



**L-Università
ta' Malta**

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE
EXAMINATIONS BOARD

**SECONDARY EDUCATION CERTIFICATE LEVEL
2019 MAIN SESSION**

SUBJECT:	Agribusiness
PAPER NUMBER:	Controlled – Unit 3
DATE:	8 th April 2019
TIME:	10:00 a.m. to 11:35 a.m.

**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:

The breeding and raising of rabbits of livestock for their meat is a traditional practice and a key agribusiness in Malta. Rabbits are also raised for their fur and shows, and to be kept as domestic pets.

- You have been assigned the responsibility of managing the rabbitry at your school and were asked to explain the basic conditions and requirements for breeding rabbits to younger students who will be visiting the rabbitry.
- You need to provide them with information about rabbit breeding, the required conditions for keeping rabbits, how to take care of rabbits to prevent and treat the main diseases and disorders.

Question 1

K2 (4 marks)

Define the following terms:

a. Allele;

(1)

b. Gamete;

(1)

c. DNA;

(1)

d. Chromosome.

(1)

Question 2**K3 (4 marks)**

a. Outline Mendel's first law

 (2)

b. Outline Mendel's second law.

 (2)
Question 3**K4 (4 marks)**

Distinguish between mitosis and meiosis by marking with a ✓ the correct answer:

	Mitosis	Meiosis
i. Crossing-over occurs in this type of reproduction.	<input type="checkbox"/>	<input type="checkbox"/>
ii. This process involves genetically identical daughter cells.	<input type="checkbox"/>	<input type="checkbox"/>
iii. Occurs in the production of gametes.	<input type="checkbox"/>	<input type="checkbox"/>
iv. Two daughter cells are produced.	<input type="checkbox"/>	<input type="checkbox"/>

Please turn the page.

Question 4

C3 (6 marks)

a. Explain how the cage requirements differ between meat rabbits and show rabbits.

(2)

b. Explain how the feed requirements of dry does and bucks differ from those of a pregnant doe.

(2)

c. Explain why the water requirements of meat rabbits is different throughout different seasons.

(2)

Question 5

K7 (4 marks)

Fill in the table below by identifying **ONE** cause and **ONE** prevention measure for each of the following diseases and disorders.

	Disease/Disorder	Cause	Prevention
a.	Sore hocks	<hr/> <hr/> <hr/> <p style="text-align: right;">(0.5)</p>	<hr/> <hr/> <hr/> <p style="text-align: right;">(0.5)</p>
b.	Ear mites	<hr/> <hr/> <hr/> <p style="text-align: right;">(0.5)</p>	<hr/> <hr/> <hr/> <p style="text-align: right;">(0.5)</p>
c.	Buckteeth	<hr/> <hr/> <hr/> <p style="text-align: right;">(0.5)</p>	<hr/> <hr/> <hr/> <p style="text-align: right;">(0.5)</p>
d.	Respiratory diseases	<hr/> <hr/> <hr/> <p style="text-align: right;">(0.5)</p>	<hr/> <hr/> <hr/> <p style="text-align: right;">(0.5)</p>

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Question 6

C4 (6 marks)

Justify **ONE** proper treatment for each of the following rabbit diseases, disorders and pests. Your justification should include an example of how the treatment can be administered.

a. Snuffles

_____ (1.5)

b. Buckteeth

_____ (1.5)

c. Ear mites

_____ (1.5)

d. Sore hocks

_____ (1.5)

Question 7

K8 (4 marks)

Fill in the table below by describing the structures of the rabbit’s reproductive system and **ONE** function related to **each**.

	Structure	Function
a. Testes	<hr/> <hr/> <hr/> <hr/> <div style="text-align: right;">(0.5)</div>	<hr/> <hr/> <hr/> <hr/> <div style="text-align: right;">(0.5)</div>
b. Cowper’s gland	<hr/> <hr/> <hr/> <hr/> <div style="text-align: right;">(0.5)</div>	<hr/> <hr/> <hr/> <hr/> <div style="text-align: right;">(0.5)</div>
c. Ovaries	<hr/> <hr/> <hr/> <hr/> <div style="text-align: right;">(0.5)</div>	<hr/> <hr/> <hr/> <hr/> <div style="text-align: right;">(0.5)</div>
d. Uterus	<hr/> <hr/> <hr/> <hr/> <div style="text-align: right;">(0.5)</div>	<hr/> <hr/> <hr/> <hr/> <div style="text-align: right;">(0.5)</div>

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Question 8

C5 (6 marks)

Answer the questions below by explaining the importance of using humane techniques when slaughtering rabbits.

- a. Explain the importance of avoiding any avoidable excitement, pain or suffering when slaughtering rabbits.

(2)

- b. Explain how slaughterhouses avoid any excitement, pain or suffering in preparation of animals for slaughtering.

(2)

- c. Explain **ONE** method that may be use for stunning rabbits.

(2)