



UGANDA NATIONAL EXAMINATIONS BOARD  
**PRIMARY LEAVING EXAMINATION**

**2013**

**INTEGRATED SCIENCE**

*Time Allowed: 2hours 15minutes*

Index No. 

|  |  |  |  |  |  |  |  |  |  |
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Candidate's Name .....

Candidate's Signature .....

School Name .....

District Name .....

**Read the following instructions carefully:**

- (i) This paper has **two** sections: **A** and **B**  
 Section **A** has **40** Questions and  
 section **B** has 15 questions. The paper  
 has 15pages altogether.
- (ii) Answer all questions. All answers to  
 both sections **A** and **B** must be  
 written in the spaces provided.
- (iii) 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.
- (iv) Unnecessary changes of work may  
 lead to loss of marks.
- (v) Any hard writing that cannot easily  
 be read may lead to loss of marks.
- (vi) Do not fill anything in the boxes  
 indicated:  
**“For Examiners’ Use Only”** and those

| FOR EXAMINERS’<br>USE ONLY |       |              |
|----------------------------|-------|--------------|
| Qn. No.                    | MARKS | EXR’S<br>NO. |
| 1 – 10                     |       |              |
| 11 – 20                    |       |              |
| 21 – 30                    |       |              |
| 31 – 40                    |       |              |
| 41 – 43                    |       |              |
| 44 – 46                    |       |              |
| 47 – 49                    |       |              |
| 50 – 52                    |       |              |
| 53 – 55                    |       |              |
| Total                      |       |              |

SECTION A

1. Give any one example of swimming bird.  
.....
2. Name the animal product used in leather industry.  
.....
3. State any one property of matter.  
.....
4. Name the part of the human heart eye that works like film in a camera.  
.....
5. In which way is the message in the sign post below helpful to school children?



- .....  
.....
6. Give any one way in which a single fixed pulley is a school.  
.....  
.....
  7. Name the body organ which helps a person to know whether there is enough sugar in tea or not.  
.....
  8. Give any one advantage of pruning trees.  
.....
  9. Which method of heat transfer helps farmers to dry their harvest?  
.....
  10. How does a fish benefit from its slippery body?  
.....  
.....
  11. In which way does the use of biogas conserve the environment?  
.....  
.....

**The diagram below shows a garden tool. Use it to answer question 12 and 13?**



12. Name the garden tool above.  
.....
13. How is the garden tool above important to farmers?

- .....
14. Which deficiency disease is caused by lack of vitamin D in children's diet?  
 .....
15. Why is the water obtained through filtration not necessarily safe for drinking?  
 .....
16. What plant system does the plumule make when it grows?  
 .....
17. How does leaching reduce soil fertility?  
 .....
18. Why is it advisable to leave the pit of a VIP latrine open?  
 .....
19. Name the cattle disease whose sign is a swollen and painful under.  
 .....
20. In which part of the female reproductive system does fertilization take place?  
 .....
- 
21. Why is the left side of the heart able to pump blood to body.  
 .....
22. State any one way in which trees are to reduce air pollution.  
 .....
23. In the space provided below, draw a lens used to correct short sightedness.  
 .....
24. How is safety pin in a first –aid kit important?  
 .....
25. In which type of change are the properties of the substance formed permanently from those different from those of the original one?  
 .....
26. How is the function of stomata in in a leaf similar to that of gills in a fish?  
 .....

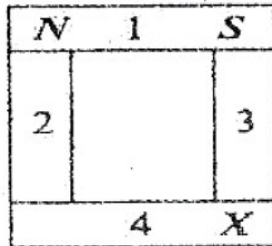
27. Which component of soil is used by plants to make their food?

.....  
.....

28. Which structures enable the trachea to remain open all the time?

.....  
.....

29. Four bar magnets marked 1, 2, 3 and 4 were placed next to each other as shown below. They attracted each other.



Name the pole of magnet 4 marked with letter X

.....

30. Apart from brushing, how else can dental caries be prevented?

.....  
.....



31. State any one way in which friction in moving parts of a machine can be reduced.

.....  
.....

32. Give any one way in which yeast is useful people.

.....  
.....

33. Apart from making food, mention one other use of leaves to plants.

.....  
.....

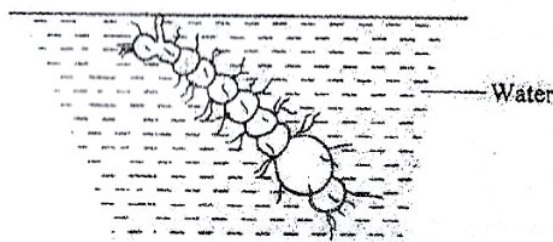
34. State any one characteristic of the images formed by plane mirrors.

.....  
.....

35. Why do the people installing electricity wear rubber gloves?

.....  
.....

The diagram below is of a mosquito larva. Use it to answer questions 36 and 37.



36. Name the mosquito which develops from such a larva.

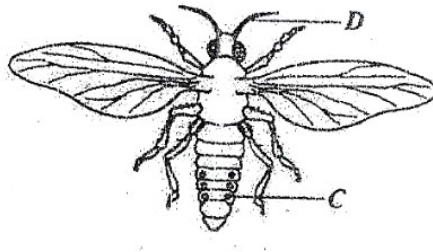
- .....
37. What disease does the mosquito you have named above transmitted to human being?  
 .....
38. How is the propagation of Irish potatoes different from that of sweet potatoes?  
 .....
39. Apart from running windmills, give one other way wind is used as an energy resource.  
 .....
40. How do the silvery walls of a vacuum flask reduce heat loss?  
 .....



**SECTION B: 60 MARKS**

*Questions 41 to 55 carry four marks each.*

**41. The diagram below shows an insect. Use it to answer the questions that follow.**



- (a) Name the parts marked C and D.  
 (i) C .....
- (ii) D .....
- (b) State the function of the part marked D.  
 .....
- (c) Why would the insect above die when the whole of its abdomen dipped in oil?  
 .....
42. (a) Apart from the lack of conditions necessary for germination, give any two other factors that can make a seed fail to germinate.  
 (i) .....
- (ii) .....
- (b) Write down any two ways farmers can control pests in the gardens without using chemicals.  
 .....

43. (a) Give any two advantages of a modern beehive.

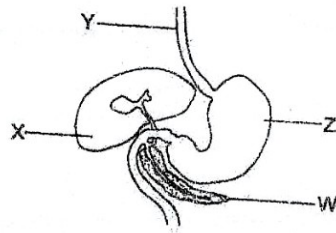
.....  
.....

(b) Write down two things a bee-keeper should consider before setting up beehives.

.....  
.....



44. *The diagram below is part of the human digestive system. Use it to answer the questions that follow.*



(a) Name the parts marked Y and W.

Y .....

W .....

(b) State the function of the part marked Z.

.....  
.....

(c) Give any one disease that affects the part marked X.

.....

45. Match the diseases in list A with the signs and symptoms in list B.

- A  
Polio  
Measles  
Tetanus  
Diphtheria

- B  
Swollen neck  
Stiffness of muscle  
Paralysed tissues  
Skin rash

(a) Polio .....

(b) Measles .....

(c) Tetanus .....

(d) Diphtheria .....

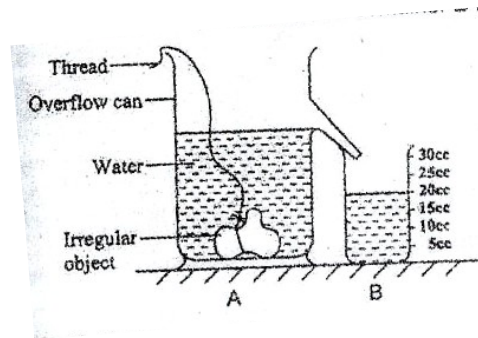
46. (a) Give any two ways in which drug dependence can affect an individual.

.....  
.....

(b) State two ways in which an individual can avoid drug dependence.

.....  
.....

47. In Irregular object was lowered into an overflow can A containing water, the water it displaced was collected in container B as shown below.



(a) What is the volume of the irregular objects?

.....

(b) Calculate the density of the irregular object if its mass is 60g.

48. The table below shows lists of animals. Use it to answer the questions it follow.

| <b>P</b> | <b>Q</b>  | <b>R</b> |
|----------|-----------|----------|
| Toad     | Chameleon | Cow      |
| Newt     | Snake     | Monkey   |
| Frog     | Lizard    | Rat      |

(a) Which characteristic is common to all the animals in the table?

.....  
 .....

(b) How is the reproduction in the animals in list P similar to those in list Q?

.....  
 .....

(c) Which list has warm blooded animals?

.....

(d) Why would you place a tortoise in list Q?

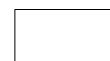
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49. (a) Name any one organism that makes fresh meat go bad.

.....

(b) State any three ways of preventing fresh meat from going bad.

.....  
 .....  
 .....



50. (a) Name the human body organ where each of the following takes place.

(i) Filtration of blood.

.....

(ii) Blood gets oxygen while carbon dioxide is removed.

.....

(b) Give the use of the following components of blood in the body.

(i) White blood cells.

.....

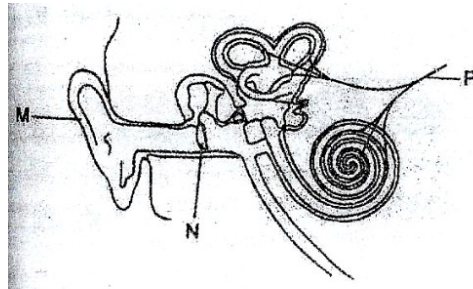
.....

(ii) Blood platelets

.....

.....

51. Study the diagram of the human ear below and use it to answer the questions that follow.



(a) Name the parts marked **M** and **N**.

**M** .....

**N** .....

(b) Give the function of the part marked **P**.

.....

.....

Use letter **B** to show the part of the ear responsible for balancing the body.

52. (a) Name any two water-borne diseases.

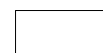
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(c) In which two ways can water-borne diseases be prevented in the community?

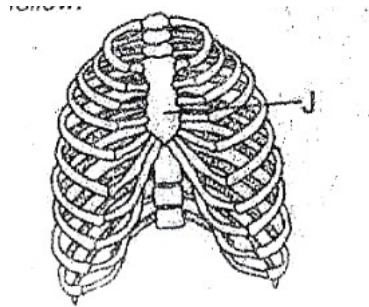
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.....





53. The diagram below shows part of the human skeleton. Use it to answer the questions that follow.



(a) Name the part marked J.

.....

(b) State any two delicate body organs protected by the part of the skeleton shown.

.....  
 .....

(c) How is the part of the human skeleton shown above used during breathing out?

.....  
 .....

54. (a) Write down any two activities that can be done by an individual to promote personal hygiene.

.....  
 .....

(b) State two ways community members can promote sanitation in their area.

.....  
 .....

55. Arrange the parts of an electric circuit below by drawing to show a complete circuit.

