



EXAMINATION NO.: \_\_\_\_\_

CANDIDATE NAME.: \_\_\_\_\_

# MULANJE DISTRICT COUNCIL

THE DIRECTORATE OF EDUCATION, YOUTH AND SPORTS

2023 PRIMARY SCHOOL LEAVING CERTIFICATE MOCK EXAMINATION

## PRIMARY SCIENCES

(100 Marks)

Subject Number: P163

Time Allowed: 2 hours

(8:00 -10:00 am)

### INSTRUCTIONS

1. This paper contains **11** printed pages.  
**Please check**
2. Write your name (**Surname First**) and Examination number in spaces provided above.
3. This paper consists of two sections (**A and B**)
4. Answer all questions in **section A** and **B**.
  - i. Encircle the correct answers in **section A**.
  - ii. Write your answers in spaces provided in **section B**
5. Tick against the question number you have answered in the table provide on this page.
6. Hand in your completed question paper to the invigilator when time is called to stop writing.

Question number	Tick questions 41-52 if answered	Do not write in these columns	
1-20			
21-40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			

PLEASE DO NOT TURN OVER UNTIL YOU ARE TOLD TO DO SO

## SECTION A

40 MARKS

## AGRICULTURE

## ENCIRCLE THE LETTER REPRESENTING THE CORRECT ANSWER

1. Which of the following is a characteristic of sand soil?
  - a. Holds a lot of water
  - b. Feels sticky when wet
  - c. Has large particles
  - d. Has medium air spaces
2. To which sub branch of crop Production does the growing of Mangoes belong?
  - a. Olericulture c. Silviculture
  - b. Floriculture d. Pomoculture
3. Which of the following is produced from animal?
  - a. Farm cart c. Shoes
  - b. Ridger d. Plough
4. State the way of maintaining a hand trowel among the following:
  - a. Oiling c. Painting
  - b. Sharpening d. Washing
5. Choose the solution to the problem of perishability of produce in agricultural marketing among the following;
  - a. Using special transport facilities

- b. Storing produce in cold rooms
- c. Reducing the amount of production
- d. Packaging produce in suitable containers

**Figure 1: is a diagram of a crop attacked by a pest. Use it to answer questions 6 and 7.**



6. Identify the pest marked A
  - a. Weevil c. Locust
  - b. Army worm d. Stalk borer
7. Which part of the crop is attacked by the pest?
  - a. Grain c. Stalk
  - b. Leaf d. Root

2023

8. Why should a rabbit house be raised above the ground?
- It reduces infestation of maggots and worms
  - It reduces the overcrowding of rabbits
  - It reduces competition when feeding
  - It reduces movement of rabbits
9. Which of the following ways can help a farmer when dry spells destroy crops?
- Harvesting the crops early
  - Irrigating the crops
  - Insuring the crops
  - Growing more than one crop
10. State the sign of anthrax in goats among the following;
- Quick breathing
  - Blisters on feet
  - Swelling of stomach
  - Saliva coming out
11. Why is it important to advertise fish for sell before harvesting?
- To know the fish customers
  - To transport the fish easily
  - To determine price of the fish
  - To package the fish
12. Which of the following layers of soil has the highest organic matter?

- Parent rock
- Weathered rock
- Top soil
- Sand soil

13. What is the use of beam in a ridger?
- Holds all parts of the ridger
  - Attaches the ridger to the chain
  - Pushes the soil to each side
  - Helps to push the ridger

*Figure 2; is a diagram of fish predator. Use it to answer questions 14 and 15.*



14. State the name of the predator
- Otter
  - Grey helon
  - Monitor lizard
  - King fisher
15. Which of the following ways can control the predator?
- Setting traps
  - Scaring it
  - Destroying its nest
  - Applying lime
16. Which of the following is a leaf vegetable?
- Eggplant
  - Lettuce
  - Tomato
  - Carrot

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The following information was obtained on a vegetable farm. Use it to answer questions 17 and 18.

- Sold 100kg tomatoes at K10,000
- Bought 25kg CAN at K10,000
- Bought tomato seeds at K400
- Sold 50kg rape at K 2,000

17. What were the total sales?
- a. K10,400 c. K20,000  
b. K12,000 d. K22,400
18. What was the farmer's profit?
- a. K 1,600 c. K 8,000  
b. K 2,000 d. K 9,600
19. Which of the following breeds of cattle can be cross bred with Malawi Zebu to increase milk production?
- a. Brahman c. Freisian  
b. Hereford d. Charolais

Figure 3 ; is a diagram of a common pest of groundnuts? Use it to answer question number 20.

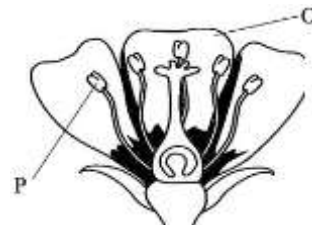


20. What is the name of the pest?
- a. Termite  
b. Grasshopper  
c. Beetle  
d. Aphid

### SCIENCE AND TECHNOLOGY

21. Which of the following diseases is associated with loss of teeth?
- a. Anemia c. Kwashiorkor  
b. Scurvy d. Marasmus
22. Melting is the process of changing the state of matter from \_\_\_\_\_?
- a. Gas to liquid c. Liquid to solid  
b. Solid to gas d. Solid to liquid

Figure 4; is a diagram of a flower. Use it to answer questions 23 and 24.



23. The part labelled P is called
- a. Sepal c. Filament  
b. Anther d. Petal
24. What is the function of the part labelled O?
- a. Holding the flower to the whole plant  
b. Attracting pollination agents to the flower  
c. Protecting the developing flower  
d. producing pollen grains

2023

25. Which of the following methods can separate a mixture iron fillings and flour?

- a. Filtration c. Magnetism  
b. Distillation d. Winnowing

26. Which of the following fruits can be dispersed by water?

- a. Coconut oil c. Dandelion  
b. Guava d. Croton

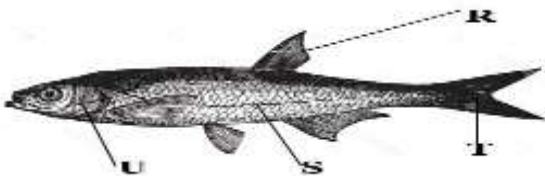
27. Which of the following problems of the human breathing system may be caused by covering ones' face with a plastic bag?

- a. Choking c. Asthma  
b. Smothering d. Tuberculosis

28. Which of the following diseases can be prevented by practicing kitchen hygiene?

- a. Goiter c. Scabies  
b. Malaria d. Diarrhea

Figure 5; is a diagram showing external parts of a fish. Use it to answer question 29 and 30



29. Identify the part marked R.

- a. Anal fin c. Dorsal fin  
b. Scales d. operculum

30. Which of the following parts of the fish helps it to move forward?

- a. T c. R  
b. U d. S

31. The energy which an object acquires if it is raised above the ground is called \_\_\_\_\_

- a. Kinetic c. Potential  
b. Chemical d. Electrical

32. It is advisable to wear white clothes on sunny day in order to?

- a. Feel warm c. Feel cool  
b. Be seen from far d. Look smart

33. Which of the following parts of an electric circuit controls the flow of electricity?

- a. Cell c. Switch  
b. Bulb d. fuse

Study the food chain below and answer the question that follows;

Grass → goats → hyena

34. What would happen to the population of goats and grass if the population of hyena increased?

- a. All hyena will be eaten  
b. All grass will be eaten  
c. Both grass and goats will be eaten  
d. All goats will be eaten and grass will grow more.

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35. Which of following ways can improve the sound transmitted by a string telephone?

- a. Loosening the string
- b. Tightening the string
- c. Making knots on the string
- d. Lengthening the string

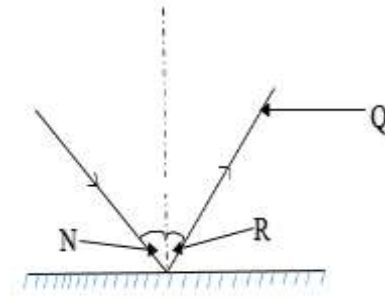
36. The cooking of food in hot oil is called \_\_\_\_\_?

- a. Frying
- b. Stewing
- c. Boiling
- d. Baking

37. Which of the following condition is a sign of kwashiorkor?

- a. Stunted growth
- b. Wasting of muscles
- c. Swollen body
- d. Good appetite

**Figure 6; is a diagram showing reflection of light. Use it to answer questions 38 & 39**



38. Name the ray marked Q

- a. Incident ray
- b. Reflected ray
- c. Refracted ray
- d. Emergent ray

39. What is the size of the angle marked R if angle N is  $45^\circ$ ?

- a.  $55^\circ$
- b.  $90^\circ$
- c.  $45^\circ$
- d.  $60^\circ$

40. Which of the following technology can conserve the environment?

- a. Paper recycling
- b. Global warning
- c. Erratic
- d. Charcoal production

**SECTION B (60 MARKS)**

**AGRICULTURE**

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41.

- a. Define fish farming (1 mark)

\_\_\_\_\_

- b. Give two ways of managing risks in a farm business (2 marks)

\_\_\_\_\_

\_\_\_\_\_

42.

- a. State two importance of flowers (2 marks)

\_\_\_\_\_

\_\_\_\_\_

- b. Give any two characteristics of indigenous trees (2 marks)

\_\_\_\_\_

\_\_\_\_\_

- c. Give two factors to be considered when selecting good seeds for planting (2 marks)

\_\_\_\_\_

\_\_\_\_\_

Figure 7; shows a cash crop, use it to answer questions below:



43.

- a. Name the cash crop in figure 7 (1 mark)

\_\_\_\_\_

- b. Give one end product produced from the crop (1 mark)

\_\_\_\_\_

- c. Explain one use of product extracted from the plant (1 mark)

\_\_\_\_\_

44.

- a. Mention any two conditions necessary for seed germination. (2 marks)

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- b. Draw a bean seed and label any two external parts. (3 marks)

45.

- a. Give two factors to be considered when designing an agroforestry plot. (2 marks)

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- b. Name the type of agro forest whose trees are mixed with pastures. (1 mark)

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- c. Why a farming calendar is an important tool to farmers

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*Figure 8; is soil conservation process. Use it to answer question 46a, b and c*



46.

- a. Classify the following forests into natural and planted forests:

- i. Chikangawa (1 mark)

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- ii. Michiru (1 marks)

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- b. Identify the figure 8 (1 mark)

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c. State how the figure 8, conserve the soil. (2 marks)

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**SCIENCE AND TECHNOLOGY**

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47.

a. Give any two examples of synthetic fibers (2 marks)

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b. State one importance of laundering garments and articles (1 mark)

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c. Give two ways in which a family can ensure food availability throughout the year. (2marks)

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Figure 9; is a diagram of a root. Use to answer questions that follow



48.

a. Identify the root in figure 9 (1 mark)

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b. i. State any one function of the tongue (1 mark)

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ii. Give one infection of the tongue (1 mark)

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c. i. List any two methods of cooking that are suitable for sedentary worker (2 marks)

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ii. Why manual worker is given plenty of fluids in their meals? (2 marks)

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49.

a. Give one function of each of the following part of flower

i. Petal \_\_\_\_\_ (1 mark)

ii. Filament \_\_\_\_\_ (1 mark)

b. Classify the following into flowering plants and non-flowering plants: mangoes, rice, algae, maize (4 marks)

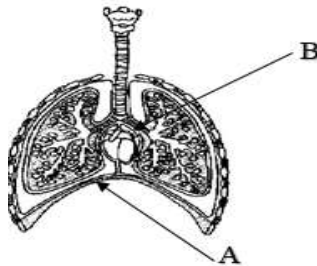
i. Flowering plants:

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ii. Non flowering plants:

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Figure 10: is a diagram showing a human breathing system. Use it to answer questions 50 (a) and (b)



50.

a. Which letter represents

(i) Diaphragm \_\_\_\_\_ (1 mark)

(ii) Left bronchus \_\_\_\_\_ (1 mark)

b. Explain what happens to the ribs and the diaphragm during inhalation (2 Marks)

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- c. Mention any two problems of the human breathing system. (2 Marks)

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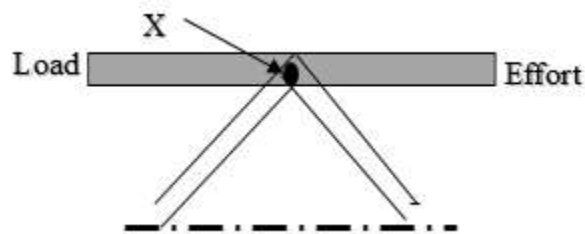
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51.

- a. Give one example of machines which assist in holding hot objects (1 mark)

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Figure 10; is a diagram of a machine. Use it to answer questions 51 b (i) and 51 (ii)



- b. (i) Name the part labeled X (1 mark)

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- (ii.) Which class of lever does the figure 11 belong? (1mark)

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52.

- a. Classify the following food into protective foods and body building food: pawpaw, peas, chisoso, fish and flying ants.

(i) Protective food \_\_\_\_\_

(ii) Body building food \_\_\_\_\_

- b. Explain the meanings of the following terms:

(i) Cooling (1 mark)

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(ii) Decoding (1 mark)

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END OF QUESTION PAPER

NB: This paper contains 11 printed pages