

UGA

NATIONAL EXAMINATION BOARD



Dr. Bbosa Science

PRIMARY LEAVING EXAMINATION

2002

MATHEMATICS

Time allowed: 2 hours 30 minutes



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Index No:

Index number entry boxes

Candidate's Name.....

Candidate's signature.....

District Name.....

Read the following instructions carefully

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- 1. This paper has two sections A and B.
2. All the working. For both section A and B must be shown in the spaces provided
3. All working must be done using a blue or black ball Point pen or fountain pen Diagram should be drawn in pencil
4. No calculators are allowed in the examination room.
5. Unnecessary change of work may lead to loss of marks
6. Any hand writing that cannot easily be read may lead to loss of marks
7. Do not fill anything in the boxes indicated: "For examiners use only". And those inside the question paper

Table with 3 columns: No., MARKS, EXR'S NO. and rows for question ranges (1-5, 6-10, etc.) and a TOTAL row.

SECTION A

1. Why does a bedbug produce a very bad smell when it is touched?

To protect itself against enemies

2. Give any one reason why a child's diet should more proteins than that of an adult.

To enable them grow well

To prevent development of kwashiorkor

3. Give any one way in which flowers are important to a plant.

Flowers are sexual reproductive parts of the plant

4. Give one sign which is common between the people suffering from tuberculosis (TB) and those from AIDS.

- constant fever

- chronic cough

- loss of weight

5. Give any one example of an animals which an amphibian.

Frog, Newt, Salamander

6. Give any one characteristic which is common to all insects.

- Have three pairs of legs

- they have three main body parts

- the thorax is subdivided into three main body parts

7. Why does sugar disappear when it is mixed with water?

Sugar is soluble in water

8. Which property of air demonstrated when air is pumped into a ball, and the ball becomes bigger?

Air exert pressure

Air occupy volume

9. How is the absence of iodine harmful to our health?

It leads to goiter

10. Explain why sandy soil cannot retain water like clay soil.

Sandy soil has bigger particles than clay soil

Sandy soil has bigger air space than clay soil

11. What is the importance of red blood cells in the body?

Transport oxygen in blood around the body

12. Give any one characteristic of an image formed in a pin hole camera.

It is real

It is inverted

13. Which of the following animals: fish, frog, lizard, rat and snail is warm blooded?

Rat

14. Why is proper disposal of refuse important in a home?

Prevents spread of disease

15. The diagram below are of three types of metals. Study them and answer the question that follows

A before heating

<input type="text"/>	M
<input type="text"/>	C
<input type="text"/>	K

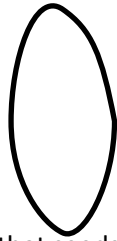
B after heating

<input type="text"/>	M
<input type="text"/>	C
<input type="text"/>	K

Explain the cause of the difference in length after they have been heated.

K has a higher expansivity than C than metal M

16. in the space provide, draw a convex lens



17. Why do you think that seeds of an orange are likely to be dispersed by a person?

It found in a juicy sweet fruit (orange)

18. When water is heated it changes into water vapour. What is this process called?

Evaporation

19. Apart from using more energy, name one other disadvantage of friction.

Wears out surfaces

Creates unnecessary heat

20. What is the importance of bees to plant?

Bees pollinate flowers

21. Explain the difference between temperature and heat.

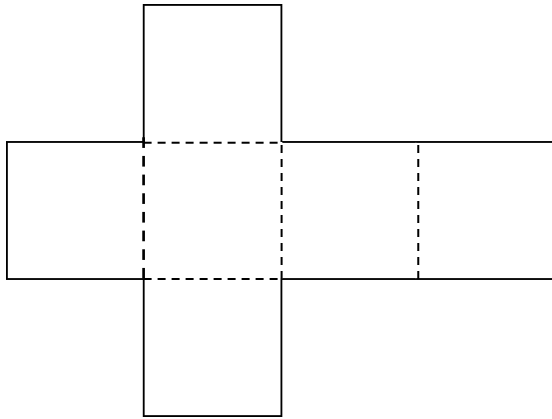
Temperature is the degree of hotness or coldness of an object while heat is a form of energy that increases temperature.

22. What is the disadvantage of having anthills near gardens?

Contain ants that destroy crops

23. The diagram below shows a certain shape of an object, which has been dismantled.

Study it and answer the question that follows.



What shape can you get that diagram if folded along dotted lines?

A cube

24. What First Aid would you give to a person whose finger has been burnt by fire?

Put the burnt finger in cold water

25. Why is it possible to control the spread of cattle diseases in a paddock system?

The cattle locked are not exposed to infected ones

Infected cattle can be separated

26. Name any cereal which is used as food.

Maize, rice, sorghum, wheat oats, barley

27. Mukasa has a pool of water in this compound and he has a problem of mosquitoes. What advice would you give him to reduce the number of mosquitoes without draining the pool?

Drain it

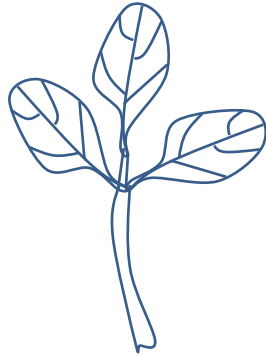
Add small fish to eat mosquito larvae

28. Why is it important to bathe with soap?

It removes dirt

It kills germs

29. In the space provide below, draw a compound leaf.



30. Vultures, kites and crows were found feeding on a dead cow. What group of birds are these?

Scavengers

31. Give any one special characteristics of the air we breath out.

Contains high percentage of carbon dioxide

It is warm

Contain high percentage of moisture

32. Give anyone way in which a human skull is important.

It protects the brain

33. Give an example of a hinge joint in a human body.

Elbow joint

Knee joint

34. Give any one sign of dehydrated person.

Pale skin

Sunken eyes

Low pulse

Dry lips

35. Give an example of a plant which grows from stem cuttings.

Cassava, sugar cane, sweet potatoes

36. Explain what ante-natal care is.

It is the care given to pregnant woman to ensure that she and the fetus are ok until delivery

37. Suggest any one way you would help one to avoid drug dependency.

To avoid groups of drug addicts

To join groups that discourage use of drugs

38. Give any one reason why parents should take their children for immunization.

To protect them against the killer diseases such as measles, TB, polio

39. On a hot day, a boy ran 1500 metres but there was not a lot of sweat on his face. Immediately he came under the shade of a tree, the whole face was full of sweat. Explain the reason for the sweating under the shade.

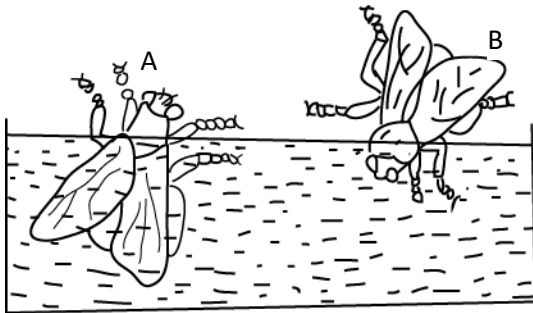
Because under the sun sweat evaporates whereas in the shade sweat condenses into a liquid

40. Why are windows put at a lower than the ventilators?

To allow in fresh cool air which is denser than the warm air in the house.

SECTION B

Al. In the diagram below, two insects were placed in water as shown.



(a) (i) which insect died?

A

(ii) Give a reason for your answer in (a) (i) above.

The spiracles are blocked and so it cannot breathe.

(b) In which way are the insects shown in the diagram harmful to man?

Spreads diseases such as trachoma, dysentery to human

(c) Give any other insect that causes the harm similar to that in (b) above.

Mosquitoes, tsetse fly, cockroach

42. (a) After it has rained, earthworm come out of their holes. Why do they come out?

Air holes in the soil are filled with water and therefore air the earthworm to breathe

(b) Give two reasons why an earthworm is very important to a farmer.

Earthworm aerate the soil

When earthworm dies it rots and form humus

Earthworms are food for our poultry.

(c) Why does worm die if oil is poured on its body?

It blocks gaseous exchange over the skin

43. Give any four ways in which fish can be preserved.

(a) by smoking

(b) by salting

(c) by tinning

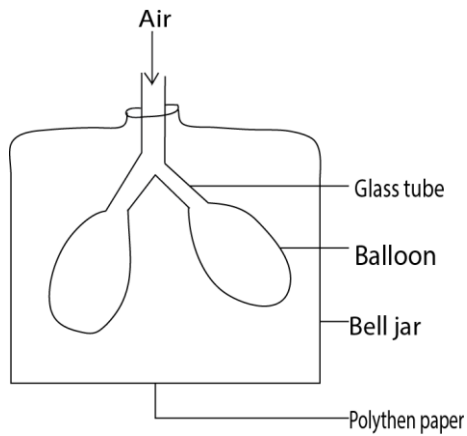
(d) by refrigeration

(e) by cooking, frying

(f) by sun drying

44. The diagram below shows the way in which one of the systems of the human body

Works. Use it to answer the question that follow



(a) Name the system.

Respiratory system

(b) What does a balloon represent?

Lungs

(c) What does the polythene paper represent?

Diaphragm

(d) What would happen to the polythene paper if air filled the balloon?

Would burst/ expand outside

45 (a) Some bacteria are useful and others are harmful. Give an example of each.

(i) Useful bacteria: **Nitrogen fixing bacteria**

(ii) Harmful bacteria: **Bacillus tuberculosis/ disease causing bacteria**

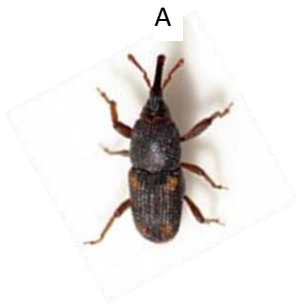
(b) Give any two examples of when bacteria are useful to man

For fermentation

Digestion in ruminants

Brewing

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



(a) Name the pests:

(i) A: **bean weevil**

(ii) B: **beetle**

(b) What is the disadvantage of the above insects to a farmer?

They destroy crops.

Increase cost of production due to buying pesticide.

47. Match items of group A with those of group B by completing the table below

A	B
Heart	Sensory organ
Kidney	memory
Skin	carbon dioxide
Lungs	circulation
Brain	urine

Complete the table below

A	B
(a) heart	Circulation
(b) Skin	Sensory organ
(c) Brain	Memory
(d) Lung	Carbon dioxide

48 (a) Name materials used to measure the volume of an irregular objects

Overflow can

Measuring cylinder

water

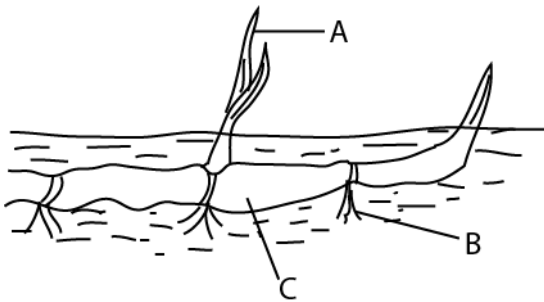
(b) How would you get the mass of an object is its density is 6g/cc and the volume is 10cc.

Mass = density x volume

= 6 x 60

= 60g

49. The diagram below shows an underground stem.



(a) State the type of underground stem shown in the diagram

Rhizome

(b) Suggest the functions of the parts labelled A, B and C

A. leaves manufacture food for the plant

B. adventitious root absorb water from the soil

roots anchor the stem into the soils that they are not uprooted easily.

50. (a) Name two practices that lead to the destruction of wet lands.

- **Industrialization**

- **swamp reclamation for agriculture**

- **brick making**

- **damping in waste**

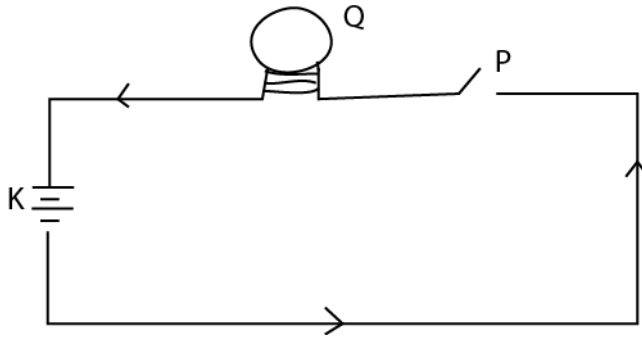
(b) What is the difference between contour ploughing and mulching?

- **contour ploughing is digging across the hill while mulching is covering soil with dry plant material**

(c) How are the two practices in (b) similar?

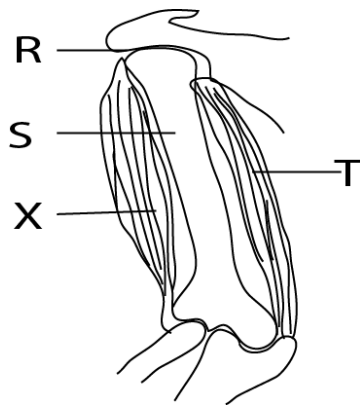
- **they control soil erosion**

51. the diagram below shows an electric circuit. Use it to answer the questions that follow.



- (a) Name part K: **battery cells**
(b) Name part P: **switch**
(c) Give the type of energy that are produces at Q when P is closed.
Light energy
Heat energy

52. The diagram below shows the arm. Study it and answer the questions that follow.



- (a) Name the Joint labelled R: **ball and socket joint**
(b) Name the bone labelled S: **Humerus**
(c) What happens to muscles T and X when the fore arm is raised?
T: **(triceps) - relaxes**
X: **(biceps) - contracts**

53. As a pupil in a school, you are of the school health committee. What do you expect to do to make health improve in the school?

- **Regular cleaning and maintaining the latrine.**
- **regular checkup of hygiene**
- **proper disposal of waster**

- mopping classes
- regular cleaning of compound

54. (a) in the list of objects: rabbit bacteria, sun, pig and plant.

(i) Name a producer: **plant**

(ii) Name a primary consumer.: **rabbit**

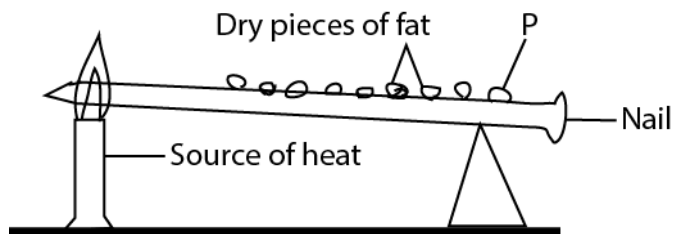
(iii) What is the role of bacteria from the above list?

They are decomposers

(c) what is the difference between a primary consumer and a secondary consumer?

Primary consumer feed directly on plants while secondary consumer feed on primary consumers

55. The diagram below is of an experiment performed by a p& class. Study it and answer the question that follow.



(a) what is the experiment about?

Heat transfer on metals or conduction of heat

(b) What is the importance of fats pieces

To show that heat transfer through the metal

(c) What will happen to piece P after sometimes?

It will melt after sometimes

(d) Give a reason for your answer in (c).

Heat reaches P by conduction