



Dr. Bbosa Science

UGANDA NATIONAL EXAMINATION BOARD

PRIMARY LEAVING EXAMINATION

2005

MATHEMATICS

Time allowed: 2 hours 30 minutes



Index No:

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Candidate's Name.....

Candidate's signature.....

District Name.....

Read the following instructions carefully

Read the following instructions carefully

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

FOR EXAMINERS USE ONLY		
No	MARKS	EXR'S NO.
1-5		
6-10		
11-15		
16-20		
21-22		
23-24		
25-26		
27-28		
29-30		
31-32		
TOTAL		

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Turn over

SCIENCE 2005

SECTION A

1. Give any one reason why animals move from one place to another

To look for food

To look for mates

2. Give any one form of energy produced when a carpenter driver drives a nail into a piece of wood a harmer.

Sound energy

Heat energy

3. Give any one animal fibre found in the environment

Sisal, banana fibre, silk, cotton, wool, cotton

4. What change of state takes place when water is frozen to ice?

Physical change

5. What structures on the leaf of a plant help in the process of transpiration?

Stomata

6. How are houseflies able to spread germs?

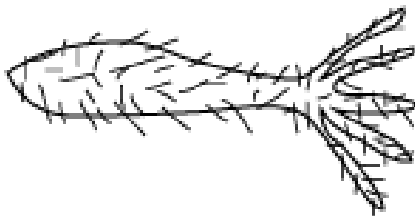
Germs are carried on hair or feet

7. Give any one proper way of disposing off rubbish in a home.

Burning rubbish

Use a dust bin

Use the diagram of a seed given below to answer questions 8 and 9.



8. How is the seed in the diagram dispersed?

By animals

9. Give a reason to support your answer in question 8 above.

It has hooks that can stick on the hairs of animals and fall off after sometimes

10 In which way is crop rotation a good method of controlling crop pest?

Changing crops breaks the feeding cycle of a pest reducing the number of pests

11. Give any one reason why people commonly use free range system of keeping poultry.

It is cheap

12. What structure in an insect work like lungs in a mammal?

Spiracles

13. What is a stretcher useful in giving First Aid?

It is used to carry causality to the health center

14. Give any one use of saliva in the digestive system.

Softens food

Contains enzymes amylase that digests starch

15. In which state of matter does heat travel by convection?

Air

Liquid

16. Why is thunder heard after lighting has been during a rainy day?

Because light travel faster than sound

17. How does painting a metal prevent it from rusting?

Keeps water and oxygen from the metal

18. What a structure enables the absorption of food to take place in small intestines?

- thin lining

- villi increase surface area for absorption

19. Give any one characteristics that makes a butterfly and a cockroach to be classified as insects.

They have three main body parts, head abdomen and thorax

They have three pairs of legs

20. Suggest any one problem of early pregnancy to a school girl below 18 years.

- lead to drop out of school

- girls may die while giving birth

- girl are likely to abort because they are not prepared for pregnancy

21. How can the school health committee tell whether a child is already immunized against Tuberculosis without referring to the Child- Health Card?

By checking for a scar on the right hand

22. Mention any one reason for thinning crops like cotton.

For easy weeding

Giving plants enough space

Reducing competition for light

23. Why is a clay soil able to retain water much longer than the other types of soil?

Clay soil has small particles which do not easily lose water

24. What force enables a match-stick to light when it is struck at the side of its box?

Friction force

25. Give the difference between heat and temperature.

Heat is a form of energy that increases the temperature of the body; the temperature is the degree of hotness or coldness of an object.

25. Give any one way in which bees benefit from plants.

Bees obtain nectar and pollen grain from the plant

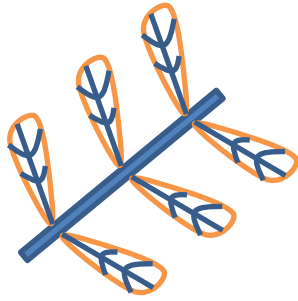
27. How is the method of propagation of a sweet potato different from that of an Irish potato?

Sweet potatoes are propagated by stem cutting whereas Irish potatoes by stem tuber

28. How does the breathing of an adult frog differ from of a tadpole?

Adult frog breath by lungs whereas tadpole use gills

29. Draw a compound leaf in the space provided below.



30. What is the importance of immunizing a pregnant woman against Tetanus?

It prevents pregnant mothers and the child from getting tetanus after child delivery.

The diagram below show a garden tool

Use it to answer questions 31 and 32



31. Name this garden tool.

Garden fork

32. Give any one use of the tool to the farmer.

For removing rubbish from the garden

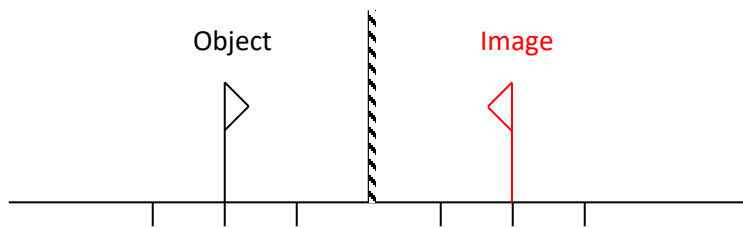
For spreading mulch

33. Give any one reason why doctors prescribe drugs for patients.

To give correct dosage

To give the right drug for the disease

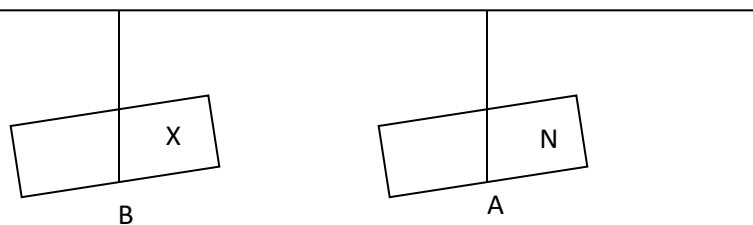
34. The diagram below shows an object 2 metres away from the mirror.



MB the image should have the same size as the object at the same distance.

Two magnets A and B were suspended as shown in the diagram below

Use it to answer question 35.



35. If the pole marked N magnet A is the north pole, what is the pole marked X on magnet B?

North pole

36. A cow and a bat are classified as mammals. To which class do the tortoises and lizard belong?

Reptile

The diagram below shows a simple lever system

Use it to answer question 37, 38 and 39.



37. Show on the diagram, with an arrow, the direction of movement of the effort at P as load is being lifted.

38. At which of the two points D and P shown on the diagram will less effort be used to lift the load?

At P

39. Give a reason for your answer in 38 above.

It is far from the pivot.

40. Why does 1 kg of iron have less volume than 1 kg cotton wool?

Iron is denser than cotton wool

SECTION B

41. Give any four ways in which plants depend on each other.

(i) tall plants provide shade for the others

(ii) trees provide support for climbing plants

(iii) Legumes fix nitrogen for others

(iv) plants produce oxygen for each other respiration

42.(a) What is the use of the hairs found in the nose of a human being?

Trap dust from air breathed in so that it does not enter the lungs

(b) Name any one disease that attacks the respiratory system.

Pneumonia

Cough

Lung cancer

Bronchitis

Tuberculosis

(c) What happens to the diaphragm when we breathe?

(i) in? **contract and flattens**

(ii) out? **Relaxes and becomes dome shaped**

43.(a) What are communicable diseases?

Diseases that can be got from another person such as malaria

(b) Give any two examples of communicable diseases.

(i) malaria

(ii) flu

- (iii) cough
- (iv) scabies
- (v) small pox

(c) State any one practice in a community that would help in the control of communicable diseases.

Proper sanitation

Proper disposal of wastes

Avoid sharing clothes

44. (a) Give any two ways in which bacteria are useful to human beings.

Decompose wastes

Fermentation of alcohol

Fix nitrogen

(b) Give any two ways in which bacteria are dangerous to human beings.

Rot food

Cause diseases such as cholera

45. Give any two ways of controlling the spread of the following diseases without using drugs

(a) AIDS

(i) being faithful to the partner

(ii) abstinence

(ii) using condoms during sexual intercourse

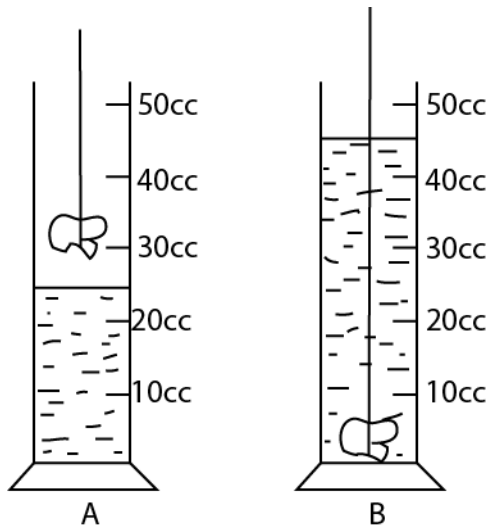
(b) Malaria

(i) Sleeping in mosquito insecticide treated nets

(ii) draining stagnant water

46. The diagram below shows a stone being put into a measuring cylinder A containing water. The level of water rose to that shown in cylinder

Use the information to answer the questions that follow.



(a) Work out the volume of the stone.

$$\text{Volume of stone} = 45 - 25 = 20\text{cc}$$

(b) If the mass of the stone is 60g, calculate its density.

$$\text{Density} = \frac{\text{mass}}{\text{volume}} = \frac{60}{20} = 3\text{g/cm}^3$$

47. (a) Give any three characteristics of living things

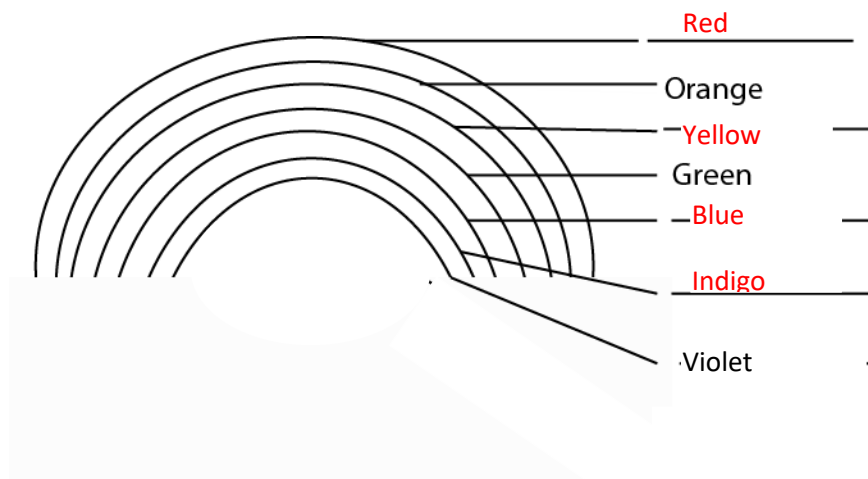
- (i) **they grow**
- (ii) **they reproduce**
- (iii) **they respond to the stimulus**
- (iv) **they feed**
- (v) **they respire**
- (vi) **they excrete**
- (vii) **they move**

(b) How are plants different from animals in the way they get their food?

Plants make their own food, while animals feed on ready manufactured food by the plants

48. The diagram below shows the even colors of a rainbow

Complete the missing bands in the spaces provided in the diagram below



49. Bbosa kept one goat and one rabbit in different houses. He used to put different types of food in their houses. He recorded the number of times they ate each type of food. The following was his daily record:

Animal	Number of times each food was eaten					
	Sweet potato leaves	Cassava leaves	Sorghum leaves	Grass	Maize leaves	Banana leaves
Goat	3	1	0	3	2	4
Rabbit	4	2	1	2	3	2

(a) What was the most favorable food for the:

(i) goat? **banana leaves**

(ii) rabbit? **sweet potato leaves**

(b) What was the least favorable food for the rabbit?

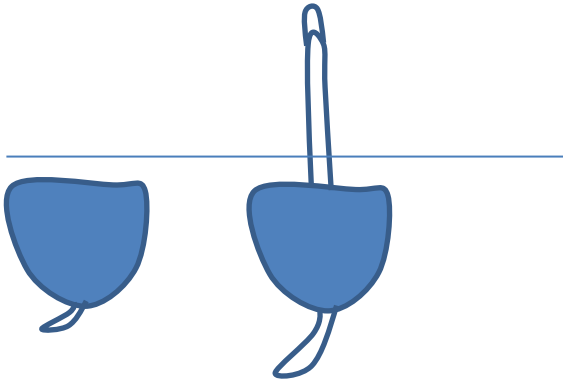
Sorghum leaves

(c) If Bbosa were to use only one type of food, which one would be the most favorable for both the goat and the rabbit?

Sweet potato leaves

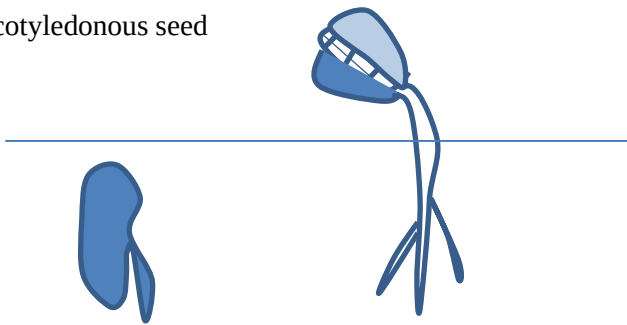
50. In the space provided below, draw a diagram to show the germination of :

(a) a monocotyledonous seed.



Note: most monocotyledonous plants undergo hypogeal germination

(b) a dicotyledonous seed



Most dicotyledonous plant undergo epigeal germination

(c) What is the importance of a cotyledon in a seed?

Store food to be used during germination

(d) In which way is a seed important to a plant?

It grows into another plants

51. (a) What does blood move from the heart to the lungs before it moves round the body?

Blood goes to the lungs to acquire oxygen and carbon dioxide is removed

(b) Give ant one function of each of the following

(i) White blood cells

Fight disease causing germs

(ii) Red blood cells

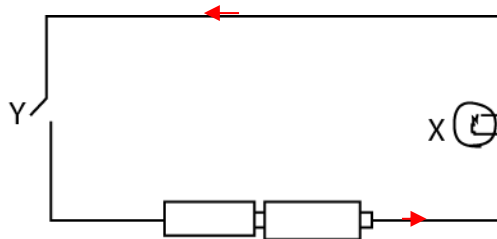
Transport oxygen in blood

(ii) Platelets

Used for blood clotting

52. The diagram below is of an electric circuit

Use it to answer the question that follow



(a) Name the parts labeled **Y** and **X** in the diagram

(i) **Y**: switch

(ii) **X**: bulb

(b) Apart from light give any one other form of energy produced by the part labeled **X** when **Y** is closed.

Heat energy

(c) Show with the help of arrows the flows of current in the above diagram.

53. Health Committee members in your school visited an old man`s home and found out that home did not have the main requirement for proper sanitation.

Suggest any four activities that should carry out to ensure proper sanitation in the old man`s home.

- (a) Mop the house
- (b) Wash plate
- (c) Sweep around the house
- (d) Boil drinking water
- (e) Dig a pit latrine 30m from the house
- (f) Iron the clothes

54. Give any two ways in which an umbilical cord is important to a baby in the womb.

(i) transport food and oxygen to the fetus

(ii) transports waste materials from the fetus

(iii) Connects a fetus to the mother

(b) Suggest any two things a pregnant woman must do to promote the health of her baby in the womb.

(iii) Good rest

(iv) eat balanced diet

(v) go for antenatal care

(vi) exercise regularly

55. Explain how to prepare Oral Rehydration Solution (ORS).

a. wash your hands clean

b. prepare a clean dry container about 2l

c. add 1l (two 1/2l cups) of cold boiled water

d. add a sachet of ORS and mix thoroughly.

e. Use in 24hrs

END