



## UGANDA NATIONAL EXAMINATIONS BOARD

### PRIMARY LEAVING EXAMINATION

2023

INTEGRATED SCIENCE

***Time Allowed: 2 hours 15 minutes***

Random No.	Personal No.

**Candidate's Name:** .....

**Candidate's Signature:** .....

**District ID No.**

**Read the following instructions carefully:**

1. Do not write your **school** or **district name** anywhere on this paper.
2. This paper has two sections: **A** and **B**. Section **A** has **40** questions and section **B** has **15** questions. The paper has **15 printed pages** altogether.
3. Answer **all** questions. **All** answers to both sections **A** and **B** must be written in the spaces provided.
4. All answers **must** be written using a **blue** or **black** ball point pen or ink. Any answer or work written in pencil other than drawings will **not** be marked.
5. Unnecessary **changes** in your work and handwriting that cannot be read easily may lead to **loss** of marks.
6. Do not fill anything in the table indicated: "**FOR EXAMINERS' USE ONLY**" and boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
QN. NO.	MARKS	EXR'S NO.
1 - 10		
11 - 20		
21 - 30		
31 - 40		
41 - 43		
44 - 46		
47 - 49		
50 - 52		
53 - 55		
<b>TOTAL</b>		

## **SECTION A: 40 MARKS**

Questions **1** to **40** carry one mark each.

1. Name the type of teeth which develops last in human beings.

.....

2. Give any **one** way in which timely weeding of crops helps to control crop diseases.

.....

3. Give **one** element of weather which helps plants to make their own food.

.....

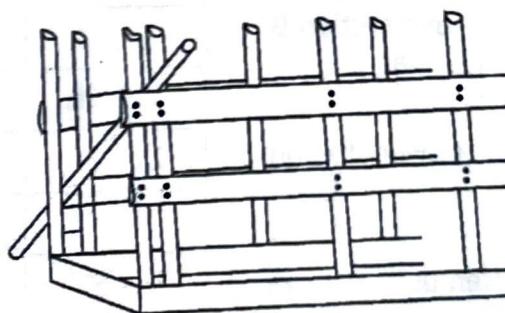
4. State the purpose of pressing the belly of a casualty of near drowning.

.....

5. Give any **one** reason why fish are able to live in water.

.....

The diagram below shows a structure in a cattle farm. Study and use it to answer questions **6** and **7**.



6. Mention any **one** farm activity carried out in the above structure.

.....

7. How is the above structure useful when carrying out the farm activity you have mentioned above?

.....

8. Name the excretory organ that removes water and carbon dioxide from the human body.

.....

9. Mention any **one** similarity between fungi and animals in the way they feed.

.....

10. State **one** way in which the screen on the pipe of a VIP latrine helps to control diarrhoeal diseases.

.....



11. State any **one** piece of advice you can give to children to help them prevent indigestion.

.....

12. State any **one** way in which you can safeguard yourself against smoking.

.....

13. Give the reason why most cooking pans are made of aluminium.

.....

.....

14. State **one** reason why the use of soap makes washing clothes easy.

.....

.....

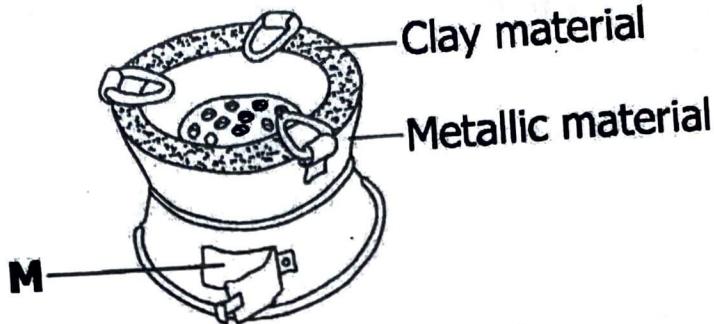
15. Apart from deforestation, mention any **one** other human activity that can result into flooding in our environment.

.....

16. Mention any **one** sign of roundworm infestation in humans.

.....

The diagram below shows a metallic charcoal stove. Study and use it to answer questions **17** and **18**.



17. Give the function of the part labelled **M**.

.....

18. State **one** advantage of building the inner wall of the charcoal stove with clay.

.....

19. State any **one** disadvantage of people living with domestic animals in the same house.

.....

20. Give **one** way in which the use of biogas is helpful in the conservation of environment.

.....

21. State the effect of opaque objects on a beam of light.

.....

22. Apart from making candles, mention any **one** other way in which bees-wax is useful to people.

.....

23. State any **one** reason why farmers are encouraged to preserve food stuffs like sweet potatoes.

.....  
.....

24. Name any **one** force which a pulley overcomes when it is being used.

.....

25. State **one** way in which a mask is important in maintaining the proper functioning of the respiratory system.

.....  
.....

26. Apart from having bright colours, state any **one** other thing that attracts pollinators to flowers.

.....

27. State any **one** way of caring for simple garden tools.

.....

28. State **one** way in which the Child Health Card is important to a parent.

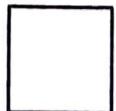
.....  
.....

29. State any **one** factor that affects the pitch of sound produced by an object.

.....

30. Name any **one** body part that may be checked during a school health parade.

.....



31. State any **one** way in which screws can be important in our daily life.

.....  
.....  
.....

32. Apart from being a source of food, give the reason why farmers hang green vegetables in poultry houses.

.....  
.....  
.....

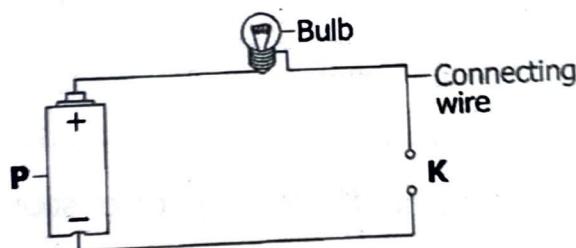
33. State any **one** change in food which shows that food has gone bad.

.....

34. State what would be observed when a plastic pen rubbed in hair is brought close to small pieces of paper.

.....

The diagram below represents a simple electric circuit. Study and use it to answer questions **35** to **36**.



35. Give the function of **P** in the circuit.

.....

36. Why would the bulb **not** light when a piece of glass is used to close

.....

37. Name any **one** part of the human body where a gliding joint is found

.....

38. State any **one** reason why pruning of trees is important in agroforestry.

.....  
.....

39. Write down any **one** activity that a School Environment Club can do to protect a school water source.

.....  
.....

40. State **one** reason why a person suffering from HIV/AIDS is easily attacked by many other diseases.

.....  
.....



## **SECTION B: 60 MARKS**

Questions **41** to **55** carry four marks each.

41. (a) State any **two** effects of rusting on iron sheets.

(i) .....

(ii) .....

- (b) Identify **two** ways in which people protect iron sheets from rusting.

(i) .....

(ii) .....

42. The table below shows an example of a farm record. Study and use it to answer the questions that follow.

Date	Health problem	Animal(s) affected	Treatment/ control method	Cost of treatment
01/8/2023	Mastitis	Goats No. 4 and No. 8	Antibiotics	17,000/=
12/10/2023	Worm infestation	Kids (06)	Dewormers	25,000/=
03/11/2023	Anthrax	All goats	Vaccination	50,000/=

- (a) Name the farm record above.

.....

- (b) Apart from Anthrax, mention any **one** other disease which is controlled by the method used on 03/11/2023.

.....

- (c) Give any **two** reasons why keeping of such a record is important to farmers.

(i) .....

(ii) .....

43. (a) Identify the type of soil erosion common in hilly areas.

.....

- (b) State any **one** danger of soil erosion to the environment.

.....

- (c) Explain how deforestation causes soil erosion.

*(02 marks)*

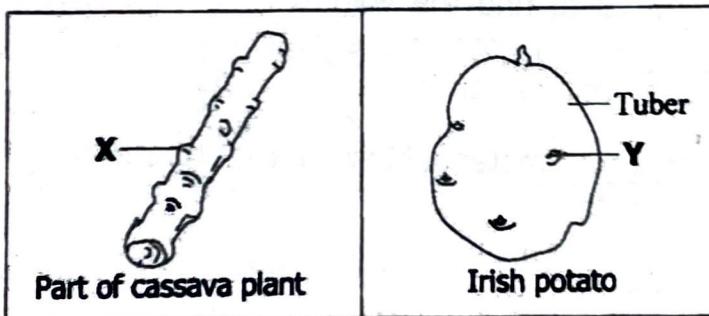
.....

.....

.....



44. The diagrams below show part of a cassava plant and an Irish potato that are used in propagation. Study and use them to answer the questions that follow.



- (a) Name the part of the cassava plant marked X.

.....

- (b) State the method of vegetative propagation where the part of a cassava plant shown above is used.

.....

- (c) In which **one** way is the function of part X of the cassava plant similar to that of part Y of the Irish potato?

.....

- (d) Give the importance of the tuber in the propagation of the Irish potato.
- .....

45 (a) What is meant by the term vulnerable group of people?

.....

(b) Apart from the sick, name **one** other group of vulnerable people in a community.

.....

(c) State any **two** ways in which you can care for the sick in your community.

(i) .....

(ii) .....

46. Moses wanted to find the volume of an irregular object. He had the following materials for the experiment; an irregular object, thread, overflow can and water.

(a) Name **one** material Moses forgot to include on the list of his materials.

.....

(b) What is the use of the thread in the experiment?

.....

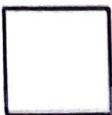
(c) Describe how Moses will get the volume of the irregular object in this experiment. **(02 marks)**

.....

.....

.....

.....



47. (a) Identify any **one** body change in girls during adolescence.

.....

(b) State any **two** ways in which school boys can help to prevent teenage pregnancies.

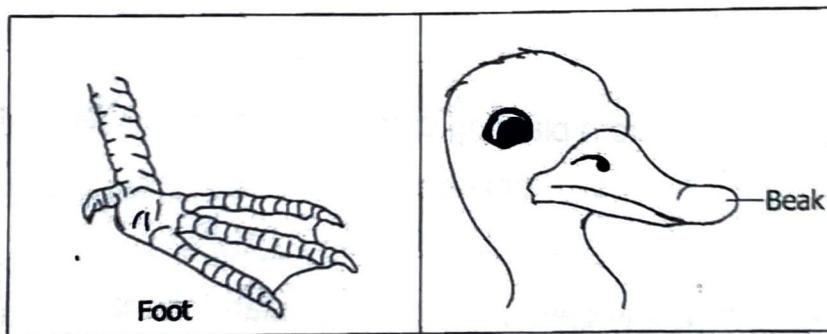
(i) .....

(ii) .....

(c) State any **one** way of caring for the reproductive system in humans.

.....

48. The diagrams below are of a foot and a beak of a bird. Study and use them to answer the questions that follow.



(a) Identify the group of birds with the type of foot and beak shown.

.....

(b) How do the parts of the bird shown above help it live well in its environment?

(i) Foot: .....

.....

(ii) Beak: .....

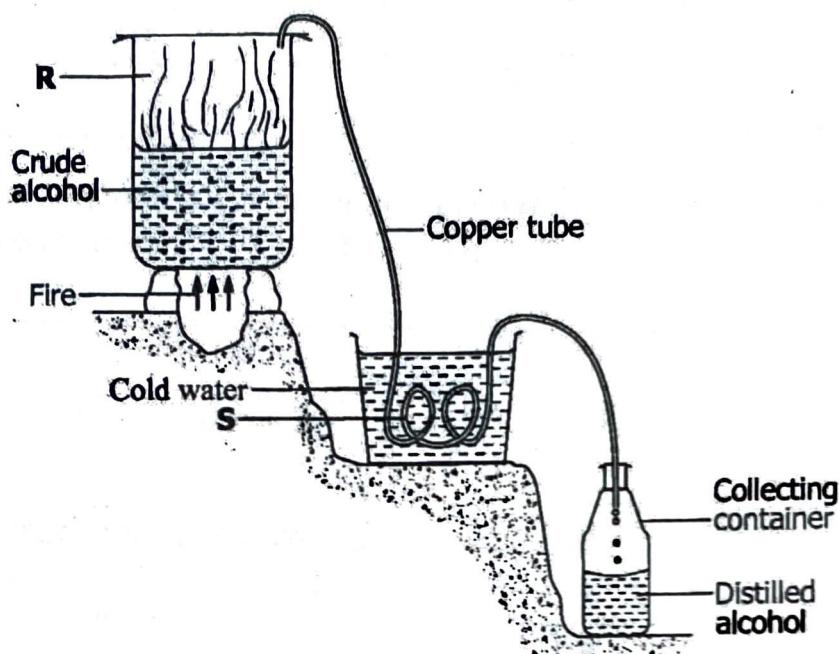
.....

(c) Give any **one** example of a domestic bird with such type of beak and foot.

.....

49. (a) Give any **one** way in which each of the following elements of Primary Health Care (PHC) is important in a community.
- (i) Food and nutrition: .....
- .....
- (ii) Maternal and child health: .....
- .....
- (b) Identify any **two** ways of giving health education to a community.
- (i) .....
- (ii) .....
- 
50. (a) Apart from planting crops in rows, give another method of planting crops.
- .....
- (b) Give any **two** advantages of planting maize in rows.
- (i) .....
- (ii) .....
- (c) State any **one** way in which the use of chemicals on a farm can be dangerous to a crop farmer.
- .....
- .....

51. The diagram below shows the distillation method of making alcohol. Study and use it to answer the questions that follow.



(a) Identify the physical changes taking place;

(i) at part marked **R** .....

.....

(ii) in part **S**. .....

(b) Give **one** reason why the container with crude alcohol should be properly sealed.

.....

.....

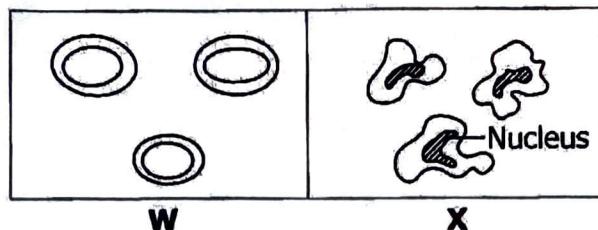
(c) Give the function of the copper tube in the method shown above.

.....

.....

52. (a) State any **two** health problems that are common in overpopulated areas.
- (i) .....
- (ii) .....
- (b) Mention any **two** ways in which collecting information on human population helps to address health problems in a community.
- (i) .....
- (ii) .....
53. (a) Give any **two** ways in which plants support human life.
- (i) .....
- (ii) .....
- (b) Mention any **two** ways in which humans can conserve plant life.
- (i) .....
- (ii) .....
54. (a) Identify any **two** characteristics of the female anopheles mosquito that makes it a good vector for malaria.
- (i) .....
- (ii) .....
- (b) How do the following methods help in controlling the spread of malaria?
- (i) Pouring oil on stagnant water.  
.....  
.....
- (ii) Sleeping under a mosquito net.  
.....  
.....

55. The diagrams below show the structure of different blood cells in the human body. Study and use them to answer the questions that follow.



- (a) Name the blood cell marked **X**.

.....

- (b) Give the function of the blood cells marked:

(i) **W** .....

(ii) **X** .....

- (c) Identify any **one** disease which destroys blood cells **W**.

.....

