in the running of the business, and they also offer several horticultural services to clients.

Question 1

K-1 (6 marks)

a. In Table 1 below, identify the tools that are used in an agribusiness enterprise.

Table 1: Tools used in an agribusiness enterprise

	Name of tool	Image
i.	(0.5)	 <p>(Source: https://www.sneeboer.com)</p>
ii.	(0.5)	 <p>(Source: https://malta.desertcart.com)</p>
iii.	(0.5)	 <p>(Source: https://huckberry.com/)</p>
iv.	(0.5)	 <p>(Source: https://nymag.com)</p>

b. Match personal protective equipment (PPE) to their functions, by drawing a line between them.

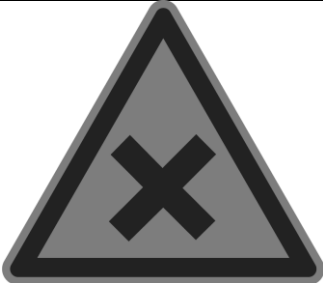

PPE
safety shoes
safety goggles
respirator
garden gloves

Function
To protect hands from thorns and abrasion
A means to prevent respiratory contamination
To protect the operator’s feet from machinery and heavy objects
To protect eyes from sharp materials and liquids

(2)

c. Recognize the following Health and Safety signage used in agricultural activity.

Table 2: Health and Safety signage used in agricultural activity

	Name of sign	
i.	(1)	 (Source: https://www.cembreinc.com)
ii.	(1)	 (Source: https://trinitonian.com)

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Question 2

C-1 (12 marks)

a. Outline **TWO** preventive measures required for maintaining a safe work environment in a crop production enterprise.

Preventive measure 1: _____





 _____ (2)

Preventive measure 2: _____

 _____ (2)

b. Describe the use of the following items that should be present in a First Aid box, as shown in Table 3.

Table 3: First Aid box items

 <p style="text-align: center;">Item 1 (Source: https://www.indiamart.com/)</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____ (1)</p>
 <p style="text-align: center;">Item 2 (Source: https://www.allegromedical.com/)</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____ (1)</p>
 <p style="text-align: center;">Item 3 (Source : https://sites.uw.edu)</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____ (1)</p>
 <p style="text-align: center;">Item 4 (Source : https://www.merit-trading.com)</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____ (1)</p>

c. Explain **TWO** ways of dealing with each of the following injuries:

i. Peter was cleaning the shed and he complained of an eye irritation.

(2)

ii. Rita was assisting a farmer at his vineyard and she accidentally cut her finger with the pruning shears.

(2)

12

Question 3

K-3 (8 marks)

a. List **FOUR** growing media used for plant propagation and growth.

Growing medium 1: _____ (0.5)

Growing medium 2: _____ (0.5)

Growing medium 3: _____ (0.5)

Growing medium 4: _____ (0.5)

This question continues on next page.

b. State suitable growing media for the following applications in horticulture.

Application 1: Open field production

(1)

Application 2: Production of seedlings

(1)

c. Outline the following **FOUR** characteristics of peat as used in horticulture.

i. Water drainage: _____

(1)

ii. Pathogens/Pests: _____

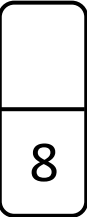
(1)

iii. Nutrient-holding capacity: _____

(1)

iv. Aeration: _____

(1)



Question 4

K-5 (8 marks)

a. Match fish species to their respective habitat. (2)

Fish species
Goldfish
Sea bream
Mollies
Clownfish

Habitat
tropical planted fresh water
marine tropical
cold fresh water
marine Mediterranean

b. List **FOUR** water parameters that should be monitored to keep a healthy fish tank.

Parameter 1: _____ (0.5)

Parameter 2: _____ (0.5)

Parameter 3: _____ (0.5)

Parameter 4: _____ (0.5)

c. Outline the following fish habitats in relation to **TWO** water parameters, for each.

i. Cold freshwater: _____

_____ (2)

ii. Brackish: _____

_____ (2)

8

Please turn the page.



Question 5

K-7 (8 marks)

- a. In Table 4 below, identify the avian pets kept in Malta.
- b. Match the avian pets identified in Question 5a with the corresponding accommodation from the ones provided below.

pigeon pen	bird cage
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Table 4: Avian Pets kept in Malta

	Image	a. Identification	b. Accommodation
i.	 Avian Pet 1 <i>(Source: https://www.petco.com)</i>	_____ (1)	_____ (1)
ii.	 Avian Pet 2 <i>(Source: https://en.wikipedia.org/wiki/)</i>	_____ (1)	_____ (1)

- c. Outline a diet for a pigeon through the following life stages.

i. Chick: _____

_____ (2)

ii. Juvenile/Adult: _____

_____ (2)

8

Question 6

K-8 (8 marks)

a. Define stock-taking.

_____ (2)

b. Stock taking is important as a means to manage the inventory of items at an agribusiness enterprise. Outline **TWO** other reasons why stock-taking is important in an agribusiness enterprise.

Reason 1: _____ (1)

Reason 2: _____ (1)

c. Describe the missing steps of the stock-taking procedure.

Step 1: _____ (1)

Step 2: Prepare tools and stock sheets

Step 3: _____ (1)

Step 4: Count items accurately (do not guess quantities)

Step 5: _____ (1)

Step 6: _____ (1)

Step 7: Update stock records

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