

# UGANDA NATIONAL EXAMINATION BOARD PRIMARY LEAVING EXAMINATION



Science 1992

Index No:	Time	allo	wed: 2						
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Candidate's 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.

Candidate's signature.....

District Name.....

- 2. Answer all questions. All answers to both sections A and B must be written in the spaces provided.
- 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		NO.						
1-10								
11-20								
21-30								
31-40								
51								
52								
53								
54								
55								
Total								

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1. Name one source of vitamin B

Liver, fish, fresh green vegetables, eggs, etc.

2. Besides carbon dioxide, name one other requirement for photosynthesis to take place in green plants.

Sun light,

Chlorophyll

3. State one way in which bacteria can be useful to man.

Nitrogen fixing bacteria in root nodules of legumes fix nitrogen into the soil Bacteria cause decay and conversion of animal wastes to humus.

4. In which way is a housefly dangerous to man.

**Transmit diseases causing germs** 

5. How is AIDS be transmitted from mother to unborn baby.

Through mixing infected mother's blood with that of a baby at birth.

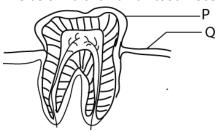
6. Why is iron important element in our diet?

It is used in the formation of red blood cells or hemoglobin

7. How does a flying be produce sound?

## By vibration of its wings

The below id of a human tooth. Use it to answer questions 8 and 9.



8. Name part marked P

**Enamel** 

9. What is the function of structure marked Q

It holds the tooth firmly to the jaw.

10. Bbosa usually brushes his teeth before eating a meal. Why is this not a good practice?

Brushing the teeth before and then eat leaves food particle in the teeth attracting germs.

11. Which blood cell is responsible for defense of the body?

White blood cells

12. How is the chamber of the heart which pumps blood throughout the body adapted to its function?

Has thick walls which contract with strong force to push blood to the body.

13. Give one possible result of a blocked egg-tube (oviduct) in a woman.

Fertilization may not take place

14. What is extended family?

Family consisting of father, mother, children and other relatives.

15. Why do some people usually take alcohol?

To kill boredom

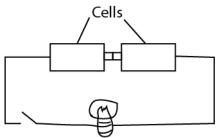
To get sleep

To pass time

To get company

To kill stress

16. David connected the circuit as below. Explain why a new bulb did not light when he on a switch?



## The cells were not connected properly.

17. A boy bleeding from the nose is made to lie down or sit on a chair with his nose upwards. What should be done next to stop breeding?

## Pitch the nose to stop bleeding

18. What is the best natural conditions under which cereals like maize can be stored? **Dry conditions** 

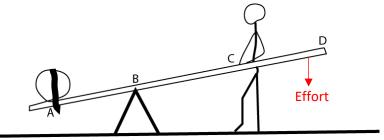
- 19. What is the main difference between a simple fracture and compound fracture?

  Simple (closed) fracture bone break but do not come out of the body, while in compound bone(s) break, pierce the body causing wound.
- 20. Why is it important to start weaning a baby after the age of four months?

To increase variety of the nutrients to eat.

## To give solid food

The diagram blow shows a man using a pole for lifting a piece of stone. Use it to answer questions 21 and 22.



- 21. On the diagram, show the direction of the effort.
- 22. What should the man do to lift the load more easily?

He should apply effort on position D to make work easier.

23. How does terracing help to prevent soil erosion?

It reduces the speed of running water hence preventing it from eroding the top soil

24. How does a tadpole differ from adult frog in the way it takes in oxygen?

A tadpole uses gills for gaseous exchange while adult frog uses lungs for gaseous exchange.

25. What is pollution?

Release of toxic substances in environment.

## Damping garbage

26. Name one activity that causes air pollution.

## Release of industrial fumes in atmosphere

Question 27 and 28 are on a mushroom.

27. Of what importance is it to man

## **Provide medicine**

## **Provide food nutrients**

28. Why does it not obtain food in the same way as a green plant do?

## It lacks chlorophyll while plants have chlorophyll for photosynthesis

29. How is nagana (sleeping sickness) spread?

## By tsetse fly

30. The diagram below shows parts of a plant stem, name the structure marked R.



#### R. auxiliary bud

31. Name a disease which commonly attacks cassava plant in Uganda.

#### Cassava mosaic

32. Why should drugs in a home be kept out of reach of children?

#### To avoid drug misuse

#### To avoid self-medication

33. How is tuberculosis vaccine administered to children?

By injection on the right upper arm on the day of delivery.

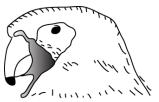
34. What do you understand by primary health care?

It a program that aims at achieving health for all which is readily available, affordable and acceptable to community. It aims at providing services like sanitation, health education, family planning

35. Where does fertilization take place in a flowering plant?

## In the ovary

36. The diagram below shows the beak of a bird. Why do you think a bird with this kind of beak is a meat eater?



## It has strong pointed and hooked mouth tearing flesh.

37. State one advantage of the ventilated improved pit latrine (VIP) over ordinary pit latrine.

## Has a vent that let out bad smell

## Has a screen on top of the vent to prevent escape of flies

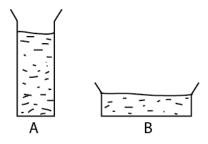
38. What is the recommended minimum distance between a drinking water and VIP latrine?

30 meters

39. Why is a butterfly regarded as an invertebrate?

## It lacks a backbone

40. Equal volumes of hot water are poured into two glass container A and B as shown below.



Why would the water in container B cool faster than in container A.

Has a larger surface area for evaporation than A; evaporation cools the liquid.

## **SECTION B**

41. a) Why do some people smoke?

To pass time due to boredom

To forget problems

To feel confident

To look mature and confident

To fit in a peer group

(b) What are the possible effect of smoking in a smoke?

Lung cancer

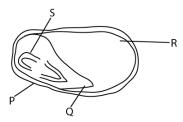
Pneumonia

**Bronchitis** 

Damage of teeth and lips

#### **Bad smell**

42. The diagram below is a cross section of a maize grain. Study it and answer the questions that follow.



- (a) Name the part marked P and R.
  - P: Testa
  - R: Endosperm
- (b) What will S grow into?
  - **Root system**
- (c) What is the function of Q?
  - Stores food for the embryo
- 43. (a) Besides retaining soil moisture, what other purpose does mulching serve?

## Rot to form manure

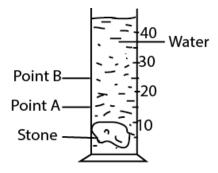
## Improve soil texture

(b) Give one disadvantage of lack of crop rotation.

## It leads to soil exhaustion

## Leads to accumulation of pests

44. A piece of stone weighs 24g in air. The same stone was placed in a measuring cylinder containing water as shown in the diagram below. The level of water in the measuring cylinder rose from point A to point B.



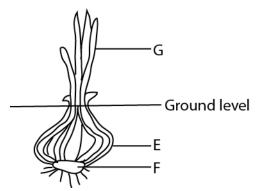
(a) What is the volume of the stone?

Volume = 
$$25 - 15 = 10 \text{cm}^3$$

(b) Calculate the density of the stone.

Density = 
$$\frac{24}{10}$$
 = 2.4 $gcm^{-3}$ 

45. The diagram below is of a cross section of an onion. Use it to answer the questions that follow



- (a) Name the parts marked E and F
  - E: Scale leaves
  - F: stem
- (b) What type of root system does it have?
  - Adventitious root system
- (c) Give the function of the part labelled G?
  - **Carry out photosynthesis**
- 46. (a) Give the difference between hinge joint and Ball and socket joint.

Hinge joint moves only in one plane whereas ball and socket joint moves in all directions.

- (b) Give the function of a tendon.
  - It joins a muscle to a bone
- (c) Name a disease connected with the muscle and skeleton system.

**Polio** 

47. Briefly explain the rain cycle.

The sun heat and causes evaporation of water from the water body. The vapor raises to the atmosphere, condenses to form rain fall.

48. (a) What is the use of a fuse in an electric circuit?

**Prevents short circuit** 

(b) How does a fuse work?

When he fuse melt in case of high voltage to prevent short circuit

(c) Give two causes of short circuit.

When to live bare wire come into contact

Too high voltage in the circuit may melt the insulation on the wire leading to their contact.

49. (a) What do you understand by family planning?

The method whereby a couple chooses when to have children according to their income.

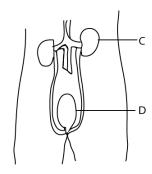
(b) Give two disadvantages of becoming a parent at an early age.

Drop out of school

Failure to look after one's children.

The child may not be ready for marriage

50. The diagram below is one of the systems of human being



- (a) Name parts labelled:
  - (i) C: **kidney**
  - (ii) B: urinary bladder
- (b) What is the function of structure C.

It removes waste products, excess water and salts from the body

51. (a) Of what value is poultry keeping?

Provides eggs to the family

For study purpose

Provide meat for the family

Droppings and bead is used for farm manure

(b) What two symptoms would a chicken suffering from new castle show?

Mucus from mouth and nose

Loss of appetite

Coughing

Lameness

Yellowish diarrhea

Bird weaken and stagger.

- 52. (a) Give two roles played by young farmers in Uganda
  Sensitize others about better method of farming
  They unite and look for market and sell their produce easily.
  - (b) What is a cooperative society?

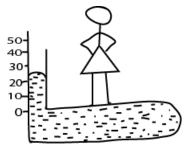
Cooperative Society an organization that brings members together for the purpose of their welfare.

(c) Give an advantage of a cooperative society.

It markets the produce of the farmers

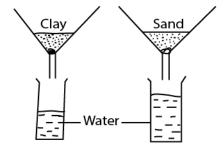
Provides essential tools for the farmers at low prices

53. The diagram below is of a weighing machine which uses liquid.



- (a) What is the weight of the girl? 25kg
- (b) Where will the level of the liquid be when the girl goes off the machine? The level of the liquid will be zero
- (c) Explain what happens if a teacher whose weight is 70kg stand on the machine?

  The liquid will overflow because the balance weighs not more than 50kg
- 54. Equal volume of sandy and clay soils were placed into containers as shown in the diagram below. Equal volumes of water were poured into each soil type at the same time. After 10 minutes the volume of water collected are as shown in the diagram.



- (a) Through which soul did the water drain faster?
  Sand
- (b) Give a reason for your answer.

More water went through due to bigger particle sizes with big air space

(c) Why do the two types of soil allow water to drain at different rates?

They have different particle size

They have different air spaces

# 55. (a) State two causes of diarrhea.

# **Eating contaminated food**

# **Eating food without washing hands**

# **Drinking contaminated water**

- (b) How can diarrhea be prevented?
  - Washing hands before eating food
  - Washing fruits before eating
  - Covering food properly
  - By giving a patient with diarrhea plenty of fluids.

END