



Dr. Bbosa Science

UGANDA NATIONAL EXAMINATION BOARD
PRIMARY LEAVING EXAMINATION

Science 2001

Time allowed: 2 hours 15 minutes

Index No:

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Candidate's Name.....

Candidate's signature.....

District Name.....

Read the following instructions carefully

1. This paper has two sections **A** and **B**. Section **A** has 50 questions and section **B** has 5 questions. The paper has 15 pages following altogether.
2. Answer all questions. All answers to both sections A and B must be **written** in the spaces provided.
3. All answers must be written using a blue or black ball-point pen or ink. **Any** work written in pencil other than graphs, pictures and diagrams will **not** be marked.
4. Unnecessary change of work may lead to loss of marks.
5. Any handwriting that cannot easily be read may lead to loss to marks.
6. Do not fill anything in the boxes indicated:
7. "For examiners". Use only and inside the question paper

FOR EXAMINERS USE ONLY		
Qn.	MARKS	EXR'S NO.
1-10		
11-20		
21-30		
31-40		
51		
52		
53		
54		
55		
Total		

Science 2001

Section A

1. Why is a hoe regarded as a simple machine?

It makes digging easier

2. How can you increase milk production in a dairy cow?

Gives good quality food

Give a lot of water

3. Give the function of teeth in the process of digestion.

Break food into smaller particles and increase surface area for digestion of food and easy for swallowing.

4. What disease is likely to attack children whose diet lacks proteins?

Suffers from kwashiorkor

5. How can you assist a person who has a foreign body in the ear?

Rushing a person to hospital

Use a wet cloth through the ear to remove the foreign body.

6. The razor blade was left outside for a night in the morning it had rusted. What made a razor blade to rust?

Presence of oxygen and moisture

7. How does the life history of the cockroach differ from that of a butterfly?

A cockroach undergoes incomplete metamorphosis while a butterfly undergo complete metamorphosis.

8. Suggest one possible reason why immunization of children is emphasized in Uganda.

To protect children against the killer diseases

9. Why is dew formed at night?

Due to low temperatures

10. What can be done to lower the temperature of a person with high fever?

Using a tepid sponge or a wet sponge in lukewarm water

11. How does paraffin which is poured over stagnant water kill mosquito larva?

Blocks oxygen from water

12. Give any one use of leaves to a plant.

For transpiration

For photosynthesis

For support

Colored leaves attract pollinators to the plants

For gaseous exchange.

For vegetative reproduction

13. How do road builders increase friction on the surface of the road?

By adding sand or tarmacking

14. Give any one activity that a teacher can do during a health parade in a school to promote health

Checking children's personal hygiene such as finger nails, teeth

15. Why does smoke go up when firewood is burning?

Because it is less dense than air.

16. Which part of the blood helps in the clotting of blood?

Platelets

17. Why is mulching a good practice to as human growers?

- controls soil erosion

- retains moisture in the soil

18. Why is it necessary to brush teeth after every meal?

To remove food particles in the teeth that would attract bacterial

19. Why does a chameleon change the colour of its body?

To protect itself from enemies

20 How is the retina of human eye similar n to the firm of a camera?

It is where the image forms

21 How are seeds of a mango dispersed?

It is dispersed by animals, and birds.

22. Which method would you use to find the value of an irregular object.

Displacement method

23. How is the respiration of a tadpole similar to that of a fish?

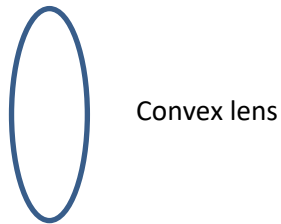
They both use gills for gaseous exchange/breathing

24. Peter water put gout fire caused by petrol but the continued Burning. Suggest one thing he should have used to put off the fire.

Fire extinguisher,

By pouring sand on to the fires

25. Musa sis log –sighted. Draw the type of lens he should use to correct his eye problem.



26. Give anyone reason which shows that animals and plants depend on each other.

Animal obtain food from pants while plants obtain carbon dioxide from animals

27. Why is it difficult to control poultry disease in free-range system?

Poultry in free range system move freely and can easily mix infected poultry.

28. How does a tortoise protect itself against its enemies?

By hiding in its hard shell for protection

29. Why are bacteria in rotting rubbish very useful to man?

They help to decompose rubbish.

30. Give one reason why mercury is used in thermometers instead of water.

It does not wet glass

It expands uniformly

It is opaque

Does not evaporated easily

31. Give the difference between freezing and condensation.

Freezing is a process by which a liquid turns into a solid whereas condensation is a process by which vapor or gas turns into a liquid.

32. Give the difference between the way man and insects breathe.

Man breathes through the lungs whereas the insects breathe through spiracles.

33. When it is said that Badru is anemic, what is lacking in his blood?

Iron in blood

34. State one disease that both a passive and active smoker may suffer from.

Lung cancer

Pneumonia

35. Why does blood go to the lungs before it is pumped to all parts of the body?

Blood go to the lungs to pick oxygen from the lungs

36. Find the density of an object whose mass is 10g and volume is 5cm³

$$\text{Density} = \frac{\text{mass}}{\text{volume}} = \frac{10}{2} = 2\text{gcm}^{-3} \text{ or } 2\text{g/cm}^3$$

37. Give one reason why a bat is a mammal not a bird.

They produce young one alive while birds lay eggs

38. Give one way in which the sun is important to plants.

Provide sunlight energy for photosynthesis

39. Give one reason why drugs should be prescribed by health worker before they are used by sick people.

To prevent taking wrong drugs

To prevent taking long doses

40. How is an echo similar to an image?

They are both produced by reflection

SECTION B

41. (a) give any two reasons why school gardens are important

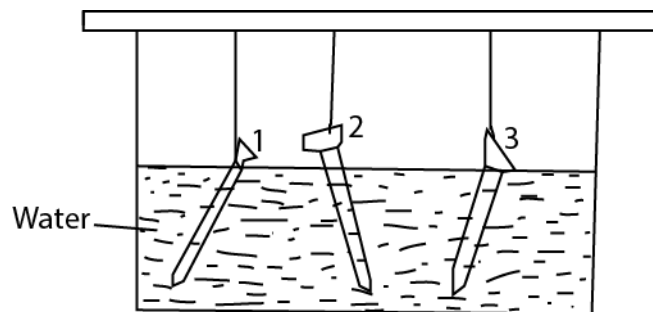
- used for demonstration purposes
- source of food for the pupils

(b) give any two reasons why you need to keep school farm records

- to know how much food is produced
- to know how many animals are on a farm
- to guard against theft

42. Nails were placed in water as indicated below for one week .us the information to answer to answer the question that follow.

- Nail 1 was painted
- Nail 2 was not painted
- Nail 3 was greased.



(a) Which of the nails above have changed its colour overnight?

Nail 2

(b) What will grease do in nail 3 above?

Prevents water and air from reaching the nail

(c) Why are metal object painted?

To prevent it from contact with oxygen and water

(d) Which nails will remain unaffected?

Nail 1 and 3

43. (a) If you put a saucepan of water on fire, how does heat travel by convection to make the water boil?

Hot is less dense than cold water, it raises to the top and the bottom is replaced by cold water creating a continuous circular current.

(b) State three ways through which convection currents help to improve our environment.

(i) provide people with fresh air

(ii) help in formation of rain

(iii) remove carbon dioxide from a house and replaced by fresh air

(iv) help form cold air current on land during day

44. Some diseases can be treated without the use of drugs.

(a) Give an example of such a disease

Flue

Rickets

kwashiorkor

(b) How would you treat the disease you have named in (a) above?

Flu by eating fruit and drinking a lot of juice

Rickets by giving foods rich in vitamin K and calcium

Kwashiorkor by giving proteins

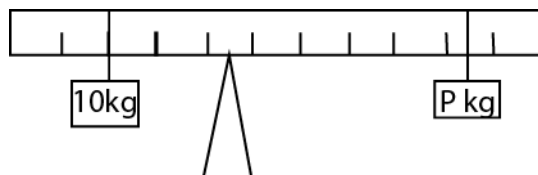
(c) What do you understand by essential drugs?

Drugs that are used to treat common diseases in a community.

(d) Give one reason why it is not advisable for two patients to share drugs presented for one person.

They do not get a full dose

The diagram below shows a lever which is balanced. Use it to answer question 45.



45. The diagram shows a lever which is balanced, calculate the weight of **P**.

Clockwise moment = anticlockwise moment

$$P \times 5 = 10 \times \frac{5}{2}$$

$$P = 5\text{kg}$$

46. (a) In which part of the plant does photosynthesis mainly take place?

Leaves

(b) Name two raw materials which enable photosynthesis to take place

(i) carbon dioxide

(ii) water

(c) Give the difference between photosynthesis and transpiration.

Photosynthesis is the process by which plants make their food using sunlight whereas transpiration is the process by which plants lose water through the stomata.

47. (a) Why is it important to feel the pulse (heart beat) of a seriously injured victim of an accident?

To determine whether the victim is alive or dead

(b) What can a small boy or girl do when his or her older sister falls into water?

Make an alarm

(c) Why is it dangerous to cause a victim who has swallows paraffin to vomit it?

Vomiting can cause paraffin enter the lungs and causing death

Vomiting may cause dehydration

(d) Why is First Aid given?

Give a lot of milk to dilute the paraffin

48. (a) How can you tell by looking at the roots, that a plant is a legume?

Root of legumes have root nodules

(b) Give any two examples of crops which are legumes.

(i) beans

(ii) soya bean

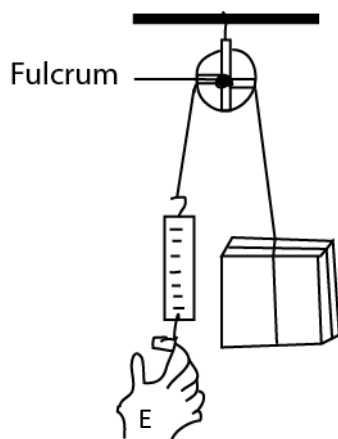
(iii) Ground nuts

(iv) cowpeas

(c) How do legumes increase the fertility of the soil?

Root nodules contain bacteria that fix nitrogen into the soil

49. Use the diagram of the machine below to answer the question that follow.



(a) What is the name of such a machine?

Pulley

(b) What class is it?

First class lever

(c) Use letter E to show effort on the diagram.

(d) Which important activity in school is done using this machine?

Digging pit latrine, digging under ground well

50. (a) Give any one example of fungi.

Mould

Mushroom.

Yeast

Toadstool

(b) How do fungi reproduce?

By means of spores

(c) Give one way in which fungi are different from ferns

Fungi do not make their own food whereas ferns do

Fungi do not contain chlorophyll whereas ferns do

51.(a) What enables a drum to produce sound when it is hit with a stick?

By vibration of the skin

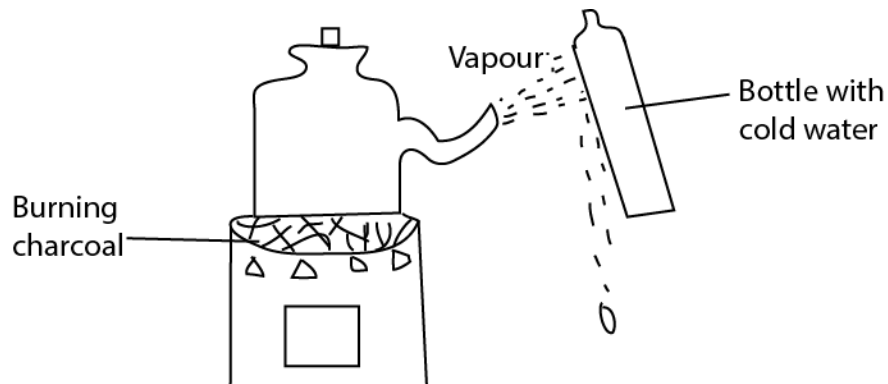
(b) Give a clear example that shows that light travels faster than sound.

A lightening is seen before thunder.

(c) State two ways in which sound can be stored.

- (i) **Compact disc**
- (ii) **On cassettes**
- (iii) **Tape recorder**
- (iv) **On the computer**

52. The diagram below is of an experiment performed in a class. study it and answer the question that follow.



(a) What natural process in the environment does this experiment show?

Formation of rain

(b) What does a stove (sigiri) represent in the process?

Sun

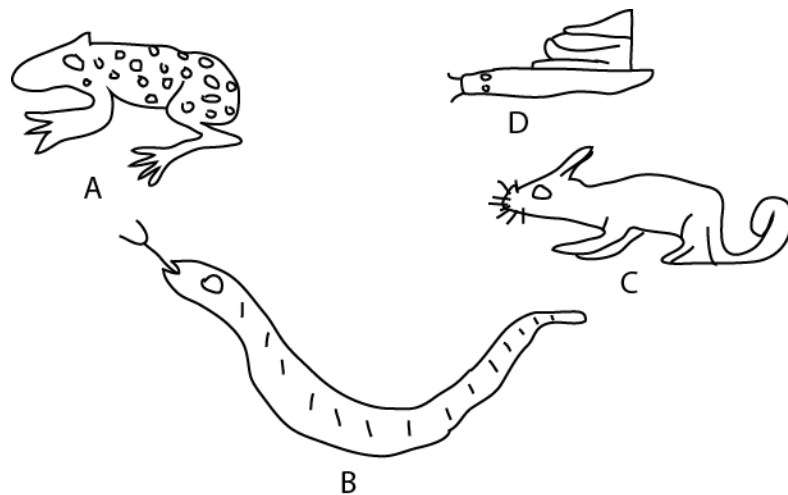
(c) What is the function of the bottle with cold water?

Condenses the steam to water

(d) Give any other local process that takes place in the same way.

Distillation

46. The diagram below are of three pests. Use them to answer questions (a) and (b) below.



(a) in which way are animals A, B and C similar?

All are vertebrate

(b) How is the reproduction in animals C different from that of the other animals?

Produce young one alive the other produce eggs

(c) To which animals does animal A belong?

Amphibian

(d) How does animal D protect itself against its enemies?

With draws into its shell

54. Draw a diagram showing how a shadow is formed. Label

Draw a diagram showing how a shadow is formed. Label your diagram correctly

