



UGANDA NATIONAL EXAMINATIONS BOARD
PRIMARY LEAVING EXAMINATION

2025

INTEGRATED SCIENCE

Time Allowed: 2 hours 15 minutes

Total Marks scored	
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Random No.					Personal No.		

Candidate's Name: **DRAFTED GUIDE BY TR MICAH {MR EDUCATION}**

Candidate's Signature. **& TR FLORA VAN ELIJAH**

District ID No.

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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** ballpoint pen or ink. Any work written in pencil, other than drawings, will **not** be marked.
5. Unnecessary **changes** in your work and handwriting that cannot be easily read may lead to **loss** of marks.
6. Do not fill anything in the table indicated **"FOR EXAMINERS' USE ONLY"** and in the 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		
TOTAL		

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SECTION A: 40 MARKS

*Answer all questions in this section.
Questions 1 to 40 carry one mark each.*

1. Name the type of soil which is good for the growing of crops.

- ✓ Loam soil

2. Give the function of the stigma of a flower.

- ✓ The stigma receives pollen grains during pollination.

3. State any one way of controlling heartburn in humans.

- ✓ Avoid eating spicy or fatty or oily foods.
- ✓ Avoid overeating / Eat small amounts of food.
- ✓ Doing some light physical exercises after eating.

4. State any one way in which slashing of bushes around a home helps to control diseases.

- ✓ Slashing of bushes destroys hiding places for disease vectors.

5. Mention any one way in which planting of trees improves the quality of air in the environment.

- ✓ Trees purify air by absorbing carbon dioxide and releasing oxygen.
- ✓ Trees take in carbon dioxide from air and release oxygen.

6. Give any one way that can be used to prevent the spread of tuberculosis in a community.

- ✓ Taking children for immunisation.
- ✓ Isolating infected people/children.
- ✓ Drinking boiled milk.

7. State any one reason why it is not good to breathe through the mouth.

- ✓ There are no cilia to filter the air.
- ✓ The mouth does not filter the air.
- ✓ The mouth does not filter, warm or moisten the air.

The diagram below shows part of a root tuber crop. Use it to answer questions 8 and 9.

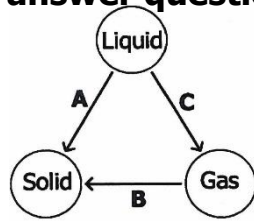


8. Name any one method of harvesting the root tuber crop.

- ✓ Uprooting / Digging out

- 9. Give any one reason why the above root tuber crop should be preserved after harvesting.**
- ✓ To prevent it from rotting.
 - ✓ To keep it for a longer time.
 - ✓ To make it easy to transport.
 - ✓ To promote food security.
- 10. State any one way through which breast feeding prevents diseases in babies.**
- ✓ Breast milk provides antibodies that boost the immunity of the baby.
- 11. Give any one characteristic of bacteria.**
- ✓ They are single celled.
 - ✓ They have no nucleus.
 - ✓ They reproduce by binary fission / cell division.
 - ✓ They have no uniform shape and size.
 - ✓ They are microscopic.
 - ✓ They feed parasitically or saprophytically.
- 12. Mention the use of a barometer in a weather station.**
- ✓ A barometer is used to measure the air pressure.
 - ✓ A barometer is used to measure atmospheric pressure.
- 13. State any one way through which the giving of feeds to a cow during milking helps to stimulate milk let down.**
- ✓ Keeps the cow calm
- 14. Give one way in which the wearing of tight-fitting shorts helps in controlling thread worm infestation.**
- ✓ Prevents threadworms from laying eggs around the anus.
- 15. Name the part of the human male reproductive system that stores sperm cells.**
- ✓ Epididymis
- 16. Give any one way of conserving living organisms in the soil.**
- ✓ By mulching the soil
 - ✓ Avoid disposing plastics on soil.
 - ✓ By growing legumes.
- 17. State any one effect of weather on the pitch of sound.**
- ✓ Pitch of sound increases with increasing temperature.
 - ✓ Pitch of sound increases with increasing humidity.

The diagram below shows the physical changes that take place in the states of matter. Use it to answer questions 18 and 19.



18. Name the physical change labelled A.

- ✓ Freezing

19. State any one way in which physical change labelled C is important to plants.

- ✓ Change C helps plants to cool themselves.
- ✓ Helps in transpiration to cool the plants.

20. Apart from being a drink, give any one other use of alcohol.

- ✓ Used as a disinfectant.
- ✓ Used for cleaning wounds.
- ✓ Used for mixing drugs.
- ✓ Used for sterilizing medical equipment.

21. Name any one exotic breed of goats kept for the same purpose as Friesian cows.

- ✓ Alpine goats
- ✓ Anglo-Nubian goats
- ✓ Toggenburg goats
- ✓ Saanen goats

22. State any one way in which flowers planted in a school compound are important.

- ✓ Flowers beautify the school compound.
- ✓ Flowers are used for decoration.
- ✓ Some flowers are eaten as food.
- ✓ Flowers are used for study research / purposes.

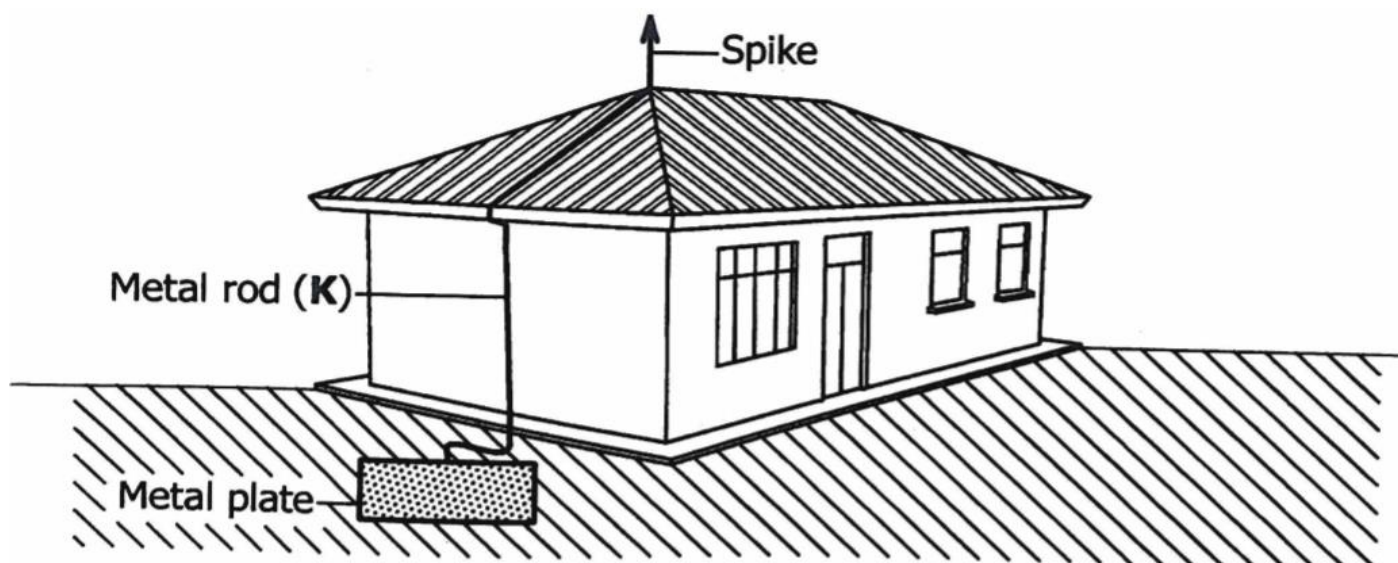
23. Give any one way of keeping the human body muscles in good working condition.

- ✓ Doing regular body / physical exercises.
- ✓ Feeding on a balanced diet.

24. Mention any one method used to prepare food at home.

- | | |
|------------|------------|
| ✓ Frying | ✓ Steaming |
| ✓ Boiling | ✓ Mingling |
| ✓ Roasting | ✓ Baking |

The diagram below shows a lightning conductor on a building. Use it to answer questions 25 and 26.



25. Name the material used to make the metal rod labelled K.

- ✓ Copper

26. State one way in which the above lightning conductor helps to control damage on buildings.

- ✓ Lightning conductor traps static charges and directs them safely to the ground.
- ✓ Lightning conductor conducts excess electric charges from the clouds into the ground.

27. Give one reason why boiled water should be filtered before drinking.

- ✓ To remove solid impurities from water

28. Mention any one way in which wind is used as a resource.

- ✓ Wind helps in winnowing harvested cereals
- ✓ Wind turns windmills to generate wind power.
- ✓ Wind helps in sailing boats.
- ✓ Wind helps in cross pollination.
- ✓ Wind helps in seed dispersal.

29. State any one way in which the strength of a magnet can be maintained.

- ✓ By keeping magnets with iron keepers.
- ✓ By painting magnets to prevent rusting.
- ✓ By keeping magnets with unlike poles together.
- ✓ By keeping magnets away from heat.
- ✓ By keeping magnets facing the North-South direction.

30. Give any one factor a health worker considers when prescribing drugs for a patient.

- ✓ Age of the patient
- ✓ Weight of the patient
- ✓ Type of disease

31. Identify the component of blood that transports waste products in the human body.

- ✓ Plasma

32. Apart from being less dense, state any one other factor that makes an object float on a liquid.

- ✓ The shape of the object
- ✓ Upthrust force (Buoyancy)

33. State any one way in which animals benefit from moving in groups.

- ✓ Animals get protection from predators/enemies
- ✓ Animals can easily find mates
- ✓ Animals can easily find food and water

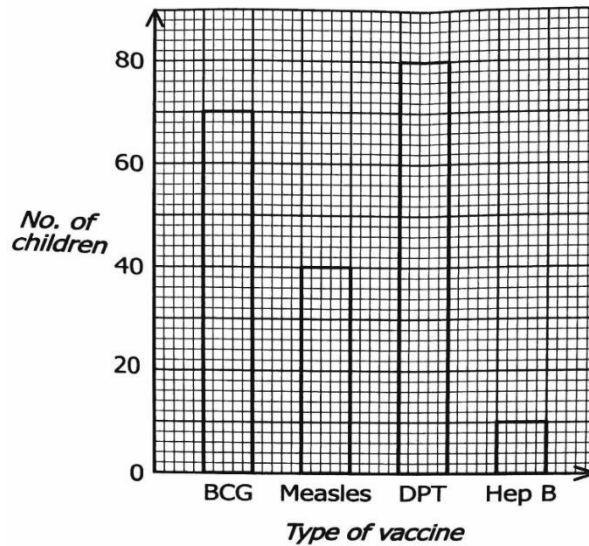
34. Name any one feature you can use to identify combs with young bees in a hive.

- ✓ Presence of brood capped cells.
- ✓ They are dull coloured.

35. State the reason why sound travels fastest in solids.

- ✓ Particles in solids are very closely packed together than in liquids and gases which makes heat conduction through solids fastest.
- ✓ Particles in solids are very closely packed together allowing atomic vibrations to conduct heat more faster than in liquids and gases.

The graph below shows vaccines that were received by children at a health Centre on one Tuesday. Use it to answer questions 36 and 37.



36. Identify any one disease for which the highest number of children received the vaccine.

- ✓ Diphtheria
- ✓ Pertussis / whooping cough
- ✓ Tetanus

37. Determine the number of children born on that Tuesday.

- ✓ Seventy (70) children were born on that Tuesday.

38. State the reason why a balloon filled with air bursts when exposed to sunshine.

- ✓ Due to rapid expansion of air inside the balloon caused by heating.

39. Give any one practice of caring for the health of the brain in humans.

- ✓ Have enough rest and sleep to refresh the brain.
- ✓ Feed on a balanced diet.
- ✓ Do regular physical exercises.
- ✓ Avoid tobacco smoking and alcoholism.
- ✓ Immunise children against meningitis.

40. State any one way through which establishment of factories in a community can be dangerous to water sources.

- ✓ Factories release untreated wastes into water bodies.
- ✓ Establishment of factories leads to destruction (draining away) of water sources.

SECTION B: 60 MARKS

Answer **all** questions in this section.

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

41. (a) Give any two social changes that take place at puberty.

- ✓ Adolescents become interested in opposite sex.
- ✓ Adolescents move in peer groups.
- ✓ Adolescents develop desire for freedom.
- ✓ Adolescents rebel against rules of teachers/parents.
- ✓ Adolescents become disobedient to their parents/teachers.

(b) Mention any two ways through which an adolescent can manage the social changes.

- ✓ Joining good social clubs.
- ✓ Joining good peer groups / peer resistance.
- ✓ Through making good decisions (good decision making).
- ✓ Through assertiveness.

42. The diagrams below show the animals W, X and Y that belong to three different groups of invertebrates. Use them to answer questions that follow.



(a) Identify the group of invertebrates to which animal labelled X belongs.

- ✓ Crustaceans

(b) Apart from having no backbone, state any one other way animals W and Y are similar in their body structures.

- ✓ Animal X and Y have segmented bodies
- ✓ Their bodies are both covered with a protective covering.
- ✓ Both have their bodies divided into two equal halves along one plane (Bilateral Symmetry).

(c) State any two benefits of animal Y to humans.

- ✓ Animal Y is eaten as food.
- ✓ Animal Y is sold for money.
- ✓ Animal Y pollinates farmer's crops.

43. (a) Give the importance of each of the following in the human diet:

(i) Roughage.

- ✓ Prevents constipation.
- ✓ Adds bulk to the diet.
- ✓ Allows easy digestion of food.

(ii) Water.

- ✓ Aids food digestion.

(b) Give any two ways in which food taboos are important to people in some communities.

- ✓ They prevent people from eating harmful food.
- ✓ They preserve culture and identity.
- ✓ They conserve natural resources.
- ✓ They promote respect and discipline.
- ✓ They shape people's habits.

44. In the table below, A shows the elements of Primary Health Care (PHC) while B shows some of the problems that may result from failure to practice the elements of PHC.

A	B
Immunisation Family planning Water and sanitation Oral health	Typhoid fever Constipation Halitosis Hepatitis B Maternal anaemia

Match correctly the problems in B with the elements of PHC in A, in spaces provided below.

- (a) **Immunisation** – Hepatitis B
- (b) **Family planning** – Maternal anaemia
- (c) **Water and Sanitation** – Typhoid fever
- (d) **Oral health** – Halitosis

45. A farmer has an apiary, a goat unit and a coffee plantation on the same piece of land.

(a) State the benefit of the;

(i) apiary to the coffee plantation.

- ✓ Bees pollinate coffee plants.

(ii) a goat unit to the coffee plantation.

- ✓ Droppings from goats is used as fertilizer in coffee plantation

(b) Mention any one danger of the apiary to the goat unit.

- ✓ By tethering goats
- ✓ By keeping goats indoors
- ✓ Carrying out Zero grazing

(d) Give any one way in which the farmer can control goats from disturbing the apiary.

- ✓ Fencing off the goat unit from the apiary

46. The diagrams below show experiments that were carried out on how light travels. Use them to answer the questions that follow.



(a) Identify the experiment in which the observer was able to see the light.

- ✓ Experiment N

(b) State the principle of light demonstrated in the experiments above.

- ✓ Light travels in a straight line.

(c) Explain how the principle in (b) above results in the formation of shadows. (02 marks)

- ✓ When light rays travelling in a straight line meet an opaque object, they are obstructed and since they cannot bend over the opaque object, a shadow is formed on the opposite side of the opaque object.

47. The diagram below shows part of the process of charcoal making. Use it to answer the questions that follow.



(a) State the reason for covering the wood with soil in the above process.

- ✓ To limit the supply of oxygen to the burning wood.

(b) State any one danger of the above activity to the environment.

- ✓ Produces smoke that pollutes air.
- ✓ Leads to deforestation.

(c) Identify any two ways the above activity can be controlled in a community.

- ✓ Enforcing laws against deforestation.
- ✓ Using alternative sources of energy.
- ✓ Using electricity for cooking instead of charcoal.

48. (a) State any two reasons why rubbish from our homes should be sorted before disposing it to gardens.

- ✓ The rubbish can pollute the soil.
- ✓ Rubbish can kill soil organisms.
- ✓ Rubbish can lead to waterlogging if not sorted.
- ✓ Rubbish can damage soil structure and texture.
- ✓ Rubbish can block water drainage in the soil.
- ✓ Rubbish can block soil aeration.

(b) Mention any two ways of keeping yourself safe while sorting rubbish at home.

- ✓ Wearing hard rubber gloves before sorting rubbish.
- ✓ Wearing gumboots to protect the feet from germs.
- ✓ Wearing a face mask to prevent direct inhaling of contaminated air.

49. (a) State any two ways you can use to control common sicknesses at home.

- ✓ Feeding on a balanced diet.
- ✓ Boiling water for drinking.
- ✓ Promoting proper personal hygiene.
- ✓ Proper disposal of wastes.
- ✓ Having regular body exercises.
- ✓ Promoting proper food hygiene.
- ✓ Avoid alcoholism, smoking and drug abuse.

(b) Give any two ways through which juvenile delinquency can be controlled in a society.

- ✓ Educating children.
- ✓ Punishing children for wrong behavior.
- ✓ Providing guidance and counselling to children.
- ✓ Providing equal treatment to all children.

50. (a) Name one material excreted by the lungs in humans.

- ✓ Carbon dioxide / Water vapour

(b) State one way through which shivering helps to regulate body temperature.

- ✓ Muscles contract rapidly to produce heat.

(c) Explain how each of the following practices helps in caring for the skin:

(i) Wearing clean loose clothes

- ✓ They keep the skin free from germs.
- ✓ They prevent skin irritation.
- ✓ They prevent bad odour/smell.

(ii) Smearing with Vaseline.

- ✓ Vaseline keeps the skin soft and moist.

51. (a) State any two uses of the sun as an energy resource.

- ✓ Sunlight is used in photography.
- ✓ Heat from the sun is used to produce solar electricity.
- ✓ Heat from the sun is used to dry wet clothes.
- ✓ Heat from the sun is used to dry harvested crops.
- ✓ The sun provides light that enables us to see.

(b) State any one reason why fire extinguishers are commonly painted red.

- ✓ To be easily seen in case fire breaks out.
- ✓ For easy identification in case of fire outbreak.

(c) State one way in which soil is useful in putting out fire.

- ✓ Soil cuts off the supply of oxygen to stop the burning.

52. (a) Give any one example of a good conductor of heat.

- | | |
|----------|------------|
| ✓ Iron | ✓ Lead |
| ✓ Copper | ✓ Zinc |
| ✓ Silver | ✓ Mercury |
| ✓ Brass | ✓ Aluminum |

(b) Mention any one way in which heat transfer by radiation is important to;

(i) plants.

- ✓ Helps plants to transpire.
- ✓ Helps in seed germination.

(ii) humans.

- ✓ Helps in drying harvested crops.
- ✓ Helps in drying people's clothes/beddings.
- ✓ Enables people to warm themselves.

(c) Explain how the silvery walls of a thermos flask keep the hot liquid in the flask hot.

- ✓ They are polished to reflect radiant heat back into the liquid.

53. (a) State the reason why a person suffering from HIV/AIDS is easily attacked by other diseases.

- ✓ HIV/AIDS weakens the immunity a person.
- ✓ HIV/AIDS destroys white blood cells which fight against germs in the body.

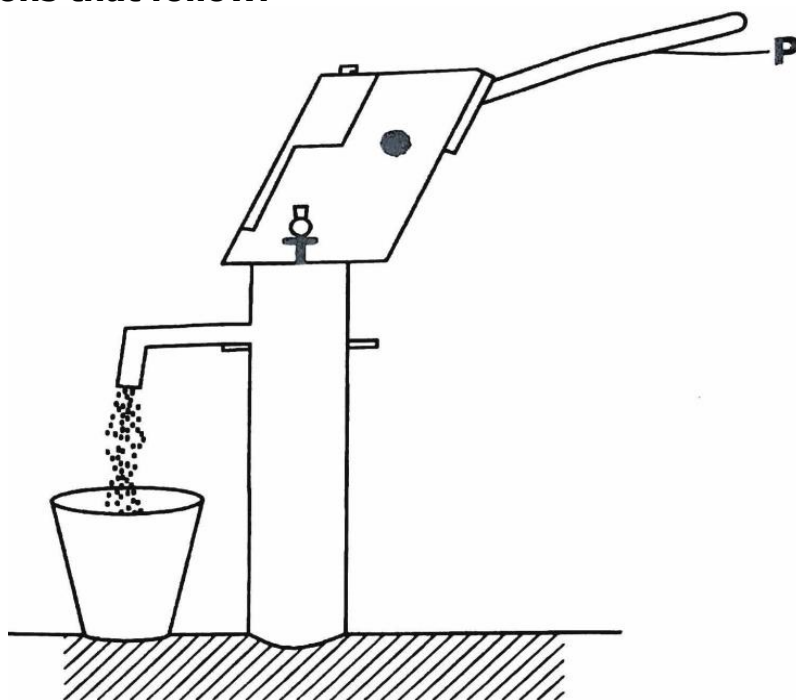
(b) Mention any one effect of HIV/AIDS on a community.

- ✓ It leads to loss of friends.
- ✓ It leads to loss of skilled labour in the community.
- ✓ It increases the number of street children.
- ✓ It leads to shortage of productive population.

(c) Give any two ways of caring for a person living with HIV/AIDS.

- ✓ Washing for them clothes.
- ✓ Feeding them on a balanced diet.
- ✓ Cooking for them food.
- ✓ Taking them to the hospital for treatment.
- ✓ Providing them guidance and counselling.

54. The diagram below is of a simple machine. Use it to answer the questions that follow.



(a) Name the class of levers to which the above machine belongs.

- ✓ First class levers

(b) Using an arrow, show the direction of the load when effort is applied to the part labelled P.

Note:

[Diagram of a first-class lever: fulcrum in the middle, effort on one side, load on the other, with arrow pointing to the load side labeled "Direction of the load"]

(c) State any two ways through which the efficiency of the above simple machine can be increased.

- ✓ Oiling the moving parts of the machine
- ✓ Greasing the moving parts of the machine
- ✓ Repairing the damaged parts of the machine

55. (a) Give any one cause of burns at home.

- ✓ Skin contact with acid
- ✓ Skin contact with hot ash
- ✓ Skin contact with hot charcoal
- ✓ Skin contact with hot metals

(b) Mention any one way in which cuts can be prevented in a school.

- ✓ Keeping sharp tools in safe places
- ✓ Using hard materials hand gloves to pick up broken sharp objects
- ✓ Throwing/disposing broken glasses into deep pits

(c) Mention any two responsibilities of a good first aider.

- ✓ To monitor the condition of the casualty
- ✓ To ensure safety of the casualty
- ✓ To provide appropriate first aid treatment
- ✓ To assess the situation quickly and calmly
- ✓ To call for medical help if needed.

PLE SCIENCE 2025

This marking guide is not the official from UNEB. It was drafted by **TR FLORA VAN ELIJAH** in a hand written scanned document and later was prepared by **TR MICAH a.k.a MR EDUCATION** as an organized drafted guide in a well formatted pdf.

Note: Guidance, Comments and corrections are highly welcomed for the better

TR MICAH {MR EDUCATION}: 0760886093

TR VAN ELIJAH: 0778039636 & 0756318117

END