

3.15 AGRICULTURE (443)

3.15.1 Agriculture Paper 1 (443/1)

SECTION A (30 marks)

*Answer **all** the questions in this section in the spaces provided.*

- 1 State **four** reasons for intercropping. (2 marks)
- 2 Give **four** advantages of intensive farming. (2 marks)
- 3 Give **four** reasons why land should be prepared early in readiness for planting. (2 marks)
- 4 State **four** reasons for deep ploughing during land preparation. (2 marks)
- 5 State **two** conditions that must exist for a market to be purely competitive. (1 mark)
- 6 Distinguish between grading and standardization in agricultural marketing. (2 marks)
- 7 State **four** benefits of agroforestry to a maize crop. (2 marks)
- 8 Distinguish between intensive hedgerow and border planting forms of agroforestry. (2 marks)
- 9 What is meant by each of the following terms: (3 marks)
 - (a) mixed cropping
 - (b) monocropping
 - (c) intercropping.
- 10 State **four** advantages of timely planting. (2 marks)
- 11 State **four** advantages of row planting in crop production. (2 marks)
- 12 State **four** reasons why a nursery is important in crop production. (2 mark)
- 13 Distinguish between monopoly and monopsony. (2 marks)
- 14 Name the plant part used for vegetative propagation of each of the following plants:
 - (a) cassava (1/2 mark)
 - (b) sisal (1/2 mark)
 - (c) pyrethrum (1/2 mark)
 - (d) sweet potatoes. (1/2 mark)
- 15 State **four** characteristics of a good vegetable seedling. (2 marks)

SECTION (20 marks)

Answer *all* the questions in this section in the spaces provided.

16 The photograph below illustrates a method of irrigation.



- (a) Identify the method of irrigation illustrated above. (1 mark)
- (b) State **two** maintenance practices that are carried out on the equipment used in the method illustrated above. (2 marks)
- (c) Give **one** advantage drip irrigation has over the method of irrigation illustrated above in crop disease control. (1 mark)

17 The table below shows a format of a farm record.

Date	Disease Symptom	Livestock affected	Drugs used	Cost of treatment	Remarks

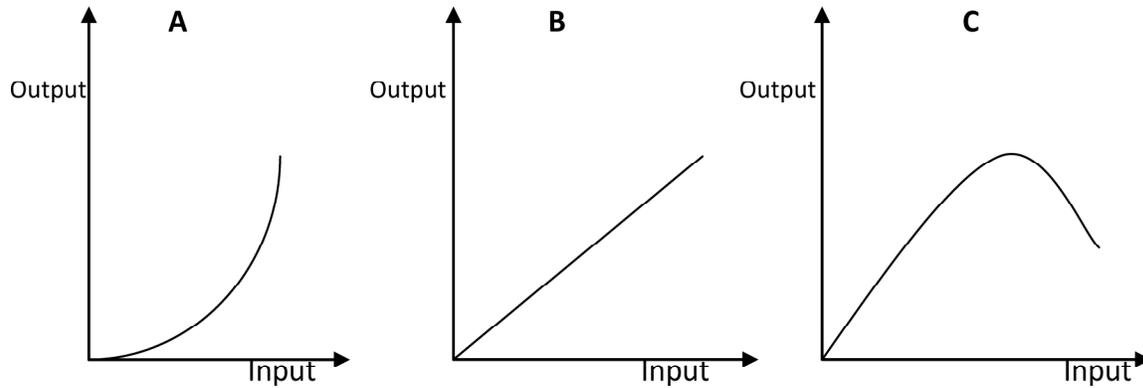
- (a) Name the farm record illustrated above. (1 mark)
- (b) Give **two** uses of the farm record shown above. (2 marks)

18 The table below represents an account in a financial book of a poultry farmer.

POULTRY							
DR				CR			
Date	Particulars	Folio	Amount	Date	Particulars	Folio	Amount

- (a) Identify the financial book. (1 mark)
- (b) On 10th January 2011, the poultry farmer bought 5 bags of layers mash worth Ksh. 10 000/- and sold 100 trays of eggs for Ksh. 20 000/- on 10 January 2011. Enter these transactions in the account above. (3 marks)

19 The following illustrations show different production function curves in agricultural economics. Study them and answer the questions that follow.



(a) Identify the production function curves labelled **A** and **B**. (2 marks)

A

B

(b) What does the law derived from the production function labelled **C** state? (1 mark)

(c) (i) Which **one** of the three production function curves is rare in Agriculture? (1 mark)

(ii) Give a reason for your answer in (c)(i) above. (1 mark)

20 The following is a list of plant nutrients; Copper, Calcium, Nitrogen, Molybdenum, Zinc, Phosphorus, Carbon, Sulphur, Iron and Magnesium.

Which of the above plant nutrients are:

(a) macro-nutrients (1 mark)

(b) micro-nutrients (1 mark)

(c) fertilizer elements (1 mark)

(d) liming elements. (1 mark)

SECTION C (40 marks)

Answer any two questions from this section in the spaces provided after question 23.

21 (a) Explain **eight** cultural methods of soil and water conservation. (8 marks)

(b) Explain **four** ways in which:

(i) HIV/AIDS limits agricultural production (4 marks)

- (ii) government policy improves agricultural production (4 marks)
 - (iii) low level of education and technology influences agriculture. (4 marks)
- 22**
- (a) Explain **seven** physical methods of pest control. (7 marks)
 - (b) Explain **eight** factors that contribute to the competitive ability of weeds. (8 marks)
 - (c) Describe the harvesting of coffee. (5 marks)
- 23**
- (a) Describe the preparation and handling of stem cuttings when planting napier grass. (5 marks)
 - (b) Describe the production of onions under the following sub-headings:
 - (i) seedbed preparation (3 marks)
 - (ii) field management (4 marks)
 - (iii) harvesting. (3 marks)
 - (c) Give **five** reasons why land consolidation should be encouraged in Kenya. (5 marks)