

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

School:..... Signature: .....

**P515/2**  
**PRINCIPLES**  
**AND**  
**PRACTICES OF**  
**AGRICULTURE**

Paper 2

**Theory**

3 hrs

**STANDARD HIGH SCHOOL ZZANA**

**Uganda Advanced Certificate of Education**

**Principles and Practices of Agriculture**

**THEORY**

Paper 2

3 hours

**INSTRUCTIONS TO CANDIDATES**

*This paper consists of sections **A, B, C, D** and **E**.*

*Answer **question I** in section **A** and **four** other questions, selecting **one** from each of sections **B, C, D** and **E**.*

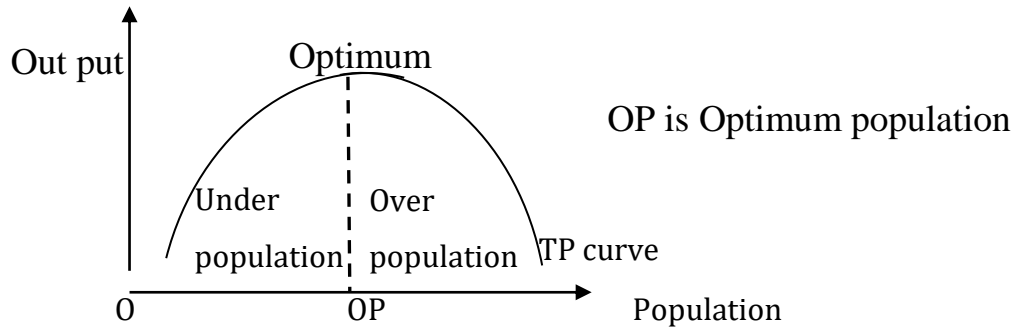
*Any additional question(s) attempted will **not** be marked.*

**Turn Over**

## SECTION A: (20 marks)

### Question 1 is Compulsory

1. (a) What is meant by population policy? (02 marks)
- (b) The figure (1) below shows the relationship between population and agricultural production. Use it to answer questions below. (02 marks)



- (c) Explain how
- (i) Optimum population comes about and how it is determined. (03 marks)
- (ii) Under population comes about and how it is determined. (03 marks)
- (iii) Over population comes about. (02 marks)
- (d) Explain the consequences of an ageing population. (12 marks)

## SECTION B: CROP PRODUCTION (20MARKS)

2. (a) Outline four benefits of mushroom growing (04 marks)
- (b) Describe the factors that are necessary for oyster mushroom cultivation. (09 marks)
- (c) Explain the challenges that face mushroom production. (07 marks)
3. Describe how you can establish and manage a crop of passion fruit up to harvesting. (20 marks)

### **SECTION C: ANMIAL PRODUCTION (20 marks)**

4. (a) Give reason for keeping the lamb and ewe in the lambing pen. (05 marks)
- (b) Describe how to manage a chilled lamb using warm water. (05 marks)
- (c) State the management practices on sheep required for mating. (10 marks)
5. (a) Enumerate **five** causes of swarming in apiary production. (05 marks)
- (b) How can farmers take care when handling bees? (05 marks)
- (c) Identify the parameters for record keeping during apiary management. (05 marks)

### **SECTION D: MECHANISATION (20 marks)**

6. (a) Explain the conditions required for success of draft technology. (09 marks)
- (b) Describe the management practices carried out on traction animals. (06 marks)
- (c) What are the advantages of using animal drawn implement (05 marks)
- 7 Outline **five** dangers of friction in farm machines. (05 marks)
- (a) With the aid of a diagram, explain how the following farm machines can be used to perform a named farm work.
- (i) Wheel barrow for manure transportation. (06 marks)
- (ii) Wheel and axle for water drawing from a dug well. (06 marks)

**Turn Over**

- (b) In case a wheel of radius  $50\text{cm}$  and axle of radius  $10\text{cm}$  is used to lift a water container of  $400\text{N}$  with an effort of  $100\text{N}$ .

Calculate the following;

- (i) Its velocity ratio (01 mark)
- (ii) Its mechanical advantage (01 mark)
- (iii) Its efficiency (01 mark)

### **SECTION E: ECONOMICS (20 marks)**

8. (a) Explain the roles of the following in agricultural development. (10 marks)
- (i) National Agricultural Advisory Service (NAADS).
  - (ii) National Agricultural Research Organization (NARO).
- (b) Identify the bottlenecks affecting development of Agriculture. (10 marks)
9. (a) Explain why there is persistent instability in the prices of agriculture commodities. (12 marks)
- (b) Suggest recommendations to stabilize agricultural market prices.(08 marks)

**END**