



Dr. Bbosa Science

UGANDA NATIONAL EXAMINATION BOARD

PRIMARY LEAVING EXAMINATION

2004

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		
Qn. 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

## SECTION A

1. Air a mixture of gases. Which of the of gases forms the greatest percentage of air in the atmosphere?

**Sandy soil**

2. Give any one characteristic which is common to all vertebrates

**They have endo skeleton**

**They have a back bone**

3. What first aid would you give a person who is suffering from diarrhea?

**Give oral rehydration salt solution to replace lost water**

**Give fruits**

4. In which process can water be changed into water vapour?

**Evaporation**

5. Give any one way in which ringworm is spread.

**By contact with infected person**

**Sharing clothes with infected person**

6. Give any one reason why you would choose to use solar energy stead of wood fuel as a source of energy.

**Solar energy does degrade the environment**

**Solar energy is not exhausted**

7. Give any one reason why people should cut their fingernails

**Longer nails keep germs**

8. Apart from having bright colours, state any other characteristic of insect –pollinated flowers.

**Have strong scent**

**Stigma is longer than the anthers**

9. Give any one reason why the burning of wood is a chemical change.

**It is irreversible**

**A new substance (ash) is formed**

10 How is the air we breathe in different from the air we breathe out?

**The air we breathe in contain more oxygen and less carbon dioxide than the air we breathe out.**

11. Give any one characteristic that can help you distinguish between a hen and a cock.

**Hens possess small crowns while big crown**

**Cock possess big comb whereas hen do not**

12. Mary suspended three magnets on strings near each other and observed that some ends came close but other ends moved away from each other. Why did this happen?

**The ends that came together had unlike poles while those that moved away had like poles.**

13. Apart from hearing, give any one other function of the human ear.

**To balancing pressure in the head**

**For posture**

14. How do animals benefit from photosynthesis?

**They obtain oxygen for breathing in**

**They obtain food**

15. Give any one way in which a P7 pupils can help in the control of polio in a community.

**Sensitize people to vaccinate their children**

16. Give any one way in which a Child Card is important to a school Health Committee.

**It shows whether a child was immunized**

**It gives a healthy record**

17. Suggest any one reason why people drink alcohol.

**- to pass time**

**- to forget their problem**

**- to get sleep**

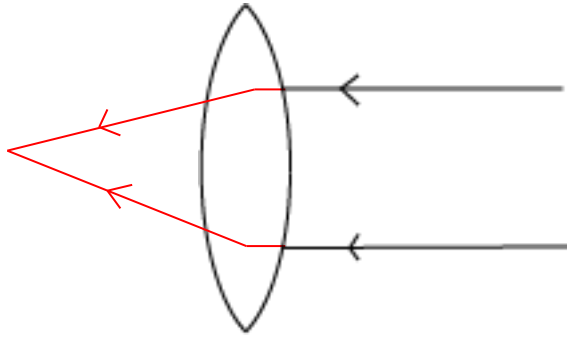
**- to make friends**

**- to relax**

18. Peter uses a wheel barrow to carry potatoes from his garden to the market. What is the advantage of using such a machine?

Less effort is required

*The diagram below shows parallel rays striking a convex lens. study it and answer question 19 and 20.*



19. Complete the diagram to show the path of the rays after passing through the lens
20. What eyes defect does this type of lens correct?

**Long sightness (hypermetropia)**

21. Give the part of an insect that has the same function as the gills of a fish.

**Spiracles**

22. Apart from the animal kingdom, which other of organisms makes up living things?

**Plants, fungi, unicellular organism**

23. How can a poultry farmer prevent hens from eating their own eggs?

**By debeaking**

**Giving them food on time**

**Providing dark laying places**

**Providing enough space**

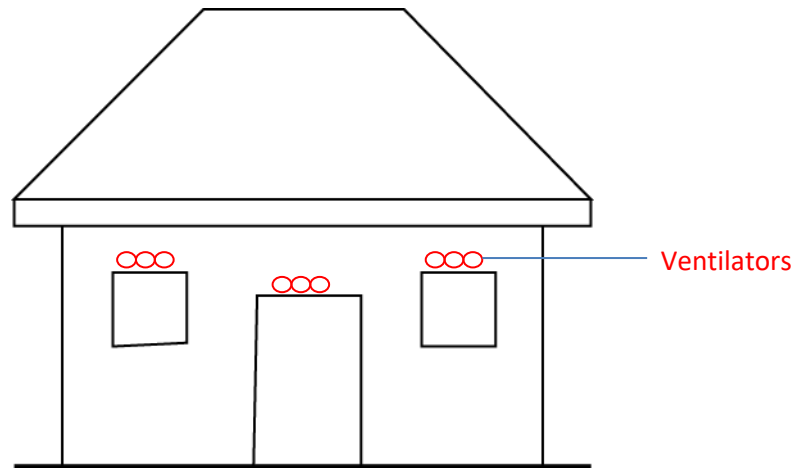
24. Which property of air enables one to drink water from a bottle using a straw?

**Air exert pressure**

25. In which way do bacteria help in soil formation?

**Cause decay forming humus**

26. Indicate on the diagram below the missing part that would improve the movement of air in the house.



27. In which way is a pool of water near a home likely to be a source of malaria to the people in that home?

**Provide breeding places for mosquitoes**

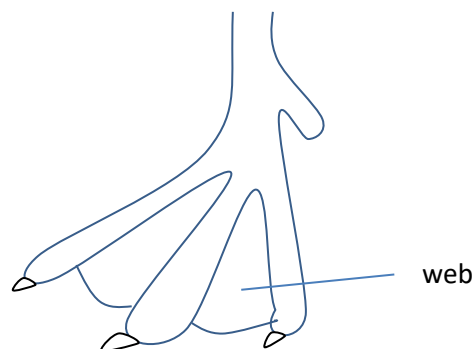
28. How does a bat differ from all the other mammals?

**A bat flies**

29. Apart from contracting sexually transmitted diseases, why would you advise a girl has started menstruating to abstain from sex?

**They may get pregnancy and drop out of school**

30. Draw an example of a foot of a swimming bird in the space provided below.

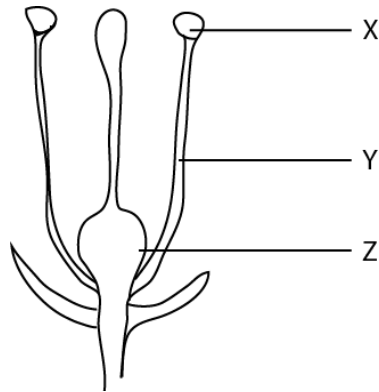


31 Why is a splint necessary when giving First Aid to someone with broken limb?

**To minimize movement of broken bones**

**To reduce further injury**

The diagram below is of a flower. Use it to answer question 32 to 34.



32. Name the part labeled **X anther head**

33. What is the use of the part labelled Y to the flower?

**To hold the anther head**

34. What does the part labeled Z become after fertilization?

**Fruit**

35. Give any one reason why it is important to weed crops.

**Remove competition of weeds with crop**

**To increase penetration of light**

**To reduce spread of diseases**

36. If a person enters a room and begins smoking, how does that habit affect the health of the people in the room?

**They become passive smokers and can suffer from lung disease**

37. In which part of the human body are the red blood cells made?

**Red bone marrow**

38. What process will you use to recover salt which has dissolved in water?

**Evaporation**

39. Which instrument is used to measure the temperature of the human body?

**Thermometer**

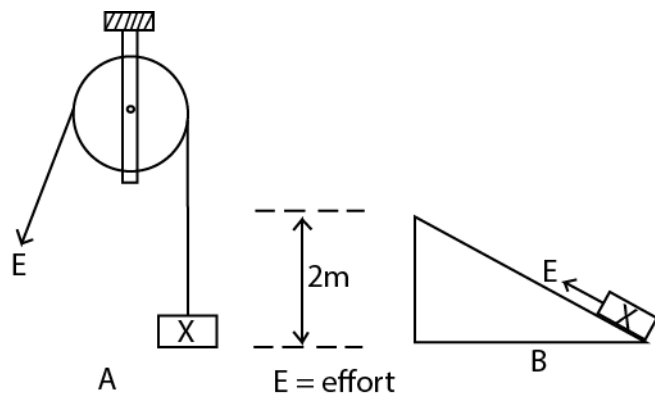
40. What first aid would you give to a child who has drunk paraffin?

**Give a lot of milk to dilute paraffin**

## SECTION B

41. The diagram bellow show two types of simple machines labelled a and b

*Use it to answer the questions that follow.*



(a) Name each of the machines shown in the diagram

(i) **A: single fixed pulley**

(ii) **B: inclined plane**

(b) Which of the two machines would you choose to use to lift the load **X** to a height of two metres?

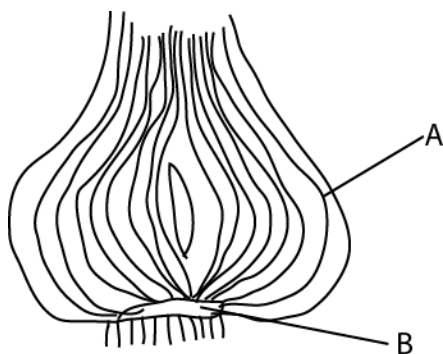
**Pulley**

(c) Give a reason for your choice of machine in (b) above.

**Uses less effort**

42. The diagram below shows as onions

*Use it to answer the questions that follow*



(a) Name the part labelled **B Stem**

(b) What is the function of the part labelled A?

**Stores food**

**Protect the bud**

(c) what types of root system does this plant have?

**Adventitious root (adventitious root are those that develop from stem)**

(d) How is this plant propagated?

**By planting the bulb**

**By seeds**

43. The two lists A and A below, show the diagram and the animals they affect .match the items in list a with those in list B correctly by completing the table below.

	<u><b>List A</b></u>	<u><b>List B</b></u>
	New castle	cattle
	African swine fever	Dogs
	Rabies	pigs
	Rinderpest	fowls
(a)New castle	<b>fowls</b>	
(b)African swine fever	<b>pigs</b>	
(c )Rabies	<b>dogs</b>	
(d)Rinderpest	<b>cow</b>	

44. (a) Why should water not be used to put out a fire caused by petrol?

**Petrol floats on water and continues to burn**

**Water contain oxygen that supports burning**

(b) Suggest any two ways in which such a fire can be put out.

**Using fire extinguisher**

**Using sand or soil**

**Use blanket**



(c) How is a burn different from a scald?

A burn is caused by naked fire or hot object while a scald is caused by hot water

45. How does each of the following animals protect itself against its enemies?

(a) Tortoise **by hiding in its shell**

(b) Wasp **by stinging its enemy**

(c) Millipede **it coils its body**

(d) Chameleon: **by changing color to match with environment**

46. Give any four main causes of motor accidents in Uganda

**(a) driving when drunk**

**(b) over speeding**

**(c) ignoring road signs**

**(d) animal crossing**

**(e) bad roads**

47. (a) What advice would you give to a person wishing to construct a pit latrine at his home?

**(i) it should be 10m from the main house**

**(ii) should not be near a water source**

**(iii) should be built with easily washable material**

**(iv) should have a vent pipe**

(b) Give any one characteristic of a Ventilated Improved Pit Latrine

**(i) has a vent pipe**

**(ii) it remains open**

(c) Give any one reason why people should use latrines /toilets properly.

**To prevent spread of diseases like dysentery and cholera**

48. Mention any one reason why copper wires are commonly used to distribute electricity from one point to another.

Copper is a good conductor of electricity

(b) Why do people who work on electric wires wear rubber gloves?

### **To prevent being electrocuted**

(c) Give any one use of each of the following:

- (i) a switch      **breaks the circuit and complete the circuit**
- (ii) a fuse      **breaks the circuit when there is short circuit**

49. (a) Which bone joint the pelvis and the tibia?

### **Femur**

(b) Apart from movement, give any other two functions of the human skeleton.

- (i) **protects delicate organs**
- (ii) **provide shape for smooth movement**
- (iii) **store mineral**
- (iv) **manufacture blood cells**

(c) What is the function of tendons in a human body?

### **A tendon joins a muscle to a bone**

50. (a) In which way does the cutting of tress (deforestation) cause soil erosion?

**This leaves land bare and exposed to agents of soil erosion such as running water, wind and animals**

(b) Suggest any three methods of farming which can prevent soil erosion.

- (i) **terracing**
- (ii) **mulching**
- (iii) **strip cropping**

51. (a) Give any one danger to a person who gets used to taking drug of dependency.

- (i) **leads to brain damage**
- (ii) **leads to self-neglect**
- (iii) **leads to neglect of jobs**
- (iv) **leads to death**

(b) Suggest any three reasons why it is not advisable to take drugs bought from local shops.

- (i)      **you may take wrong dose**

(ii) you may take wrong drug

(iii) may take expired drugs

(iv) may take contaminated drug

52 (a) What do you understand by ‘dual purpose’ cattle?

**Dual-purpose cattle are cattle kept for milk and beef**

(b) Give any two common local breeds of cattle kept in Uganda

(i) Zebu cattle

(ii) long horned cattle

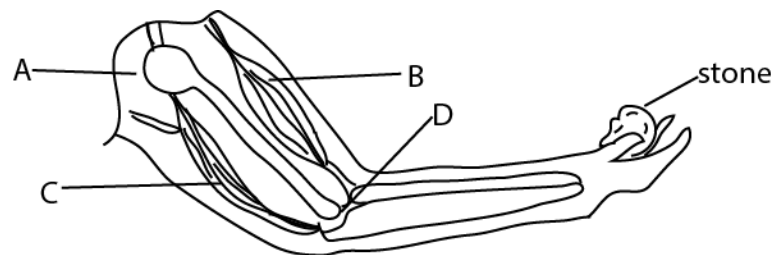
(c) Suggest any one reason why cattle keepers practice cross-breeding.

**To improve on milk production**

**To improve on beef production**

53. The diagram below shows the human arm holding a stone

*Use it to answer the question that follow*



(a) Which muscle acts as the effort in order to lift the stone?

**Muscle B**

(b) What kind of movement is possible at each of the following joint?

(i) joint **A**: Move in all direction (ball and socket joint)

(ii) joint **D**: move in one plane (hinge joint)

(c) Which class of lever is represented by the diagram above?

Third class lever

54. Use one sentence to explain the meaning of each of the following:

(a) reflection of light

**Is the bouncing back of light.**

(b) conduction of heat

**Is a process by which heat move from one part of a solid to another?**

(c) Transpiration

**This is the loss of water from a plant leaves**

(d) condensation

**This is a process by which vapour turns to a liquid**

55. The table below shows food stuffs prepared in different families

*Study it and answer questions that follow*

<b>Family A</b>	<b>Family B</b>	<b>Family C</b>	<b>Family D</b>
Matooke Yams Meat beans	Cassava Beans Posho yams	Potatoes Posho Cassava yams	Millets Fish Goat milk Mangoes

(a) Which family will be able to have vitamin **C**? **D**

(b) Which family has proteins but lacks fats? **B**

(c) What food nutrients are lacking in family A?

**Vitamin C**

(d) Which family has almost a balanced diet?

**D**

**END**