**END OF TERM 1 EXAM, 2022**

**FORM 4 AGRICULTURE PAPER 1**

**NAME: ………………………………………….ADM NO: …………..CLASS: ……………..**

**SECTION A (30 MARKS)**

***Answer all questions in this section***

1. What is a production function? ( ½ mk)
2. Name three types of production function. (1 ½ mk)

3. Explain the following terms as used in Agricultural Economics.(2 mks)

a)Marginal Returns

b) Gross Domestic Product (GDP);

c) Opportunity cost;

d) Per Capital Income;

1. List four pieces of information found in a title deed; (2 mks)
2. List four factors that lower the demand of a commodity. (2mks)
3. List factors that determine the quality of compost manure. (2mks)
4. Name any four types of financial books; (2 mks)
5. Outline four methods of preparing seeds before planting; (2 mks)
6. List five factors that determine the competitive ability of weeds; (2 ½ mks)

10. Highlight four cultural measures of controlling maize streak disease. (2 mks)

11. Name one crop that is propagated by each of the following; (2 mks)

12. Mention four aspects of rainfall that influence agriculture. (2 mks)

13. Give four ways in which land consolidation helps to promote sound farm management. (2 mks)

14. In which two forms is Nitrogen absorbed by plants? (1 mk)

15. Outline four pieces of information obtained in an invoice. (1mk)

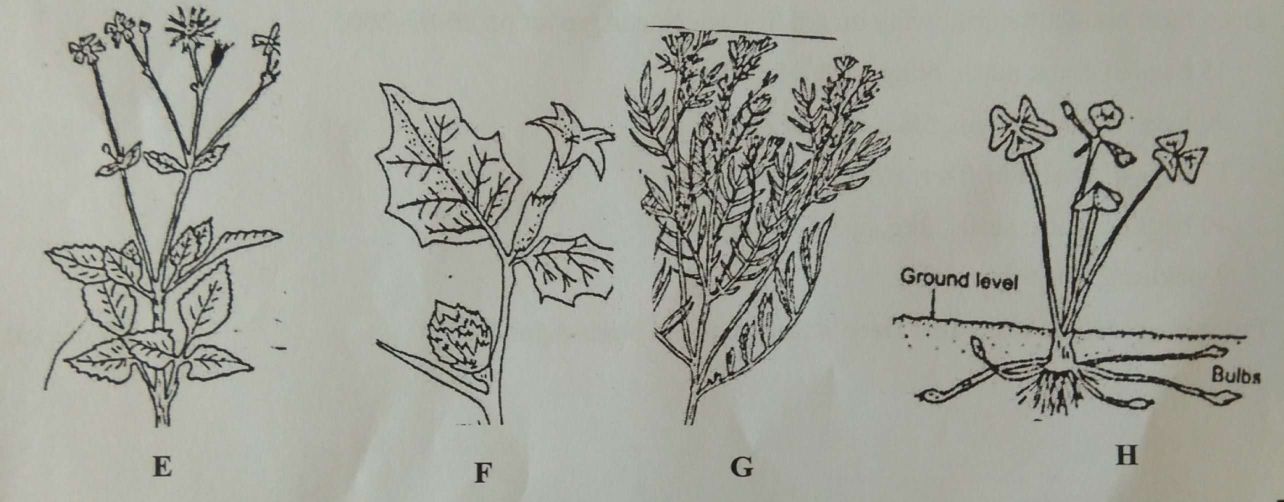
16. A farmer was advised to apply 300kg of CAN /ha to top dress the maize crop.CAN contains 21% N.Calculate the amount of Nitrogen applied per hectare. (2 mks)

17. Give four ways of improving labor productivity in the farm. (2 mks)

**SECTION B (20 MARKS)**

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

18. The diagram below shows types of weeds. Study them and answer the questions that follow.



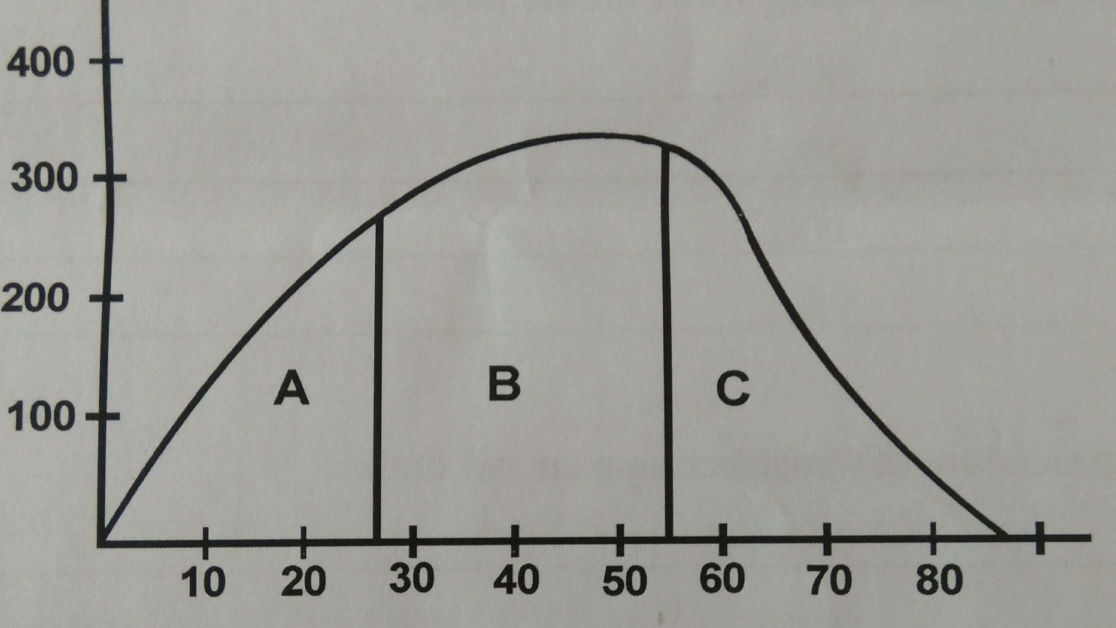
1. Identify the weeds E to H ( 4 mks)

1. State one reason why it is difficult to control weed labeled H(1mk)
2. Name any two known weeds with underground structures which are difficult to remove (2mks)

d) state four harmful effects of weeds (2mks)

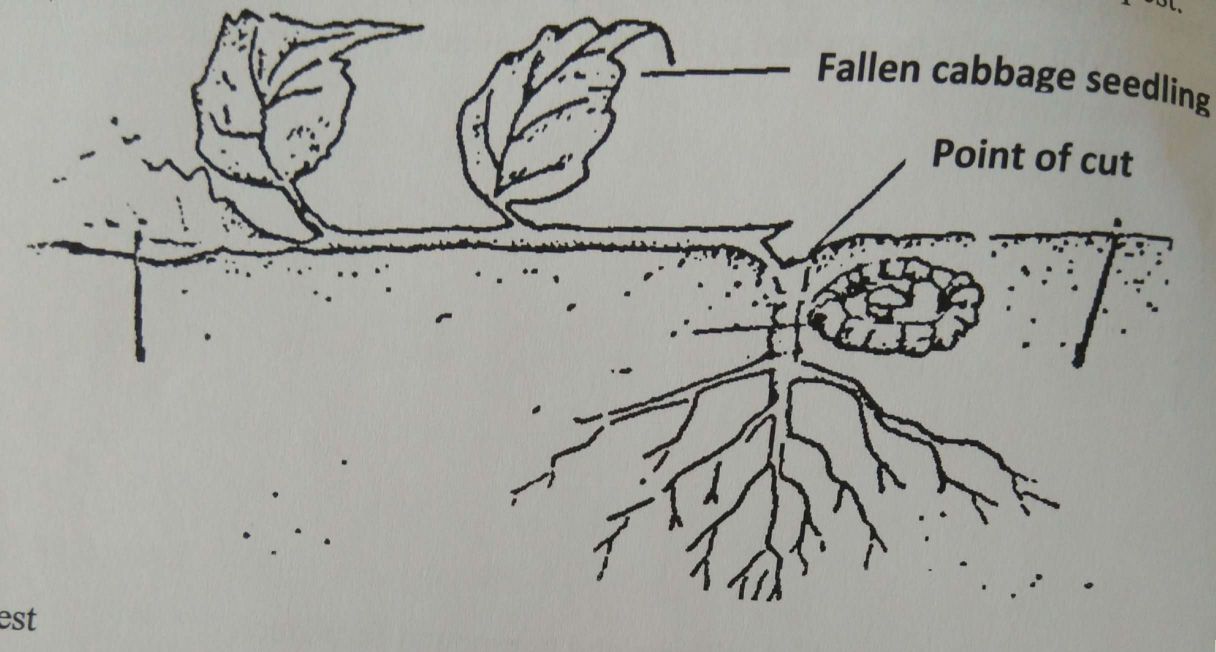
20. Maize requires 120kg/ha of phosphorus pentoxide (p2O5). How much of the compound fertilizer 20:20:10 would be applied to 0.4 hectare of land to achieve this rate. (2mks)

21. The diagram below shows a graphical representation of an economic law



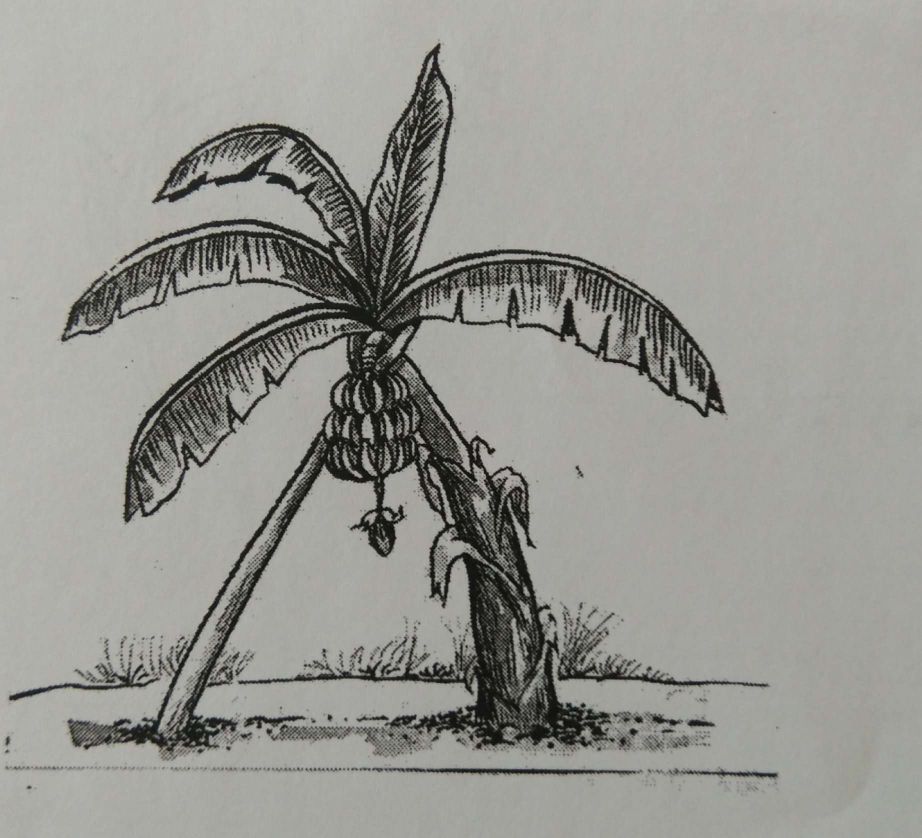
1. Name the economic law depicted in the curve above (1mk)
2. Explain what is happening in each of the zones A,B,C in relation to utilization of scarce resources (3mks)

22. The diagram below shows a cabbage seedling which has been attacked by a certain pest.



1. Identify the pest (1mk)
2. State two methods of controlling the above pest (2mks)

23 . Below is a diagram illustrates a training practice carried out on some crops. Study it carefully and use it to answer questions that follow.



1. Identify the field practice (1mk)
2. State one condition that necessitate the practice (1mks)

**SECTION C ( 40marks)**

***Choose any two questions from this question***

24. a) Outline five factors that determine the quality of hay (5mks)

b) Explain five objectives of land tenure reform in Kenya (5mks)

c) Describe ten factors that can influence soil erosion (10mks)

25. The following information was extracted from the farm records of Victory Farm as at 31/12/2017.

Sale of poultry……………………………………5000

Sale of milk……………………………………….6000

Telephone bill……………………………………..1000

Feed purchase…………………………………….. 2500

Purchase of calves ……………………………….3000

Purchase of lambs………………………………….2800

Sale of goats ………………………………………5000

Closing Valuation ………………………………….150,000

Rent ……………………………………………….. 2000

Casual labour……………………………………… 2500

Sale of Cereal……………………………………… 12000

Opening Valuation…………………………………140,000

Depreciation of machinery……………………………500

Interest on loan……………………………………….. 400

Sale of sukuma Wiki……………………………………500

Purchase of chicks……………………………………….800

1. Prepare profit and loss account for victory farm using the above information (10mks)
2. Distinguish between closing and opening valuation (2mks)
3. State five functions of a farm manager (5mks)
4. State four guiding questions that a farm manager may ask while preparing a partial budget (2mks)

26.a) Describe the advantages of using seeds as planting materials (5mks)

1. Describe the production of tomatoes under the following subheadings

i)Land preparation (4mks)

ii)Transplanting (6mks)

1. State five advantages of using herbicides (5mks)