

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD
UNIVERSITY OF MALTA, MSIDA

SECONDARY EDUCATION CERTIFICATE LEVEL

MAY 2017

SUBJECT:	Agribusiness
PAPER NUMBER:	Controlled – Unit 3
DATE:	4 th April 2017
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 _____

Scenario:

Rabbit farming has grown from raising a few rabbits for family consumption to large commercial operations with hundreds of rabbits. Investment in a rabbitry, including breeding stock, requires knowledge and commitments.

Your school is working on an ambitious project to raise and breed rabbits. You are part of this project. However, before you start working on this project, you have been requested to draft a number of fact sheets which assess your knowledge about rearing and breeding rabbits.

Question 1

K4 (4 marks)

Rabbits need an adequate microclimate to grow healthy and without any stress. Describe briefly how the following conditions can affect the growth of rabbits.

a. Lack of light:

(1)

b. Hot temperature:

(1)

c. High humidity levels:

(1)

d. Very low ventilation:

(1)

Question 2**C2 (6 marks)**

Consider the following pictures of different types of feeds, bedding and cages. Write down next to each picture whether each item is best for **pet rabbits** or for **commercial rabbits**. Do not write anything next to the picture that is not related to either pet rabbits or commercial rabbits.

a. Rabbit feed







(2)

This question continues on the next page.

b. Rabbit housing







(2)

c. Rabbit flooring/bedding



(2)

Please turn the page.

Question 3**K5 (4 marks)**

Link the disease and/or disorder with the probable cause. The first one has been done for you as an example.

Disease and/or Disorder	Probable Cause
Fleas	Some rabbits have abnormal urinary tract structures that can predispose the animal to such conditions. Abnormal structural change can develop in a rabbit's urinary pathway; it can increase the pressure in the ureters, the tubes that release urine. (1)
Pasteurellosis (Snuffles)	These pathogens are more common in some climates and during particular seasons, but they can affect rabbits year-round. Moreover, such pathogens can jump from one pet species to another, such as from dogs or cats.
Viral Haemorrhagic Disease (VHD)	A bacterial infection that can affect the eyes (discharge, redness, squinting) and/or nose (sneezing, discharge), congestion and conjunctivitis. (1)
Overgrown Teeth	This is a viral disease that damages the rabbit's internal organs such as the liver and gut, and can also cause haemorrhage or bleeding from the nose. Sudden death usually occurs. (1)
Urinary Tract Infection (Cystitis)	If a rabbit is not constantly grinding their teeth down by eating fibre one can start to noticing their molar teeth forming sharp spikes that damage their cheeks and tongue. This causes pain that makes them reluctant or unable to eat. (1)

Question 4

K6 (4 marks)

State **ONE** prevention method you would use to prevent the following diseases / disorders from occurring.

a. Pasteurellosis (Snuffles)

(1)

b. Overgrown Teeth

(1)

c. Viral Haemorrhagic Disease (VHD)

(1)

d. Fleas

(1)

Question 5**C3 (6 marks)**

Choose the correct disease, disorder or pest from the given list for each treatment listed below. Only **ONE** answer is correct for each question.

Myxomatosis	Pasteurellosis (Snuffles)	Overgrown teeth	Ear canker
Calicivirus	Sore hocks	Obesity	Fleas
Urinary Tract Infection (Cystitis)		Viral Haemorrhagic Disease (VHD)	

- a. Antibiotic treatment is necessary to cure this disease such. Antibiotics can include enrofloxacin, ciprofloxacin, and trimethoprim sulfa.

Answer: _____ (1)

- b. There is no specific treatment so only supportive care (fluids, antibiotics to prevent secondary infections, etc.) can be offered.

Answer: _____ (1)

- c. There is no treatment available. It can only be prevented by giving vaccines, keep the rabbit's environment clean and avoid contact with insects.

Answer: _____ (1)

- d. Proper nutrition, high in fibre including hay

Answer: _____ (1)

- e. Affected rabbits often respond to a combination of antibiotic therapy, increased water consumption, dietary modification, weight loss, and an increase in exercise alone. In more severe cases, such as for rabbits with large amounts of calcium in the bladder, fluid therapy and manual massage to empty bladder will be necessary.

Answer: _____ (1)

- f. Frequent cleaning of bedding and the rabbitry are important in preventing and controlling these parasites. Powders and ointments are also commercially available. In severe cases antibiotics are necessary to cure skin infections caused by this.

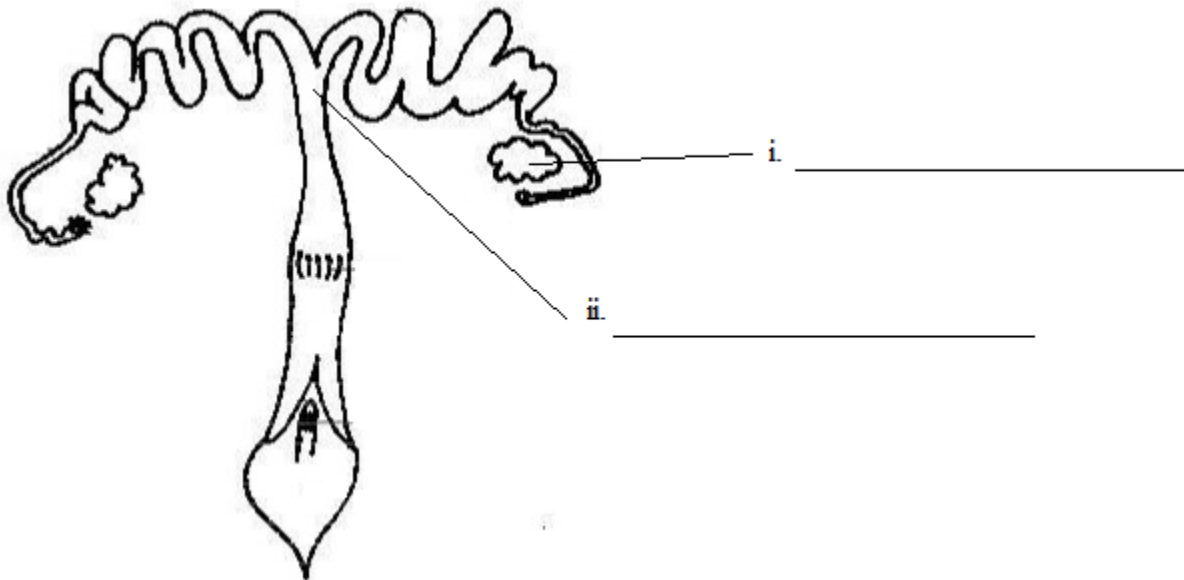
Answer: _____ (1)

Question 6

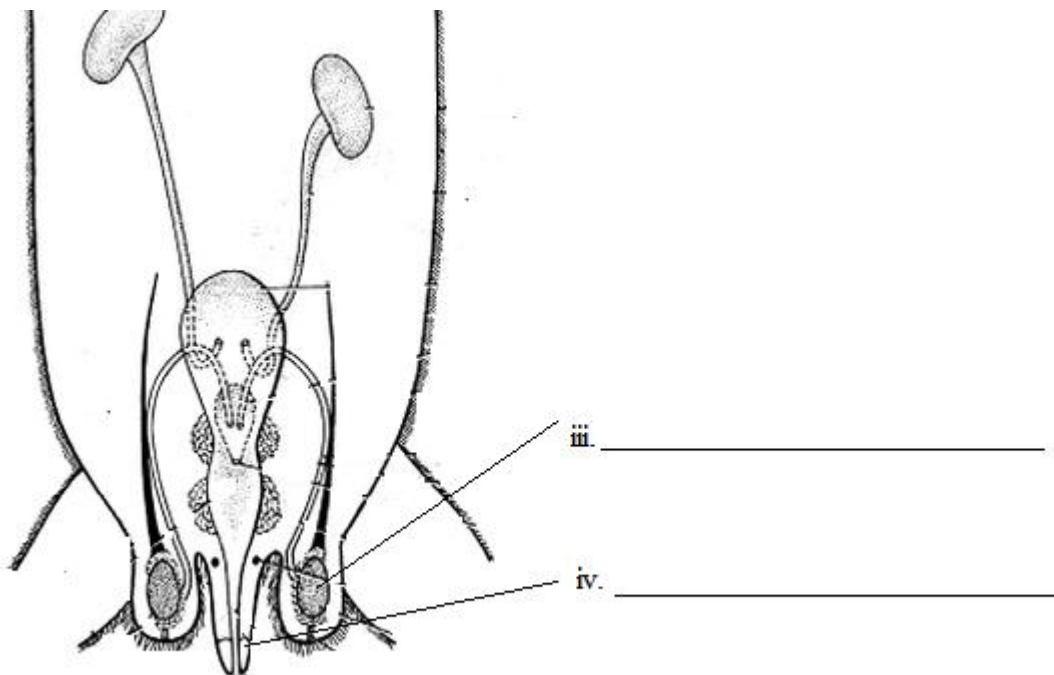
K7 (4 marks)

Consider the following diagrams of a **male** and **female** rabbit reproductive system.

a. Label the organs marked in both diagrams



(1)



(1)

This question continues on next page.

b. Describe **ONE** function of organ i.:

(½)

c. Describe **ONE** function of organ ii.:

(½)

d. Describe **ONE** function of organ iii.:

(½)

e. Describe **ONE** function of organ iv.:

(½)

Question 7

K10 (4 marks)

Give and explain **TWO** reasons why it is important to kill rabbits in a humane way.

a.

(2)

- b. _____

 _____ (2)

Question 8**C5 (6 marks)**

A small rabbit breeder and a large commercial rabbit breeder may slaughter their rabbits using different techniques but they should respect the welfare of their animals. Answer the following questions in order to point out the differences between different methods of slaughtering rabbits. Choose **TWO** slaughtering methods and answer the following questions;

- a.
- i. Name of method 1: _____ (1)
 - ii. Describe briefly how method 1 is carried out:

 _____ (1)
- b.
- i. Name of method 2: _____ (1)
 - ii. Describe briefly how method 2 is carried out:

 _____ (1)

This question continues on next page.

- c. By considering the two methods that you mentioned above, choose the best method of slaughtering and explain why.

(2)