



Dr. Bbosa Science

UGANDA NATIONAL EXAMINATION BOARD
PRIMARY LEAVING EXAMINATION

Science 1999

Time allowed: 2hours 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

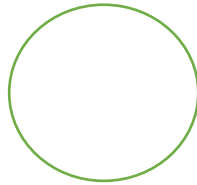
**FOR EXAMINERS
USE ONLY**

Qn. No	MARKS	EXR'S NO.
1-10		
11-20		
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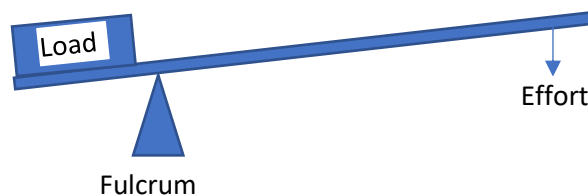
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SECTION A

1. Give the functions of the feeler of an insect.
To detect smell
To detect sound
To detect obstacles
2. Draw a simple diagram of a red blood cell in the space provided below.



3. Name one breed of pig commonly kept in Uganda.
Local breed, large white, saddle back
4. Why is a person suffering from diarrhea given treatment for dehydration?
To replace lost water
5. State any one practice which may prevent hook-worm infestation.
Wearing shoes daily
Washing fruits and vegetables before eating
Proper disposal of waste
6. Give one example of a green plant which reproduces by means of spores.
Fern, mosses, liverwort
7. State the most important part of the nervous system.
brain
8. State one way in which a spider is similar to a cockroach.
They are both invertebrates
They have jointed appendages
They have exoskeleton
9. State one way is the retina of human eye similar to the film of a pinhole camera.
It is where the image is formed
10. In the diagram below, what class of lever is represented.



First class lever.

11. What food nutrient are leguminous crops rich in?
proteins
12. Give one of the functions of the human ear.
Hearing

Posture

Equalize pressure in the head

13. Which body system commonly infected by polio?

Skeletal system or nervous system

14. Why would animals in a paddock system not easily be attacked by East Coast Fever.

They are protected from direct contact with infected animals

15. What is the immediate result of fertilization in both plants and animals?

For a zygote

16. Which type of sheep is reared for wool.

Merino sheep

17. Which condition is caused by shortage of red blood cells in the body?

anemia

18. How does the lens shown below affect light rays?



It diverges light rays

19. Which big mammal lives its whole life in water?

whale

20. State the first stage of soil formation from rocks.

Weathering

21. Why it is important to look left, right then left again before crossing the road?

To prevent motor accidents

22. What is the importance of human teeth in the digestion of food?

The breakdown food into small particles to ease swallowing and also increase surface area for **enzymatic action.**

23. What type of electricity is obtained by rubbing a plastic material against hair or woollen cloth?

Static electricity

24. Apart from contour ploughing, strip ploughing and mulching, give one other practice which is useful for soil conservation on hilly ground.

Terracing

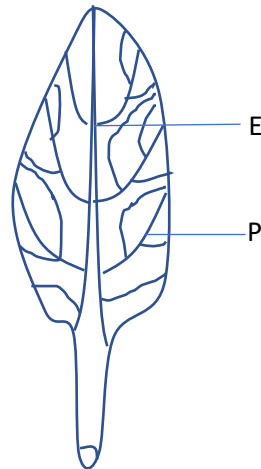
25. What happens to the blood as it passes through the kidney?

Urea, ammonia and excess water are removed

26. What type of change occurs to an egg which has been left in boiling water or more than ten minutes?

Chemical change

Use the diagram of a leaf below to answer questions 27 and 28



27. What is part marked P?

vein

28. Give one function of part E.

Provides support to the leaf

Transports water and mineral salts to the leaf

Transports manufactured food from the leaf

29. Why do you think photosynthesis is not likely to take place at night?

There is no sunlight

30. State any one biological change which occurs in female adolescents but not in male ones?

They begin menstruation cycles

Development of the breast

31. Why is it dangerous to stay near a person who is smoking?

Passive smoking leads to respiratory diseases like cancer.

32. Why is osmosis an important process for plants?

Enables absorption of water from the soil

33. What is the danger of taking drugs that are not prescribed by a health worker?

One may take overdose

One may take under dose

One may take wrong drug

34. Give one example where the filtration process is used at home.

To purify water

Filtering tea of tea leaves

35. When Peter looked into a plane mirror, he saw his face at the back of a plane mirror. How did the face get into the back of the plane mirror?

Due to reflection

36. Why is it advisable for parents to take their children for immunization?

To protect them from the killer diseases such as polio.

37. Why should a girl avoid teenage pregnancy?
Teenage pregnancy lead to drop out of school
Teenage pregnancy may lead to fistula
May lead to obstructed delivery.
May lead to failure to look after the baby properly

38. How can water vapour be turned into a liquid?

By condensation

39. Why is it not advisable to use water to put off fire caused by petrol?

Petrol floats on water and continues to burn

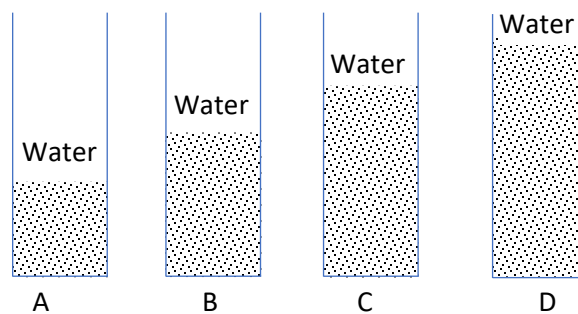
40. What is the importance of keeping clothes clean?

To prevent diseases like cholera

To prevent infestation of lice

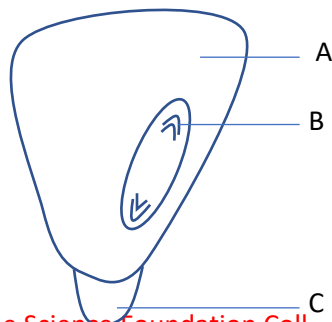
SECTION B

41. The diagram below shows glass tubes of the same size with water at different levels as indicated. Study then and answer the questions that follow.



- (a) If each tube is blown separately, which one will produce
 (i) Highest sound **D**
 (ii) Lowest sound: **A**
- (b) What happens to the sound produced by A if water is increased to the level of the tube D?
The pitch will increase to that produced by D
- (c) What happens to the sound produced by each of the tubes if water was replaced by the same quantity of milk?
They will produce sound with the same pitch as those produced with water

42. The diagram below is for a maize grain. Study it and answer the questions (a) to (d) which follows



- (a) How is the part marked C useful to the grain?
It attaches the seed to the cob.
 - (b) What does part marked B become during germination?
It becomes a shoot
 - (c) What is the importance of the part marked A?
For food storage
 - (d) Which of the marked parts is not important in germination?
Part C
43. A mill bug is a common crop pest.
- (a) Name any two vegetable crops it affects
Cabbage, eggplant, tomatoes, cauliflower
 - (b) What can be done to prevent it from attacking the crops you have named in (a) above?
By crop rotation
By spraying with insecticide
 - (c) What natural method controls milli bug pests in a garden?
by its predator
44. (a) What is a magnet?
An object that has ability to attract other magnetic metals
- (b) Give one example of how a doctor in a hospital can use a magnet.
To keep razor blades, dissection knives
To remove metallic substance from the eyes
 - (d) Give two items found in homes which make use of magnets.
Loud speakers
Electric bell
television
45. When measles attack a child, there are signs and symptoms:
- (a) Give an example of:
 - (i) a sign of measles
Skin rash
Painful eyes
Flue like symptoms
 - (ii) a symptom of measles
High fever
Mouth sores
pneumonia
 - (b) In which way can measles can be prevented from attacking a baby?
By vaccination
 - (d) Why is it important to give a child suffering from measles plenty of fluids to drink?

To replace water lost by evaporation due to fever

46. (a) give the type of chicken reared for:

- (i) Meat: **broilers**
- (ii) Eggs: **layers**

(b) Suggest two ways you would care for chicken to improve upon egg production.

Give good quality food

Vaccinate against diseases

47. (a) Name one practice which increases the spread of bilharzia.

Swimming

Urinate in water

Defecate in water

(b) Which vector is important in the spread of bilharzia.

snail

(c) Give any two ways of preventing the spread of bilharzia.

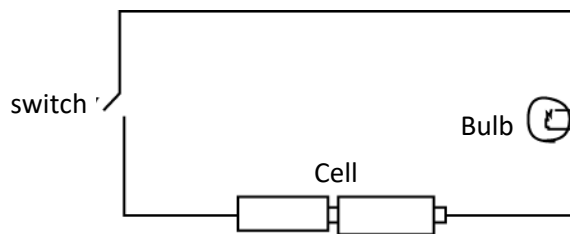
Avoid swimming in river and ponds

Proper disposal of wastes

Treatment of infected persons

Clearing stagnant water

48. (a) Draw two dry cells arranged correctly and ready to give light in a bulb.



(b) If you get a new torch with new dry cells and new working bulb in place, but when you switch it on, the bulb does not light. Suggest two possible problems with the torch.

- improper arrangement of battery cell
- loose connection of the bulb
- switch could be rusted

49. (a) What is first Aid?

First treatment given to an injured person before being taken to hospital

(b) Why would it be dangerous for a boy of 11 years to try to remove an adult, who is near drowning, from water?

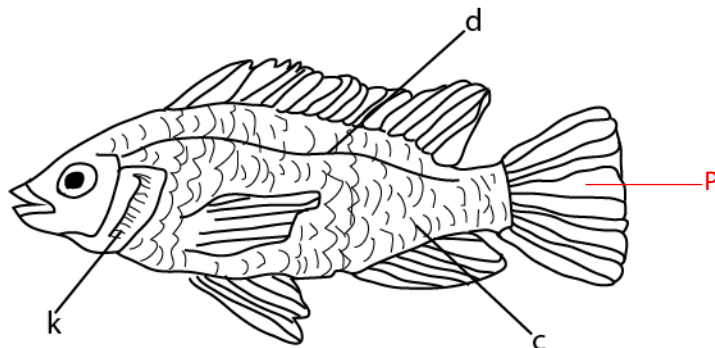
May also fall and drown in water

(c) Suggest two things the boy in (b) above should do to save the adult from drowning.

Call for help

Throw closed empty jerrycan into water to enable the drowning person to float on water

50. The diagram below is a fish. Study it and answer the questions which follow.



(a) Mark with letter P, the part which enables the fish to move forward.

(b) What is the function of part marked C?

Protect inner part of the body

It is slippery and reduces friction while swimming

(c) Complete the table to compare the parts marked k and d to those of a goat.

Parts in fish	Name the similar part in a goat
(i) K	Lungs
(ii) d	Ears

51. (a) What is the mixture of two or more metals

alloy

(b) Give one example of a common mixture of metals.

Steel, solder, bronze

(c) how does heat move from one point to another in a metal?

By conduction

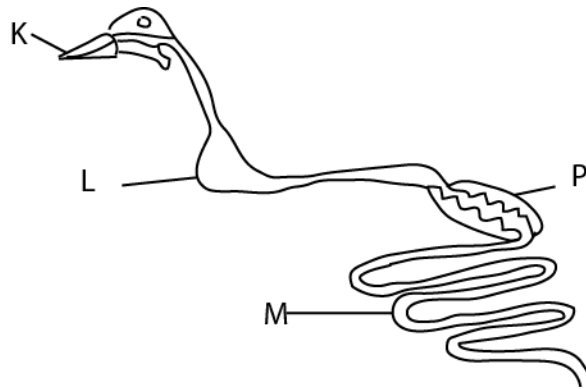
(d) apart from painting, give any one method of preventing a metallic object from rusting.

By oiling

By galvanizing

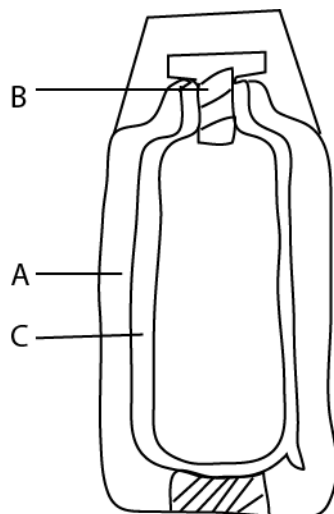
By oiling

52. The diagram below shows the alimentary canal of a bird. Use it to answer the questions that follow.



- (a) What does the bird use part K for?
For picking food
For defense
- (b) What is the function of part L?
Softens food
Pounds food
- (c) What takes place in part marked P?
Grinding food
- (d) How is part marked M useful to the bird?
It is where absorption of food takes place.

53. The diagram below is of domestic item. Study it and answer the question that follow.



- (a) What is part marked A made of

Plastic

(b) What is the function of part marked C?

Prevents heat loss by radiation

(c) Why is part marked B useful in this item?

Prevents heat loss

Toppers the flask

(d) Why is it that many homes do not use the item?

It is expensive

54. (a) State any two qualities of an essential drug.

It is cheap

It is available

Treats symptoms

Reduces pain

(b) Give any two advantages of laboratory manufactured drugs over traditional ones

It gives accurate doses

Well packed

Produced under hygienic condition

55. (a) If the temperature of tea which is 45°C reduces by 15°C. what will be the temperature of the tea.

$$45 - 15 = 30^{\circ}\text{C}$$

(b) Change your answer in (a) above to Fahrenheit Scale.

$$F = \left(^{\circ}\text{C} \times \frac{9}{5} \right) + 32$$

$$F = \left(30 \times \frac{9}{5} \right) + 32$$

$$= 86^{\circ}\text{F}$$