



## PROVISIONAL MARKING KEY

### AGRICULTURE II

#### Section A (20 marks)

1. a. Income for the farmer

$$= 400\text{kg} \times \text{K}600 \text{ per kg}^{(1)}$$

$$= \text{K}240\,000^{(1)}$$

- b. Gross margin

$$\text{Total variable costs} = \text{K}100\,000 + \text{K}\,60\,000 + \text{K}\,30\,000 = \text{K}180\,000^{(1)}$$

$$\text{Gross margin} = \text{Total income} - \text{Total variable costs}$$

$$= \text{K}240\,000 - \text{K}180\,000 = \underline{\underline{\text{K}60\,000^{(1)}}}$$

- c.

$$\text{Profit / Loss} = \text{Gross margin} - \text{Total fixed costs}$$

$$= \text{K}60\,000 - \text{K}60\,000^{(1)}$$

$$= 0^{(1)}$$

OR

$$\text{Profit / Loss} = \text{Total Income} - \text{Total costs}$$

$$= \text{K}240,000 - \text{K}240,000^{(1)}$$

$$= 0^{(1)}$$

d.

-The farmer should increase yield of milk through proper feeding

- Increase price of milk per litre

- Reduce costs/Practise input substitution

**(2 marks x 2)**

e.

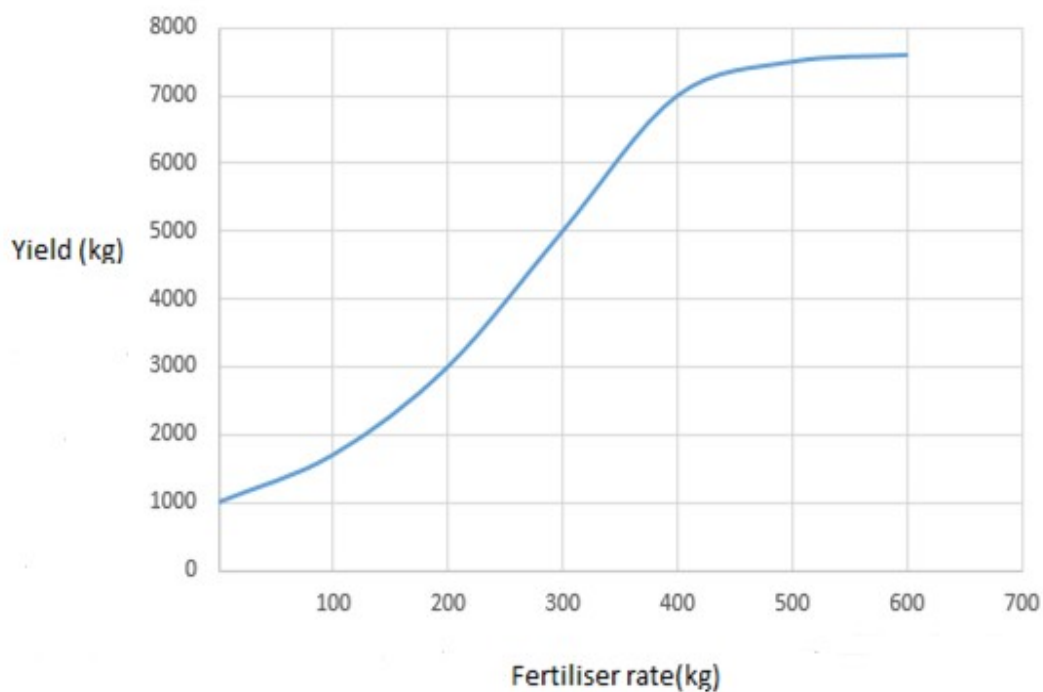
- it helps the farmer to manage the cattle properly

- it helps in detecting/calculating profit/losses

- it helps in decision making

- it helps the farmer to easily calculate income from the farm **(2 marks x 2)**

1. a.



1 mark \_ scale in vertical axis

1 mark \_ scale in vertical axis

1 mark \_ for labelling both axes



1 mark \_ plotting points on the graph

1 mark \_ joining points using free hands

- b. 400kg/ha (1 mark)
- c. It is giving maximum/highest marginal yield which will eventually reduce cost of production (2 marks)
- d. - law of diminishing returns (1 mark)
- e. - it helps the farmer to decide on the best level of inputs to use  
- it helps farmers to use resources wisely (1 mark)

### Section B (20 marks)

- 2. a. - inelastic (1 mark)
  - b. (i) - complementary (1 mark)
  - (ii) - each crop acts as a barrier for pests for the other<sup>(1)</sup>/ resulting in increased survival rate<sup>(1)</sup>  
- beans fix nitrogen<sup>(1)</sup>/ which promotes health maize growth<sup>(1)</sup>  
- it reduces the risk of crop failure<sup>(1)</sup>/ since if one crop fails the farmer relies on the other crop<sup>(1)</sup> (4 marks x 2)
  - c. - dehusking  
- shelling  
- drying  
- cleaning (4 marks in that order)
- 3. a. – integrated farming/ integrated forest farm and fish system (1 mark)
  - b. - Requires more land  
- Need a lot of skill  
- Requires high cost in investment



- Needs more labour

**(2 marks x 2)**

c. - Fruit trees will absorb CO<sub>2</sub> from atmosphere / reducing global warming

- Water drained from fish pond will be used to irrigate groundnuts and oranges

- Poultry wastes will be used to produce biogas / to replace firewood cutting or deforestation

- Manure from poultry will fertilize soil / for high production of fruits and groundnuts

**(4 marks x 2)**

d. - fats and oils

**(1 mark)**

e. - it provides proteins/ for good health and growth of the goats

- to maintain the bodies of goats to avoid weight loss

**(2 marks x 1)**

**END OF MARKING SCHEME**

