## FORM 4 TERM 3 APRIL 2022 AGRICULTURE PAPER 1

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

1a) Distinguish between flood irrigation and basin irrigation	(1mk)
b) Give two maintenance practices required in flood irrigation system.	(1mk)
2) State the fate of water added to soil in crop field. (2mks)	
3a) Name two crops which after harvesting are processed using a flail.	(1mk)
b) What name is given to the practice in 3a above?	(1/2mk)
4State two conditions under which opportunity cost can be zero.	(2mks)
5. Shown below is part of a record found in Nyali farm	

		SECTION	ONA (30 marks)		-
Ar	sawer ALL the	questions in	this section in the	spaces prov	(1 mark)
1	<ul><li>(a) Distinguish bet</li></ul>	ween flood irrigat	tion and basin irrigation		
	Charles de la constante de la	terrore procince	required in a flood irriga	ution aystem	(1 mark)
	(B) Give (Wo Main	termine process			
2.	State the fate of v	vater added to soi	I in a crop field		(2 marks)
					(1 mark)
3.	(a) Name two ero	ps which after ha	rvesting, are processed a	sing a man	
			tice in 3(a) above?		C/2 mark
	. State two condi	tions under which	h opportunity cost can be	zero	(2 mark
	. State two condi	tions under which	h opportunity cost can be ound in Nyati Farm	zera	(2 mark
	. State two condi	tions under which	h opportunity cost can be	zero	(2 mark
	5. Shown below is	tions under which	h opportunity cost can be ound in Nyati Farm Date	Original U	(2 mark
	5. Shown below is	part of a record f	h opportunity cost can be bund in Nyati Farm Date Acquired	Original U	(2 mark
	5. Shown below is  Item  Watering trough	part of a record f	ound in Nyati Farm  Date  Acquired  03.03.2006	Original U Cost (ISSH 3 000 250 2 3 10	(2 mark
	State (we condition to the condition to	part of a record f	ound in Nyati Farm  Date Acquired 03.03.2006 31.05.2005	Original I Cost (ICSH 3 000 250 2 310 169	(2 mark
	State two condi	part of a record f	Ound in Nyati Farm  Date  Acquired  03.03.2090  31.05.2005  04.01.2005  11.07.2004  Diverse dates	Original U Cost (KSH 3 600 250 2 310 169 281 000	(2 mark
	State (we condition to condition)  Shown below is less watering trough Hand hoes Wheel barrow Machetes	part of a record f	Date Acquired 03.05.2004 Diverse dates 0.02.2004 Diverse dates 0.02.2004	Original I Cost (CSH 3 600 250 2 310 169 281 000 32 600	(2 mark
	State two condi-	part of a record f  Quantity  2 4 1 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Date   Acquired	Original U Cost (KSH 3 600 2 50 2 310 169 281 000 32 600 66 000	(2 mark
	Shown below is  Item  Watering trough Hand hoes Wheel barrow Machetes Buildings Milking shed	part of a record f Quantity  4  1  6  2  1	Date Acquired 03.05.2004 Diverse dates 0.02.2004 Diverse dates 0.02.2004	Original I Cost (CSH 3 600 250 2 310 169 281 000 32 600	(2 mark
	State two condi- Shown below is  Hem  Watering trough Hand hoes Wheel barrow Machetes Buildings Miking shed Cattle Sheep	part of a record f  Quantity  2 4 1 6 2 1 1 1 14	ound in Nyati Farm  Date Acquired 03.03.2006 31.05.2005 04.01.2005 11.07.2004 Diverse dates 02.02.2004 Diverse dates Diverse dates	Original U Cost (KSH 3 600 2 50 2 510 169 281 000 32 600 66 000 2 100	(2 mark
	State two condi- S. Shown below is  Item  Watering trough Hand hoes Wheel barrow Machetes Buildings Milking shed Cattle Sheep  (a) (i) Identify the	part of a record f  Quantity  2 4 1 6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ound in Nyati Farm  Date Acquired 03.03.2006 31.05.2005 04.01.2005 11.07.2004 Diverse dates 02.02.2004 Diverse dates Diverse dates	Original Cont (KS1) 3 600 2810 2810 2810 32 600 32 600 2 100	(2 mark

a)i Identify the type of record shown above. (	1mk)
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ii) Give reason for your answer to a (i) above. (1mk)

b) What other column should be added to this record, to make it complete. (1mk)

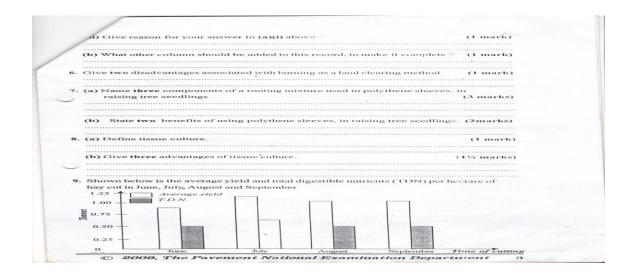
- 6Give two disadvantages associated with burning as a land clearing method. (1mk)
- 7(a)Name three components of rooting mixture used in polythene sleeves in raising tree seedlings. (3mks)
- b) State two benefits of using polythene sleeves, in raising tree seedlings. (2mks)

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8. a)Define tissue culture.	(1mk)
bGive three advantages of tissue culture	

9. Shown below is the average yield and total digestible nutrients (TDN) per hectare of hay cut in June July, August and September



a)From the graph identify the relationship between average yield and total digestible nutrients of hay. (1mk)

a) From the graph, identify the most appropriate month of harvesting hay.	(1mk)
10. Outline how the age of an animal influences the quality of farm yard manure	production form it (1mk)
11. List four soil requirements for tomatoes.	(2mks)
12. Under what circumstance are beans referred to as vegetables.	(1mk)
13a) State two conditions that may lead to land fragmentation.	(1mk)
b) Give two benefits of land fragmentation.	(1mk)

b) Give three features of an ideal green manure crop	. (11/2 mks)
SECTION B (20MKS)  15 Given below is an illustration of water levels of maturation stage of cereal crop	undrained and tile – drainage land in the sowing and
18. Given below is an Huntralian erwater foods with a mixing and maturation alongs of a constitution of the second state.	
a) What benefit of land drainage is shown in the	e illustration above? (1mk)
b) What three advantages may be associated wi	th tile-drainage? (11/2mks)
c) State two maintenance requirements of tile-d	rainage system. (1mk)

16. The diagrams labeled A,B and C below illustrate some weeds. Study the diagrams carefully and then answer the questions that follow.

	sowing and maturation stages of a cereal crop.
	water free level sowing manufactured water free level
~	(a) Undrained Land (c) Tile - Drained Land
	(a) What benefit of land drainage is shown in the illustration above? (1 mark)
	(b) What three advantages may be associated with tile-drainage? (1/2 marks)
9	(c) State two-maintenance requirements of a tile-drainage system (1 mark)
9	(c) State two maintenance requirements of a tile-drainage system (1 mark)
٥	(c) State two maintenance requirements of a file-drainage system (1 mark)  16. The diagrams labelled A, B and C below illustrate some weeds. Study the diagrams
9	(c) State two maintenance requirements of a file-drainage system (1 mark)  16. The diagrams labelled A, B and C below illustrate some weeds. Study the diagrams
9	(c) State two maintenance requirements of a file-drainage system (1 mark)  16. The diagrams labelled A, B and C below illustrate some weeds. Study the diagrams
9	(c) State two maintenance requirements of a tile-drainage system (1 mark)  16. The diagrams labelled A. B and C below illustrate some weeds. Study the diagrams carefully and then answer the questions that follow.

a) Identify each of the weeds illustrated in diagram A,B and C. (3MKS)

Α

В

C

B)i Classify the weeds into two groups, on the basis of their life cycles. (21/2marks)

ii) Give reasons for you answer in (bi) above.

(3mks)

c)State two negative effects of weed C, on livestock.

(1mk)

17. The diagram labeled E, F and G below illustrate some pest found in vegetables study the diagrams carefully and then answer the questions that follow

	(a) Identify each of the weeds illustrated in diagrams A. B and C	(2 marks)
	(II) Give reason(s) for your answer in (b)(i) above	
		C3 reservices
	(c) State two negative effects of weed C, on livestock	
		C. I reserved
	***************************************	
	17. The diagrams labelled E. F and G below illustrate some posts from L	
	Study the diagrams earefully and then answer the questions that fellow	
	occupy the diagrams earerdily and then answer the questions that balley	
	The state of the s	Y -25"
		1 1
	(a) Identify each of the posts illustrated to disgrams E. Franci C.	(A market)
	FI	
	#P	
	************************************	
	(b) State the damage caused by each of the peats labelled E and F, on the	
	The second secon	
-	80]	(2 marks)
	(c) Give one cultural control measure for the pest labelled E	
		(Lunaric)
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a) Identify each of the pest illustrate in diagram E,F, and G.

(3MKS)

B) State the damage caused by each of the pest labeled E and F, on the host plants. (mksa\_

c)Give one cultural control measure for the pest labeled E (1mk)

d) Other than vegetables name two crop plants that may be infested with the pest labeled G

## SECTION C (40MKS)

Answer an two question in this section the space provided 18Discuss vegetable crops under the following sub- headings a)Definition of vegetable.

(1mk)

b)Management of perishability vegetables.

(4mks)

c)Importance of vegetables.	(6mks
d)Common stem vegetables.	(4mks)
e)Staking in tomatoes.	(5mks)
<ul><li>19a) Discuss budding a applied in crop production under</li><li>i) Timing</li></ul>	r the following sub-headings (5mks)
ii) Advantages over grafting.	(4mks)

iii)	Materials used.	(6mks)
iv)	Briefly describe whip grafting.	(5mks)
	s wind erosion under the following sub- headings tive effects of wind erosion on crop plants.	(5mks)
e) Fa	actors affecting susceptibility of soil to wind erosion.	(15mks)