



Dr. Bbosa Science

UGANDA NATIONAL EXAMINATION BOARD  
PRIMARY LEAVING EXAMINATION



**Science 1998**

Time allowed: 2 hours 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		
21-30		
31-40		
51		
52		
53		
54		
55		
<b>Total</b>		

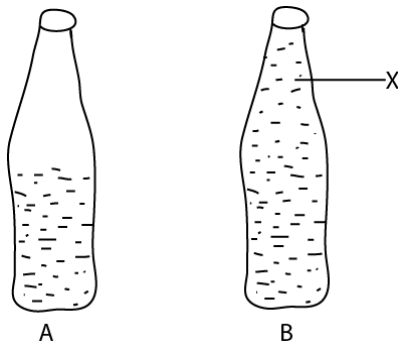
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## SECTION A

1. Give any one reason why you think that brushing of teeth prevents tooth decay  
**Remove food particles that attract bacteria that cause tooth decay**
2. Give one example of where refraction of light can be a disadvantage.  
**Water bodies look shallower than they are actually which may lead to drowning.**
3. How is a person get infected with tetanus?  
**Through dirty wounds**
4. Suggest one way of preventing poultry from pecking each other.  
**Debeaking**  
**Giving enough space**  
**Giving enough food**
5. What is drug abuse?  
**Taking drugs classified as illegal**
6. Give the importance of bacteria found in root nodules of leguminous plants to the soil.  
**They fix nitrogen to the soil**
7. Metals are usually painted to prevent them from rusting. How is painting help in stopping metals from rusting?  
**Painting prevents water and oxygen coming into contact with the metal**
8. If your friend accidentally pours hot milk on his/her hand, what First Aid would you give him or her.  
**Put the hand in cold water or pouring water to injured hand.**
9. Give one reason you think mushrooms are similar to fungi.  
**Both lack chlorophyll**  
**They both do not manufacture their own food.**  
**They both reproduce by spore formation**
10. Suggest one way through which foot and mouth disease spread in cattle.  
**Through body contact**
11. Give one sign of syphilis.  
**Sores on the private parts**  
**Swollen joints**  
**Painful urination**
12. How is a habit of bee visiting flowers important to the plant?  
**Pollinate the plants**
13. Suggest one reason why dew usually forms at night and not during day?  
**Vapour condense due to coldness**
14. What is the importance of mineral salt in a child's diet  
**Strengthen bones and tooth**
15. How do human action controlled by the spinal chord different from those which are controlled by the brain?  
**Spinal cord controls reflex action whereas the brain controls voluntary action**

16. Give an example of a ball and socket joint in human being.  
**Shoulder joint**  
**Hip joint**
17. Give one way in which friction is a disadvantage.  
**Wear shoes**  
**Lead to production of a lot of noise**  
**Retards motion**  
**Produces unwanted heat**
18. State any one function of human kidney.  
**Regulates body water**  
**Removes urea and ammonia from blood**  
**Controls pH of blood**
19. What is the importance of a nursery bed to a vegetable farmer.  
**Help a farmer to care for the seedlings**  
**A nursery bed protects the seedlings from direct damaging rain and sunlight.**  
**A nursery bed occupies small space**
20. Give any one reason you think a plant is a living thing.  
**It grows**  
**It reproduces**  
**Feeds**  
**Respires**  
**Excretes**  
**Responds to stimuli**

John poured paraffin in the bottle as shown in A below. He added water to fill the bottle as shown in B below. Use the diagram to answer questions 21 and 22.



21. Name the liquid labelled X  
**paraffin**
22. Give a reason for your answer in question 21 above.  
**Paraffin is less dense than water**

Use the diagram below to answer question 23.



23. Isaac who weighs 30kg and Susan who weight 45kg sit on seesaw above, such that Isaac sits at point X and Susan at point Y. which side of the seesaw go down?

**Taking moments at the fulcrum**

**Clockwise moment =  $4 \times 45 = 180\text{gm}$**

**Anticlockwise moment =  $30 \times 6 = 180\text{gm}$**

**Since clockwise moment = anticlockwise moment, the seesaw balances.**

24. How does leprosy spread?

**Through body contact with infected person**

**Through nasal secretion for infected person**

25. Apart from being a state of matter, in which way are liquids similar to gases?

**Particles are widely spaced**

**In both heat is conducted by convection**

26. Give any one way in which a child can acquire immunity against a disease without being given a vaccine.

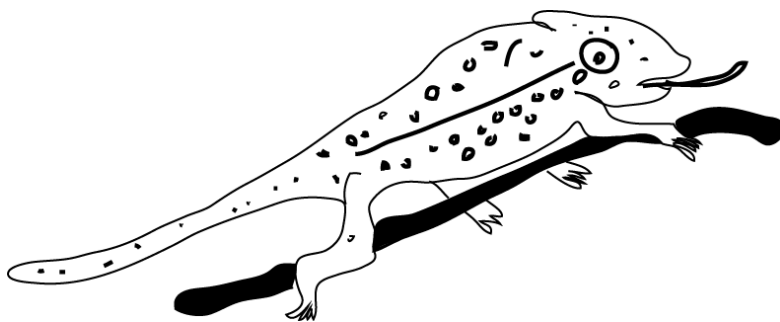
**By suffering and recover from the disease**

**Through breast milk.**

27. Give one example on how man uses water to produce energy.

**For production of hydroelectricity**

The diagram below shows an animal commonly found in the school surroundings. Use it to answer questions 28 and 29



28. To which group of animals does this belong?

**Reptiles**

29. How does the animal protect itself from its enemies?

**by changing color to blend with environment so that it is not easily seen.**

30. What advice would you give to a mother whose child is suffering from kwashiorkor?

**Feed the child on foods rich in proteins**

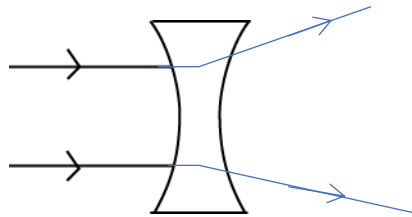
31. Which structure of an insect has the same function as gills in fish?

**Spiracles**

32. John threw a blanket on to a burning fire and the fire was put out. How did the blanket help in putting out the fire?

**It obstructed oxygen in the source.**

33. Complete the rays through the lens in the diagram below.



34. Suggest one reason why blood goes to the lungs before it circulates to all parts of the body.

**To get oxygenated**

35. Why do electricity wires hanging on the electric pole sometimes, appear loose and other times tight?

**When they expand they appear loose on hot day and when they contract on a cold day they appear tight**

36. Which part of the eye functions like a film in a camera?

**Retina**

37. Which body organ is damaged when you drink a lot of alcohol?

**Brain**

**Liver,**

**Kidney**

38. Give any one reason why it is not advisable to buy and use medicine from local shops?

**Drugs may be expired**

**One may take wrong dose**

**One may buy wrong drug**

39. Peter's friend is suffering from scurvy. Suggest reasons why Peter's friend is suffering from that disease.

**He lacks vitamin C.**

40. Give any one way a farmer can improve on the local breed of cattle.

**By cross breeding**

SECTION B

41. Most of our problems can be solved without use drugs. Suggest any four ways in which this can be done.

- **Maintaining proper hygiene**
- **Feeding on balanced food**
- **Regular exercises**
- **Keeping proper sanitation**

The diagram below shows a lantern lamp. Use it to answer question 42



42. (a) how does paraffin move up through the wick?

**By capillary action**

(b) Name two forms of energy produced by this lantern lamp.

**Light energy**

**Heat energy**

(c) what is the use of part marked S.

**Allow in oxygen to support burning**

43. (a) Give two ways in which you can prevent malaria in your home?

**Sleeping in mosquito insecticide treated nets**

**Draining stagnant water**

**Slashing around the house**

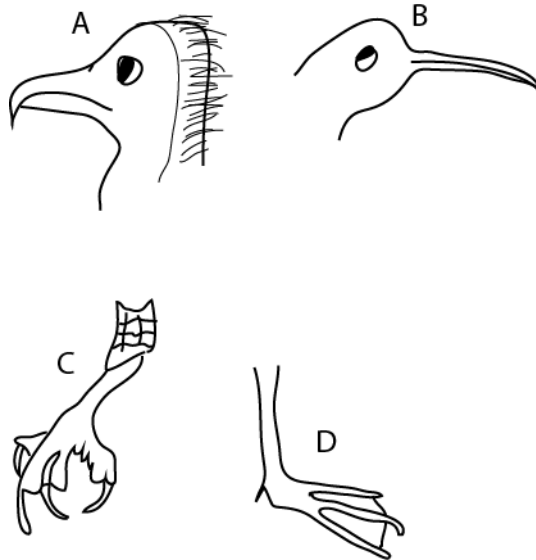
**Spraying the house with insecticides**

(b) Suggest two reasons why HIV/ AIDS infection tends to be more common among female adolescents than in the male adolescents?

**They mature faster than male and desire sex earlier**

**They receive infected sperms**

44. The diagram below shows the beaks and feet of birds. Use it to answer the questions that follow.



(a) Suggest the type of food that part labelled A feed on.

**Flesh**

(b) How does the bird use the claw (foot) labeled C for feeding?

**Holding or picking its prey**

(c) What type of food is suitable for the bird's beak labelled B?

**Nectar, insects**

How useful is the foot labelled D to the bird?

**For swimming in water**

45. (a) Give two functions of the nerves in the human body.

**Conduct impulses to the brain**

**To transport impulses from the brain to the body**

(b) In which ways is food important in the human body?

**To provide materials for growth**

**For body repair**

**Provide energy**

**Cure deficiency diseases**

46. Give any four methods commonly used to preserve meat.

**Smoking**

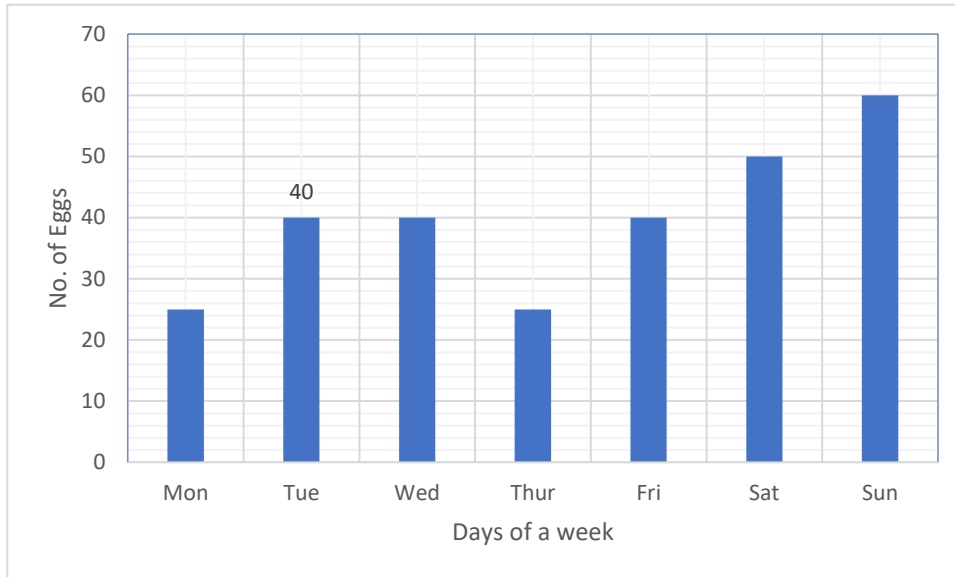
**irrigation**

**Tinning**

**Salting**

**Cooking**

47. The graph below shows the number of eggs laid on a poultry farm



(a) On which day was the highest production recorded?

**Sunday**

(b) What was the average number of eggs produced per day?

$$\text{Average} = \frac{\text{sum of eggs}}{\text{number of days}} = \frac{25+40+40+25+40+50+60}{7} = \frac{280}{7} = 40 \text{ eggs}$$

(c) If an egg cost shs. 100/= how much money did the farmer get that week?

1 egg cost 100

$$28 \text{ eggs cost } 28 \times 100 = 2800/=$$

(d) Suggest the problem which could have caused the low production on Monday and Tuesday?

**Theft**

**Poor feeding**

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

**Prevents short circuit**

(b) Give three reasons why a bulb of torch may not give light when the switch is on.

**Improper arrangement of batteries**

**Loosely fixed bulb**

**Rusty or non-functioning switch**

49. Describe an experiment to show that air has weight?

**Apparatus**

**Balance**

**Empty balloon**

**Inflated balloon**

**Procedure**

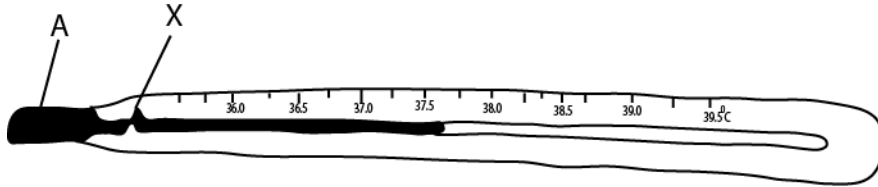
**Weight the balloon and a thread**

**Inflate and tie the balloon with a thread and weigh it again.**

**Finding**

**Inflated balloon is heavier than uninflated balloon showing that air has weight .**

50. The diagram below shows a common instrument. Use it to answer the questions (a) to (d).



(a) What is the use of the above instrument?

**To measure body temperature**

(b) Name the liquid labelled A.

**Mercury**

(c) Why is the liquid named in (b) used in the instrument?

**It expands uniformly**

**Does not wet glass**

**It can be seen easily**

**It does not evaporate inside the tube**

(d) What is the importance of part marked X?

**To prevent backflow of mercury**

51. (a) Name three things required by leaves for the process of photosynthesis to take place

**Water**

**Carbon dioxide**

**Sunlight**

**chlorophyll**

(b) Give the importance of photosynthesis to the flowering plants.

**Manufacture food for the plants**

52. (a) What type of immunity does a child get in each of the following

(i) From mother to child.

**Passive immunization**

(ii) After immunization

**Artificial immunization**

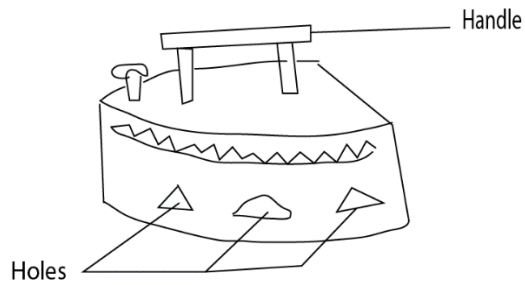
(iii) After suffering from a disease like measles?

**Natural immunity**

(b) Why should a pregnant mother be immunized against tetanus?

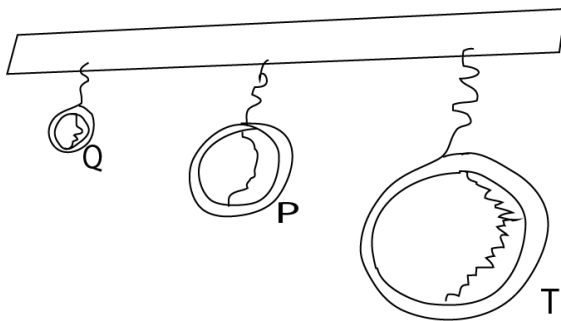
**To prevent her and her child from getting tetanus at delivery**

53. The diagram below shows a charcoal flat iron box.



- (a) Why is the handle of the flat iron box made of wood?  
**Wood is a poor conductor of heat**
- (b) State two uses of holes in that iron box.  
**Allow in oxygen**  
**For removing the ash**
- (c) How does heat from the iron box reached the user's body?  
**Radiation**

54. The diagram below shows three metallic rings Q, P, T.



- (a) Which ring will produce:
- Sound of a low pitch? : **T**
  - Sound of a high pitch? **Q**
- (b) Name any two devices that can be used to store sound.  
Sound tapes  
Compact disc

55. Suggest four reasons why physical exercise are important to our bodies

- Improve immunity
- Makes body fit
- Makes body fit
- Allow proper digestion
- Improves flexibility of the body
- Burns excess fat

END