



Dr. Bbosa Science

UGANDA NATIONAL EXAMINATION BOARD  
PRIMARY LEAVING EXAMINATION



Science 2007

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		
Total		

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## SECTION A

(questions **1** to **40** marks each)

1. Which reptile change the colour of its body as its moves from one place to another ?

**Chameleon**

2. Give any one way in which bush burning leads to soil erosion.

**It removes vegetation cover and expose soil to agents of soil erosion such as wind, running water.**

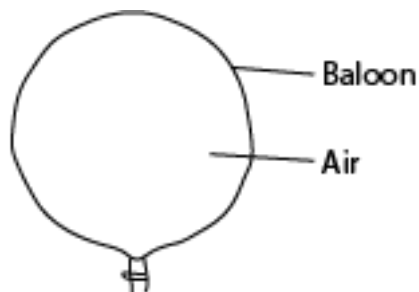
3. How are bats different from hens in their way of reproduction?

**Bats give birth to young ones whereas hens lay eggs.**

4. How does immunization promote health in a child?

**Protect the child from killer diseases such as tetanus, TB.**

5. Give any one property of air shown in the diagram below



**Air occupies space**

6. Give the difference between evaporation and condensation

**Evaporation is a change of a liquid to vapor/gas while condensation is the change if vapor to a liquid**

7. Why is an earth-worm called an invertebrate?

**It does not posses a vertebral column or back bone**

8. Give any one function of the human skeleton.

**Provide shape of organism**

**Provide support**

**Manufacture red blood cells**

**Store minerals like phosphorus and calcium**

9. Give any one way in which the spread of scabies can be controlled.

**Preventing contact of a healthy person with a person with scabies**

10. Mention a disease which makes a person to pass out watery stool with blood.

**Dysentery**

11 State the difference between volume and mass

**Volume is the space occupied by matter while mass is a quantity of matter in a substance contains**

12. Give any one body characteristic which is common to a spider and a tick

**Both have four pairs of limbs**

**Both have two main body parts**

13. What is the main cause of fainting?

**Shortage of blood supply to the brain**

14. Suggest any one way in which human beings use energy light the sun.

**To see**

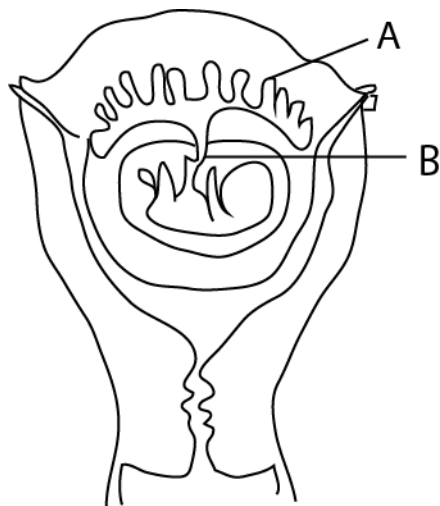
**To make solar electricity**

15. Give any one way in which sweating is important in a human body.

**To cool the body**

**To remove waste product from the body**

The diagram below a foetus in the womb. Use it to answer questions 16 and 17



16. Name the part marked with letter A

**Placenta**

17. State any one way in which the part marked with letter B is useful to the foetus

B the umbilical cord:

- **Conduct nutrients and oxygen to the fetus**
- **takes away carbon dioxide and waste products from the fetus**

18. Which part of human eye works like a film in camera?

**Retina**

19. Give any one activity that can be done at home to control the spread of malaria.

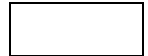
**Sleeping in insecticide treated nets**

**Removing stagnant water**

**Slashing around the house**

20. In which way is a person who HIV positive different from the one who has developed AIDS?

**A person with HIV show no sign of the disease while a person with AIDS has signs like cough, skin rash, fever, loss of weight.**



21. Give any one way in which a transparent object differs from an opaque object.

**Transparent objects allow light to pass through fully whereas opaque objects do not.**

22. What causes kwashiorkor in children?

**Deficiency of protein**

23. Why is photosynthesis important to plants?

**Manufacture food for the plants**

24. Give any one reason why human beings breathe in.

**To get oxygen for the body**

25. What is an enzyme?

An enzyme is a substance that speeds up a biological reaction

26. Give any one reason why plants and animals are classified as living things.

**They feed**

**They grow**

**They respond to the stimulus**

**They respire**

**They reproduce**

27. State any one way in which health parades are important in primary schools.

**Educate the pupils about their body**

**Sensitize the pupils for cleanness**

**Educate the pupils how to avoid diseases.**

28. Apart from painting, give any one other way in which metal can be prevented from rusting.

**By oiling**

**Keeping in dry places**

**Greasing**

**Galvanizing**

29. Which type of soil does not allow water to go through it easily?

**Clay soil**

30. Why is a sling used when giving First Aid to a person with a broken hand?

**To minimize movement of the broken hand**

31. State any one practice on a school garden that will help to improve soil fertility.

**Mulching**

**Adding manure**

32. Why is a tick called a parasite?

**Feed on its host**

33. State the difference between the function of a pulmonary vein and that of a pulmonary artery in blood circulation.

**Pulmonary vein carries oxygenated blood whereas pulmonary artery carries deoxygenated blood**

34. Give any one form of energy that is produced during the process of splitting firewood with an axe.

**Heat energy**

**Sound energy**

35. Give any one way in which plants benefit from animals.

**Plants get carbon dioxide**

36. Give any one sign on a school compound which shows that the school environment is degraded.

**Poor disposal of wastes**

**Gully from soil erosion**

37. In which way is the function of kidneys similar to that of the skin in a human body?

**They are both organs of excretion**

38. Apart from the brain, give any one other body organ which is greatly damaged by alcoholism.

**Liver**

39. How does heat from the sun reach the ground?

**By radiation**

40. Give any one way in which teeth are important in the digestion of food.

**The breakdown of food to ease swallowing**

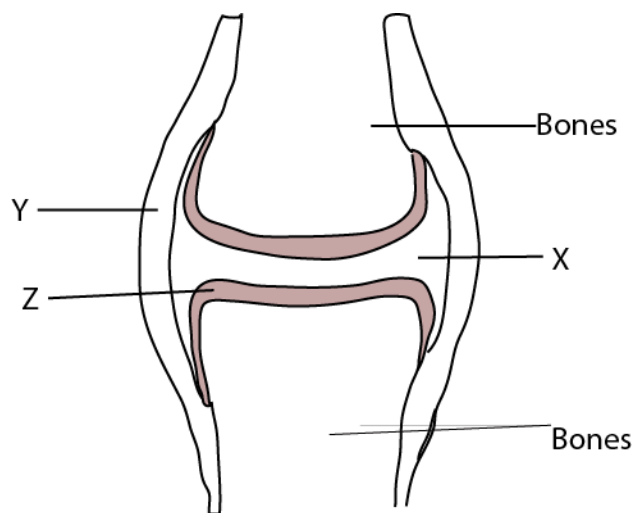
**They break down food to increase surface area for enzyme action**

## SECTION B

(Questions 41 to 55 carry four marks each.)

41. The diagram below shows a human joint.

Use it to answer the questions that follow.



(a) Name the part marked with letter **Y** and **Z**

(i) **Y Ligament**

(ii) **Z cartilage**

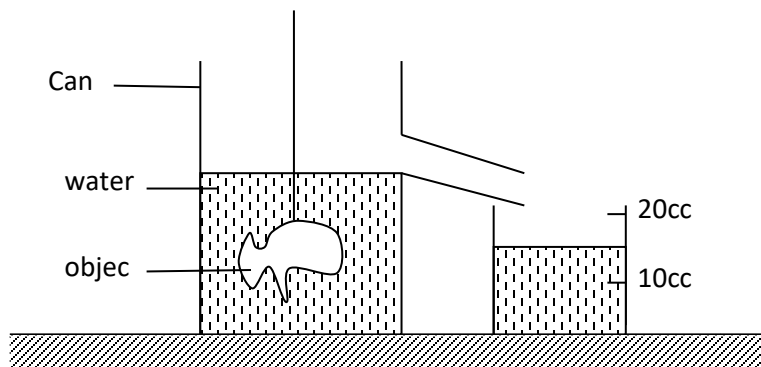
(b) Give any one function of the fluid found in the place marked with letter **X**

**The synovial fluid reduce friction**

(c) What type of joint is shown in the diagram above?

**Hinge joint**

42. An experiment was done by a P 7 class as shown in the diagram below. *Use it to answer the question that follow.*



(a) When is such a method of finding volume used?

**To find the volume of irregular objects**

(b) If the object above has a density of  $2 \text{ g/cm}^3$ . Find its mass.

$$\begin{aligned}\text{Volume} &= 15\text{cc} \\ \text{Mass} &= \text{density} \times \text{volume} \\ &= 2 \times 15 \\ &= 30\text{g}\end{aligned}$$

43. (a) Give any two characteristics that are common to a frog and as crocodile apart from being vertebrates.

**(i) they are both cold blooded animals**

**(ii) they are both aquatic animal**

(b) How is fertilization of a frog different from that of a crocodile?

**Fertilization in frog is external while that of crocodile is internal.**

(c) Name any one other vertebrate that can be classified with a frog

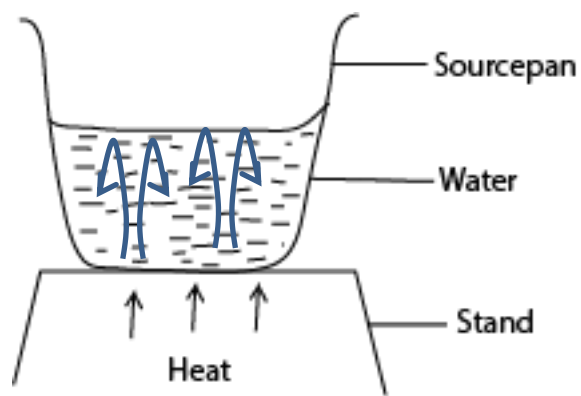
**Toad**

**Salamander**

**Newt**

44. The diagram below shows a saucepan with some water on fire.

*Use it to answer the questions that follow.*





- (a) How will heat from the fire move to reach the water at the bottom of the saucepan?

**Conduction through the saucepan**

- (b) Which method will enable that heat all the water in the saucepan?

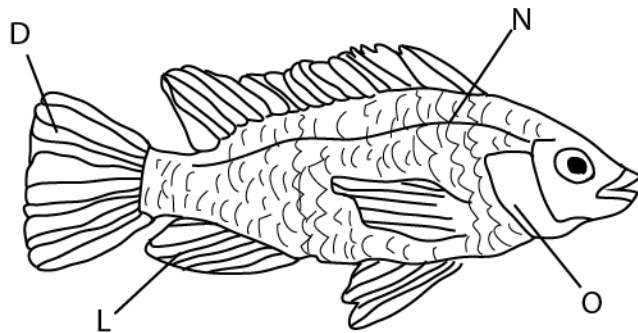
**Convection**

- (c) Use arrow to show the movement of water in the saucepan after it has been heated for sometime.  
(d) What will happen to the water in the saucepan to show that it is boiling?

**Bumps up and down**

45. The diagram below is of a fish

*Study it and answer the questions that follow*



- (a) Name the structure marked **L**

Ventral fin

- (b) What is the function of each of the structure marked **D** and **N**?

**D: propels the fish**

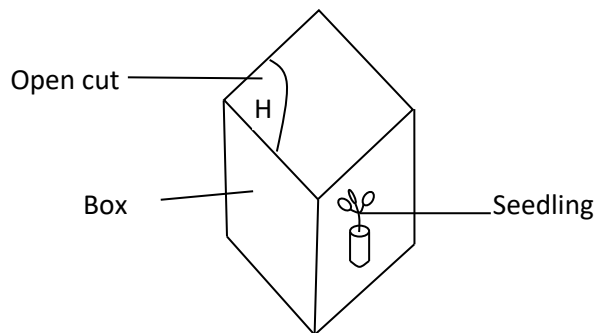
**N: detects sound waves**

- (c) State the function of the structure covered by the part marked **O**

**The structure covered is the gills that are used for gaseous exchange**

46. The diagram below, show a seeding in a box

*Study it and answer the question that follow.*



(a) What colour will the leaves of the seedling be if left in this box with H covered for a week?

**The color of the leaves turns yellow**

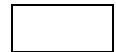
(b) Give a reason for your answer in (a) above.

**Absence of light prevents formation of chlorophyll**

(c) Give any two things that are likely to happen to the seedling if the part marked with letter H is left open.

(i) **It will bend and grow toward the open H**

(ii) **The leaves will turn green**



47 (a) Give any one reason why a magnet cannot attract pieces of wood.

**Wood has no magnetic properties**

(b) Give any three practices that can lead to the destruction of a magnet

(i) Heating

(ii) hammering

(iii) Storing east -west direction

48. Bbosa is a poultry farmer. He has 100 layers on his farm. Give any four reasons why he should keep farm records?

(a) **to know how much food, they eat**

(b) **to know how much eggs they lay**

(c) **to know amount of money he spends on food**

**(d) to know how much money**

49 (a) Why is it a bad practice to apply soil or cow dung on any burnt area of our skin?

**They may contain germs**

**They do not reduce the heat from the burn**

(b) Suggest any two reasons why the injured part with a burn or scald is dipped into cold water.

**To cool the burnt place**

**To minimize the effect of the burn**

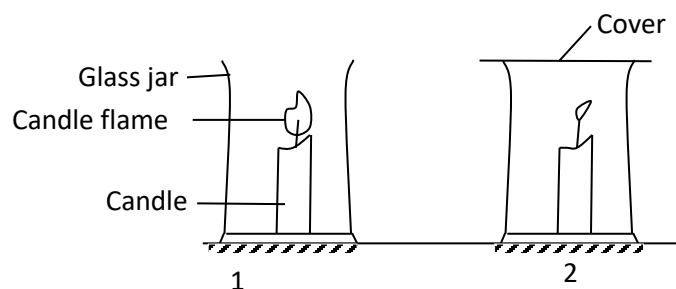
(c) Give any one way of avoiding burns while lifting hot objects.

**Use pieces of paper or cloth**

50. The diagrams numbered 1 and 2 below show an experiment done by a P7 class.

Diagram 1 shows a burning candle in an open jar. In diagram 2, the jar was covered as shown.

*Use the diagrams to answer the question that follows.*



(a) What would happen to the flame in diagram 2 if the cover was removed after a short time?

**The candle will burn with a bigger flame**

(b) Give a reason for your answer in question (a) above.

**The candle burns with a bigger flame due to presence of much oxygen**

(c) If the cover had been left on the jar in diagram 2 for a long time what would have happened to the flame?

**The flame will go off**

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

**The flame will go off because oxygen that supports burning is used up**

51.(a) What is environmental degradation?

**Is the misuse of the environment to an extent that it cannot support life**

(b) Give any **three natural** causes of environment degradation.

**(i) floods**

**(ii) drought**

**(ii) volcanic eruption**

**(iii) soil erosion**

52. (a) Give any two ways in which mulching is important to the soil.

**(i) maintains moisture in the soil**

**(ii) the mulch decomposes to add manure**

**(iii) mulching stops soil erosion**

(b) Suggest any two materials that are commonly used for mulching gardens.

**(i) grass**

**(ii) coffee or rice husks**

**(iii) Banana leaves**

**(iv) Tree leaves**

53. State any one function of each of the following parts in simple electric circuit:

**(i) Wire conducts electricity.**

**(ii) Battery is the source of current**

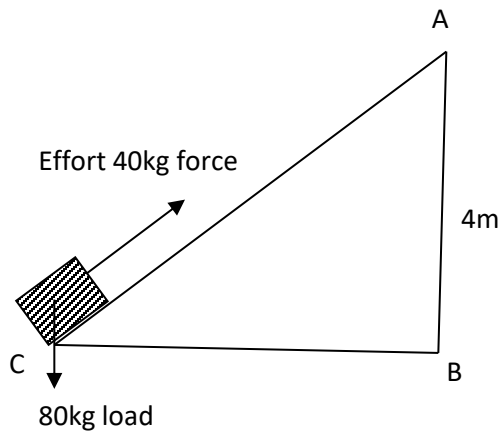
**(b) Mention any two causes of a short circuit**

**(i) high voltage**

**(ii) contact of naked wires in a circuit.**

54. The diagram below shows a machine used for lifting loads

Use it to answer the question that follow.



(a) What distance is the load to be lifted?

**4m high**

(b) Give the advantage of lifting the load alongside CA.

**Less effort is used to make work easier**

(c) Find the mechanical advantage of the machine above.

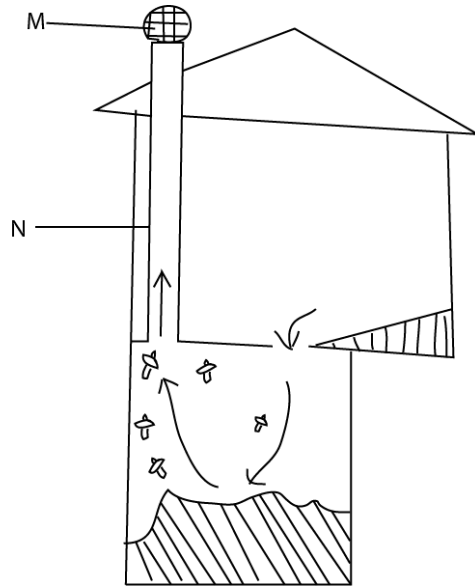
$$\text{MA} = \frac{\text{Load}}{\text{Effort}} = \frac{80}{40} = 2$$

(d) How can the machine be improved so that less effort is used to lift loads.

**By reducing the angle of inclination of the plane**

The diagram below is of a ventilated improved Pit (VIP) latrine.

*Use it to answer the question that follow.*



(a) Name the parts marked m and n

(i) **M flies screen (wire gauze)**

(ii) **N Vent pipe**

(b) Give the function of the part marked **M**

**Prevent flies from escaping from the latrine**

(c ) What do the arrows in the diagram show?

**Direction of air through the latrine**



**END**