*Student's Assessment Number*_____

THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL OF TANZANIA
FORM TWO NATIONAL ASSESSMENT

034

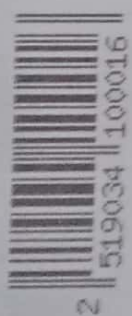
AGRICULTURE

Duration: 2:30 Hours **Year: 2025**

Instructions

1. This paper consists of sections A, B and C with a total of **ten (10)** questions.
2. Answer **all** the questions in the spaces provided.
3. Section A and C carry **fifteen (15)** marks each and section B carries **seventy (70)** marks.
4. Communication devices and any unauthorised materials are **not** allowed in the assessment room.
5. All writing must be in **blue** or **black** ink.
6. Write your **Assessment Number** at the top right corner of every page.

FOR ASSESSOR'S USE ONLY		
QUESTION NUMBER	**SCORE**	**ASSESSOR'S INITIALS**
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
TOTAL		
CHECKER'S SIGNATURE		



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SECTION A (15 Marks)

Answer **all** questions in this section.

1. For each of the items (i)-(x), choose the correct answer from the given alternatives and write its letter in the box provided.

(i) A dairy livestock keeper experienced an increase in milk production as a result of an increase in pasture production. What type of product relationship is observed in the dairy farm?

A Supplementary products B Joint products
C Complementary products D Competitive products

(ii) Why at the end of the accounting period, a farmer should hire an expert in agricultural economics to indicate values of assets and liabilities of the farm business?

A To record important events of the farm
B To count amount of products in the farm
C To list assets in the farm
D To find financial position of the farm

(iii) Which farming activity would you suggest to improve the structure of the soil?

A Over cultivation of the soil
B Use of heavy machinery on wet soils
C Ploughing at constant depth
D Minimum tillage of the soil

(iv) Suppose you want to cultivate a field having sticky and hard soil, which farm machinery could appropriately be used?

A Chisel plough B Mouldboard plough
C Disc plough D Ox-plough

(v) When going through the vertical section of the soil from the top, remains of dead plants and animals on the surface were observed. Which conclusion can be drawn from such observation?

A Complete decomposition of organic matter has taken place
B Little decomposition of organic matter has taken place
C Weathering of rocks has taken place
D Supply of decomposition of rocks has taken place

(vi) The following are criteria used to classify crops **except**:

A Agronomic classification B Life cycle classification
C Fertilizer application classification D Uses classification

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(vii) Which one best describes the contributions of agriculture to both country and family economies?

(1) Provision of raw materials
(2) Supply of food
(3) Source of income
(4) Offers employment

A (1) and (4) B (2) and (3)
C (1) and (3) D (3) and (4)

(viii) Spice crops are important for improving aroma/taste of food used by human beings. Which crops are these?

(1) Ginger
(2) Leek
(3) Onions
(4) Cinnamon

A (1) and (4) B (2) and (3)
C (1) and (3) D (3) and (4)

(ix) Which one is a merit of using living organisms such as insects or large animals to suppress weed growth?

A It does not requires expensive research
B It eliminates weeds quickly
C It is environmental friendly
D It does not consume a lot of time

(x) In a field of crops, only few plants are infected. Which methods of plant disease control would you advise the farmers to use?

A Rogueing B Deep ploughing
C Timely planting D Crop rotation

2. Match the diameters of soil particles in **List A** with the names of soil particles in **List B** by writing the letter of the correct response below the corresponding item number in the table provided.

List A		List B	
(i)	Less than 0.002 mm	A	Fine sand
(ii)	0.002-0.02 mm	B	Loam
(iii)	0.02-0.2 mm	C	Silt
(iv)	0.2 mm -2.0 mm	D	Fine stones
(v)	2.0- 20 mm	E	Clay
		F	Gravel
		G	Coarse sand

Answers

List A	(i)	(ii)	(iii)	(iv)	(v)
List B					

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SECTION B (70 Marks)

Answer **all** questions in this section.

3. (a) Metal file is an important tool for sharpening metal blades. However, it is not recommended to apply oil or grease to the metal file for cleaning.

(i) Why is it not recommended to do so? Briefly explain.

_____

_____

_____

_____

(ii) Which instrument is used for cleaning the tool?

_____

_____

_____

(b) Briefly describe five measures to be taken to prevent accident occurrence when there are sharp edge tools in the workshop.

(i) _____

_____

(ii) _____

_____

(iii) _____

_____

(iv) _____

_____

(v) _____

_____

4. (a) Form Two students did a careful examination to show that clay and sand soils have some properties which cause problems in crop production. What are the three agronomic problems which are likely to be determined for the clay and sand soil?

(i) Agronomic problems of clay soil

- _____

_____

_____

- _____
- _____
- _____

(ii) Agronomic problems of sand soil

- _____
- _____
- _____

(b) Differentiate the following concepts as used in soil science.

(i) Available water from field capacity.

_____

_____

_____

_____

_____

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(ii) Wilting coefficient from unavailable water.

_____

_____

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5. (a) Briefly describe how rotational grazing system is practiced in livestock keeping.

(b) Briefly explain four advantages of practising rotational grazing system.

(i)

(ii)

(iii)

(iv)

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6. (a) Briefly explain two methods that can be used to monitor soil moisture of the farm.

(i) _____

_____

_____

_____

_____

(ii) _____

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_____

_____

(b) For each of the following crops indicate the critical growth stage in relation to moisture requirement.

(i) Cabbage

_____

_____

(ii) Carrot

_____

_____

(iii) Beans

_____

_____

(iv) Tomato

_____

_____

(v) Maize

_____

_____

7. (a) A farmer decided to grow sorghum and cowpea on the same field at the same time. What are the six advantages that the farmer might obtain by practising such a cropping system?

(i) _____

_____

(ii) _____

_____

(iii) _____

_____

(iv) _____

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(v) _____

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(vi) _____

_____

(b) Give four disadvantages of practicing mixed cropping system.

(i) _____

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_____

(ii) _____

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(iii) _____

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_____

(iv) _____

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_____

8. (a) How do the following cultural practices are used to control weed in ensuring land sustainability for future farming activities?

(i) Crop rotation

_____

_____

_____

(ii) Use of clean seeds

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_____

_____

(iii) Mulching

_____

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_____

(iv) Use of proper plant spacing

_____

_____

_____

(v) Flooding in rice fields

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_____

(b) In order to increase crop production, the use of herbicides for controlling weeds is emphasized. What are the five merits for using such practice in crop production?

(i) _____

_____

(ii) _____

_____

(iii) _____

_____

(iv) _____

_____

(v) _____

_____

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9. (a) Briefly explain four main resources to be used in the farm during the process of sugar cane production.

(i) _____

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_____

(ii) _____

_____

_____

(iii) _____

_____

_____

(iv) _____

_____

_____

(b) Suppose you are a farm manager, outline four roles you will play to ensure higher production of sugar cane.

(i) _____

_____

_____

(ii) _____

_____

_____

(iii) _____

_____

_____

(iv) _____

_____

_____

(v) _____

_____

_____

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(vi)_____

SECTION C (15 Marks)

Answer question **ten (10)**.

10. Form Two students are complaining about food shortage in the dinning. The Head master plans to increase maize crop production in a school farm to solve the problem. Recommend to the head teacher on how to raise the production of the crop based on the following headings:
    (a) Climate and soils
    (b) Crop varieties
    (c) Propagation and spacing
    (d) Weeding
    (e) Application of manure and fertilizers
    (f) Controlling pests and diseases
    (g) Harvesting

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