THE UNITED REPUBLIC OF TANZANIA NATIONAL EXAMINATIONS COUNCIL CERTIFICATE OF SECONDARY EDUCATION EXAMINATION

034/2

AGRICULTURAL SCIENCE 2 (PRACTICAL)

(For Both School and Private Candidates)

Time: 2:15 Hours

Friday, 18th November 2016 a.m.

Instructions

- 1. This paper consists of three (3) questions.
- 2. Answer two (2) questions.
- 3. Each question carries 25 marks.
- 4. Cellular phones and calculators are not allowed in the examination room.
- 5. Write your Examination Number on every page of your answer booklet(s).



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1. You are provided with specimens A, B, C, D, E, F and G. Observe them carefully and answer

1.	the questions that follow:					
	(a)	(i)	Identify each of specimens A and D by their botanical name.	(1 mark)		
		(ii)	Give two main reasons why seeds of specimen A have to be treated.	(2 marks)		
			State any two importance of specimen A plant in core production.	(1.5 marks)		
		(iv)	Briefly explain three methods of harvesting specimen A.	(3 marks)		
		(v)	Name rhizobium strain which fix nitrogen in specimen D.	(1 mark)		
	(b)	(i)	Identify specimens B and C by their scientific names.	(1 mark)		
		(ii)	How could you control specimens B and C?	(2 marks)		
		(iii)	State six ideal measures to be taken in order to reduce the rapid de	evelopment of		
			specimen C in storage of grain.	(3 marks)		
	(c)	(i)	State four factors which determine the quality of specimen E.	(2 marks)		
		(ii)	Outline seven steps to be followed during hand baling of specimen E.	(3.5 marks)		
		(iii)	How could you improve the palatability of specimen E in livestock?	(0.5 mark)		
	(d)	(i)	Identify specimens F and G by their scientific names.	(1 mark)		
		(ii)	State two control measures of specimen F.	(1 mark)		
		(iii)	Briefly describe three typical symptoms infection which can be	observed in		
			specimen G.	(1.5 marks)		
		(iv)	Briefly describe the 'mosaic' pattern of disease in specimen G.	(1 mark)		
2.			provided with specimens H, I, J, K, L, M and N. Observe them careful wing questions:	lly and answer		
	(a)	(i)	State five microbial activities which takes place in specimen H.	(2.5 marks)		
		(ii)	Briefly describe the specimen H.	(2 marks)		
	(b)	(i)	State five characteristics of specimen I.	(2.5 marks)		
		(ii)	What are the five factors to be considered in siting the apiary for specin	men I?		
		(2.5 marks) products.				
				(2 marks)		
			Give two uses of processed specimen J.	(1 mark)		
	(c)	(i)	Identify specimens L and M by their botanical name.	(1 mark)		
		(ii)	State six desirable qualities for specimens L and M in livestock keeping	g. (3 marks)		

n order to manage	(iii) Outline ten practices that should be taken into consideration			
(5 marks)	specimens L and M for livestock keeping.			
(2 marks)	(iv) Provide four ingredients for making artificial of specimen K.			
(0.5 mark)	(d) (i) Identify specimen N.			
(1 mark)	(ii) What is the use of specimen N?			
them carefully and	You are provided with specimens O, P, Q, R, S, T and U. Observe them canswer the questions that follow:			
(1.5 marks)	(a) (i) Briefly describe the procedure for using specimen O.			
(1 mark)	(ii) What are the relationship between specimen O and P?			
(0.5 mark)	(b) (i) Identify specimen Q.			
(1 mark)	(ii) What is the use of specimen Q?			
been controlled by	(iii) Account for three extreme effects of soil acidity which has not			
(3 marks)	application of specimen Q to plant growth.			
(0.5 mark)	(c) (i) Identify specimen R.			
(2 marks)	(ii) What are the four challenges of using specimen R in farming?			

(iii)	Briefly explain three agronomic practices to be adopted to maintain the s	soil organic
	matter content hence soil fertility apart from using specimen R.	(3 marks)
(iv)	Account for the effects of using specimen R which has a wide C:N ratio	in the soil
	with deficient in Nitrogen.	(2 marks)
(d) (i)	State the process involved in using specimen S in oxenization.	(1 mark)

(ii) Outline four compone	nts to be used in making specimen S.	(2 marks)
(iii) Apart from specimen S	S, list other two types of specimen.	(1 mark)
(iv) State four classes of a	nimals used for draughtwork with specimen S.	(2 marks)

(e) Propose three	equipment	which are	used t	ogether	with	specimen'	T in	its function	
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(1.5 marks)

- (f) (i) With the aid of specimen U, name the main three types of plastering. (1.5 marks)
 - (ii) State three methods of laying specimen U in masonry work. (1.5 marks)