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Name : ..... Centre/ Index No.

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P515/2  
PRINCIPLES  
AND  
PRACTICES OF  
AGRICULTURE  
Paper 2 (Theory) 2020  
*2hrs*

*STANDARD HIGH SCHOOL ZZANA*  
*Performance Standard Examination Entebbe*  
Uganda Advanced Certificate of Education  
Principles and Practices of Agriculture  
Theory Paper 2  
3 hours

**INSTRUCTIONS TO CANDIDATES**

*Question 1 is compulsory; answer other four questions from section, choosing one question from each of the sub-section.*

*Start each question on a new page or sheet of paper.*

*Illustrations and examples will earn you a bonus mark*

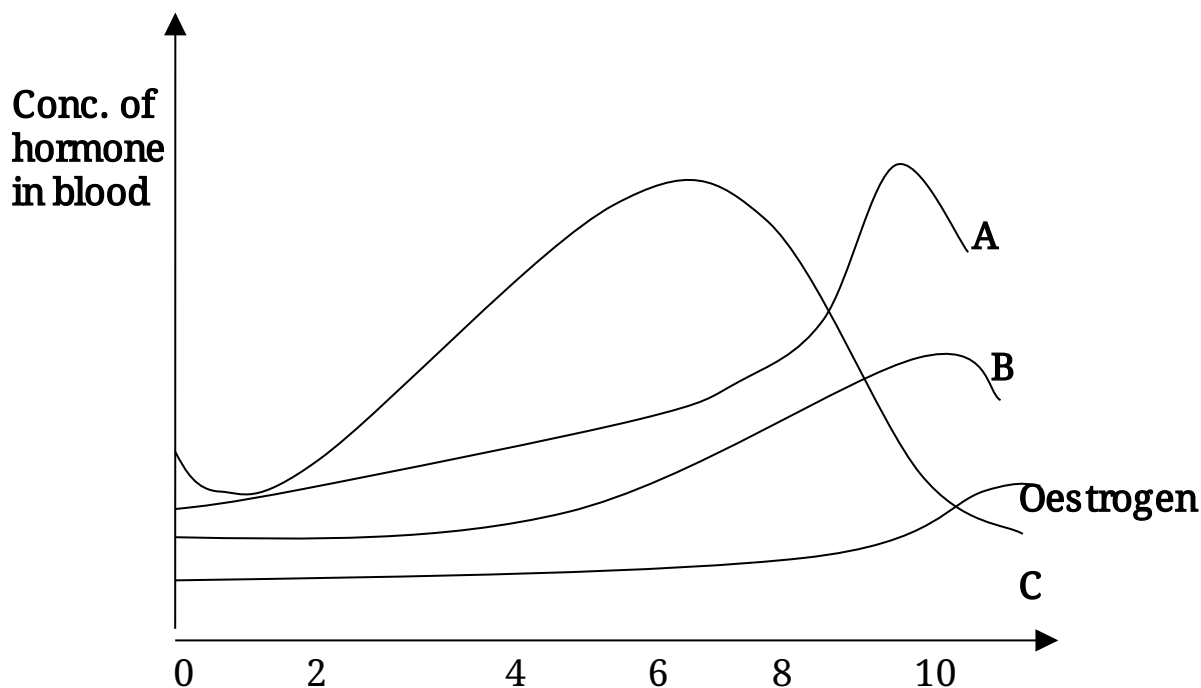
*Neatness is always a pre-requisite to better performance*

**Turn Over**



**SECTION A: (20 marks)**  
**COMPULSORY QUESTION**

1. The graph below shows the levels of hormones Oestrogen, Relaxin, Progesterone and prolactin in blood of a pregnant cow.



**Months**

- Name and describe the trend of each hormone represented by letters **A**, **B**, and **C**  
(6 marks)
- Indicate on the graph the point of calving  
(1 mk)
- Explain the shape of the curve **A**, **B**, and **C**  
(6 mks)
- Give three functions of hormone represented by letter **C**  
(3mks)
- How does the knowledge and skills of pregnancy diagnosis help a livestock farmer  
(4mks)

**SECION B**  
**SOIL SCIENCE AND CROP PRODUCTION**

- (a) Define the term soil and water conservation  
(2mks)
- (b) Describe the roles of the following in soil and water conservation  
(10 mks)
  - Vegetation
  - Bio fertilizer
- Describe the various agricultural practices that can be employed to modify

soil temperature  
(8mks)

3. (a) With illustrations, describe how the concentration of nitrogen is maintained in nature  
(12mks)

(b) State the effects of excess nitrogen in plant nutrition (4 mks)

(b) Give the ways by which nitrogen can get depleted from the soil  
(4mks)

### **ANIMAL PRODUCTION**

5. (a) Describe ~~six~~ methods of selection. (12 marks)

(b) Explain factors to consider when selecting animals for breeding. (08 marks)

6 (a) Outline the conditions which encourage each of the following in a laying flock

i) Stress (3mks)

ii) Vices (3 mks)

b) Describe the factors that affect hatchability of eggs in a deep litter system  
(9 mks)

c) State the management of a laying flock to ensure high eggs production  
(5mks)

### **FARM MANAGEMENT**

6(a) Describe how the price of agricultural commodities are determined in a free market economy?  
(12mks)

(b) Outline the importance of price in agriculture (8mks)

7(a) what is the main difference between Women in Development (WID) and Gender and Development (GAD)  
(4mks)

(b) What problems do women farmers face in accessing agricultural credit?  
(10mks)

(c) What measures can be adopted to improve women's access to agricultural credit  
(8mks)

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### **MECHANISATION**

8a). Describe the factors that affect effectiveness of hedgers on the farm (12 marks)

b) Outline the importance of having fences (8marks)

9a) Describe the mechanism of a bucket spray pump

(12marks)

b) State how you can maintain efficiency of farming tools and equipments

(8marks)

**AGRICULTURE TEACHERS UNION  
ENTEBBE  
Compiled by Gonzagga Okumu**

**END**