



UGANDA NATIONAL EXAMINATIONS BOARD

PRIMARY LEAVING EXAMINATION

2016

INTEGRATED SCIENCE

Time Allowed: 2 hours 15 minutes

Index No.

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Candidate's Name

Candidate's Signature

School Name

District Name

Read the following instructions carefully:

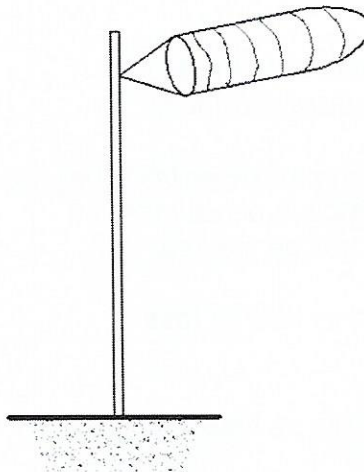
1. This paper has two sections: **A** and **B**. Section **A** has **40** questions and section **B** has **15** questions. The paper has 16 pages altogether.
2. Answer all questions. All answers to both sections **A** and **B** must be written in the spaces provided.
3. **All** answers must be written using a blue or black ball point pen or ink. Any work written in pencil other than graphs and diagrams will **not** be marked.
4. Unnecessary changes of work may lead to **loss** of marks.
5. Any handwriting that cannot easily be read may lead to **loss** of marks.
6. 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 - 10		
11 - 20		
21 - 30		
31 - 40		
41 - 43		
44 - 46		
47 - 49		
50 - 52		
53 - 55		
TOTAL		

SECTION A: 40 MARKS

Questions 1 to 40 carry one mark each.

1. Name the gas used in fire extinguishers.
.....
2. State the eye disease which is spread by houseflies.
.....
3. Which part of a fish performs a similar function as the human ear?
.....
4. Name the male reproductive cell in flowers.
.....
5. Give any **one** way in which wood fuel can be conserved.
.....
6. The diagram below is of a weather instrument. Use it to answer the question that follows.



What is the use of this instrument at a Weather Station?

.....
.....

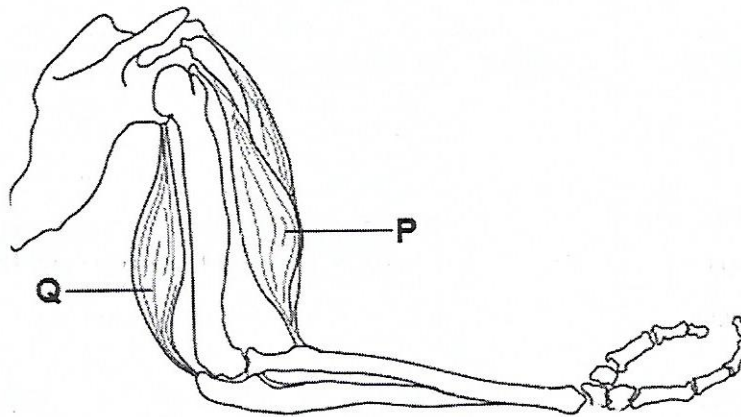
7. Which method of heat transfer enables a person to iron clothes using a flat iron?
.....
8. Why should cold water be poured on the part of the body which has been scalded or burnt?
.....
.....
9. Apart from decomposition, in which other way is soil formed?
.....
10. What is the importance of smoke during the harvesting of honey?
.....
.....
-
11. State the class of lever in which the effort is between the fulcrum and the load.
.....
12. Give a reason why male anopheles mosquitoes do not transmit malaria parasites to humans.
.....
.....
13. How can foot and mouth disease be controlled in cattle?
.....
.....

14. Give **one** way in which farmers can improve on the supply of nitrogen in the soil without the use of artificial fertilizers.

.....

.....

The diagram below is of a human arm. Study and use it to answer questions **15** and **16**.



15. Name muscle **P**.

.....

16. What happens to muscle **Q** when the arm is raised?

.....

.....

17. Which intestinal worm enters the human body through bare feet?

.....

18. How do plants make use of the gas given out by animals during respiration?

.....

.....

19. State any **one** use of plane mirrors to people.

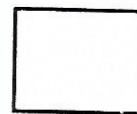
.....

.....

20. Apart from helping in pollination, give **one** other way in which wind is useful to plants.

.....

.....



21. Which part of a maize grain has a similar function as the cotyledon of a bean seed?

.....

22. State any **one** characteristic which shows that a bat is a mammal.

.....

.....

23. Which blood cells carry oxygen in the body?

.....

24. Give any **one** reason why breastfeeding is encouraged for at least two years.

.....

.....

25. Name any **one** scale in which temperature is measured.

.....

26. The diagram below shows two bar magnets placed close to each other. Use it to answer the question that follows.



Use arrows to show what happens to the **two** bar magnets.

27. Name the human body system to which the **lungs**, kidneys and the skin belong.

.....

28. Give **one** way in which bacteria in pit latrines are useful.

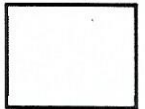
.....
.....

29. Name **one** disease that affects the stomach **because of** alcoholism.

.....

30. Apart from the polio vaccine, name any other **vaccine** administered to children at 6 weeks of age.

.....



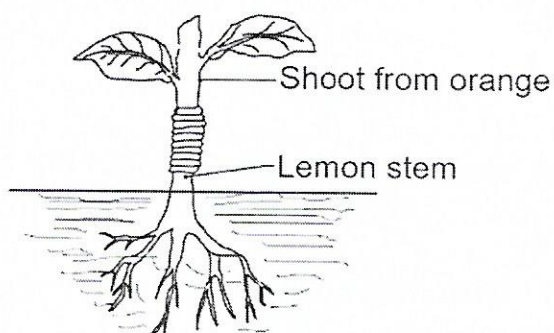
31. In which part of the human alimentary canal is water absorbed?

.....

32. What is the danger of having too much wax in the human ear?

.....
.....

33. What form of energy is produced by dry cells?
.....
34. Give any **one** good health habit that can improve the working of the lungs.
.....
35. Apart from eating a balanced diet, give any **one** other way of controlling common diseases at home.
.....
.....
36. The diagram below shows a method of plant propagation. Use it to answer the question that follows.



Name the method of plant propagation shown in the diagram above.

-
37. Which organs are used by both fish and tadpoles for breathing?
.....
38. Give any **one** secondary sex characteristic which is common to both adolescent boys and girls.
.....
.....

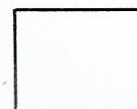
39. Name the fungi which normally grows on left over foods.

.....

40. What happens to light rays when they meet a convex lens?

.....

.....



SECTION B: 60 MARKS

Questions 41 to 55 carry four marks each.

41 (a) State any **two** ways in which vectors spread diseases to humans.

(i)

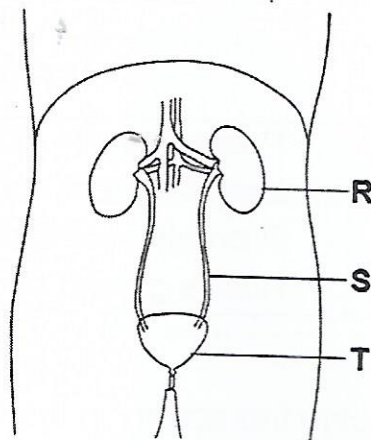
(ii)

(b) Give any **two** ways of preventing vectors from spreading diseases to humans.

(i)

(ii)

42. The diagram below is of the human urinary system. Study and use it to answer the questions that follow.



- (a) Name the parts marked **S** and **T**.

(i) **S**

(ii) **T**

- (b) What is the function of the part marked **R**?

.....
.....

- (c) Give any **one** disease that affects the above system.

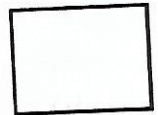
.....

43. In the table below, part **A** shows some activities carried out by farmers and part **B** shows the effects of the activities.

A ACTIVITIES	B EFFECTS
Irrigation Afforestation Mulching Crop rotation	<ul style="list-style-type: none"> - Preserves soil moisture - Leads to death of crop pests - Promotes convectional rainfall - Allows growth of crops in all seasons

Write the correct effect to the activity in the space provided below.

- (i) Irrigation
- (ii) Afforestation
- (iii) Mulching
- (iv) Crop rotation



44. (a) Give any **two** examples of non-renewable resources in the environment.

- (i)
- (ii)

- (b) State any **two** ways of conserving non-renewable resources.

- (i)
- (ii)

45. (a) To which group of plants do ferns and liverworts belong?

.....

(b) How is the reproduction of ferns similar to that of liverworts?

.....

.....

(c) Give **two** other plants that reproduce in the same way as ferns and liverworts.

(i)

(ii)

46. (a) Name the change of state which takes place when:

(i) vapour changes to liquid.

.....

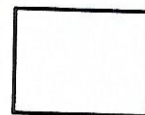
(ii) a solid changes directly to gas.

.....

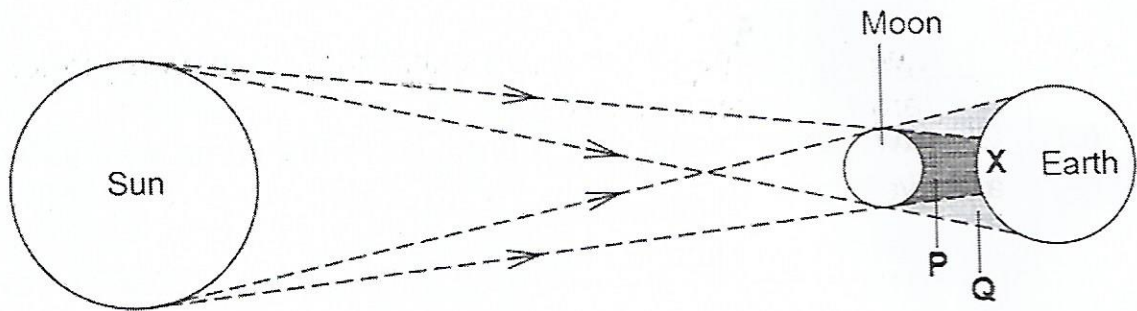
(b) Apart from causing change of state, give **two** other effects of heat on matter.

(i)

(ii)



47. The diagram below shows a type of eclipse. Study and use it to answer the questions that follow.



- (a) Name the type of eclipse shown in the diagram above.

- (b) Name the shadows marked **P** and **Q**.
 (i) **P**
 (ii) **Q**
- (c) What happens to a person who would be in part **x** during the eclipse?

48. (a) In which **one** way is each of the following elements of Primary Health Care (PHC) important to the community?
- (i) Water and sanitation

- (ii) Maternal and child health

(b) Give any **two** health care services which are provided through maternal and child health.

(i)

(ii)

49. (a) Name **two** systems of keeping poultry that enables a farmer to keep large numbers of birds.

(i)

(ii)

(b) State any **two** viral diseases that can spread easily in the above systems of poultry keeping.

(i)

(ii)



50. (a) Give any **one** characteristic which is common to all invertebrates.

.....

.....

(b) To which group of invertebrates does each of the following animals belong?

(i) Snail

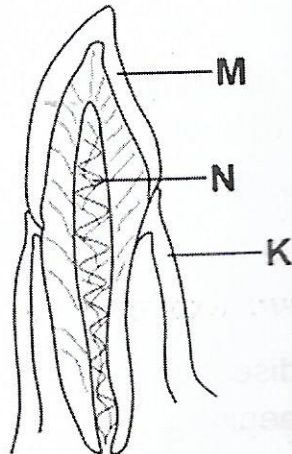
(ii) Grasshopper

(c) State **one** way in which snails may be dangerous to humans.

.....

.....

51. The diagram below shows a section through a human tooth. Study and use it to answer the questions that follow.

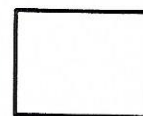


- (a) Name the parts marked **M** and **K**.
- (i) **M**
- (ii) **K**
- (b) Which mineral salt helps to form part **M**?
.....
.....
- (c) Give the function of the part labelled **N**.
.....
.....
52. (a) State the method that can be used to separate:
- (i) fruit seeds in juice.
.....
- (ii) millet seeds mixed with its husks.
.....

(b) Give the importance of the following steps in cleaning clothes at home:

(i) Sorting

(ii) Soaking



53. (a) Write down any **two** examples of anti-social behaviour in our communities.

(i)

(ii)

(b) State any **two** ways of controlling anti-social behaviour in our communities.

(i)

(ii)

54. (a) Apart from using solfa notation, mention any **two** other ways of storing sound.

(i)

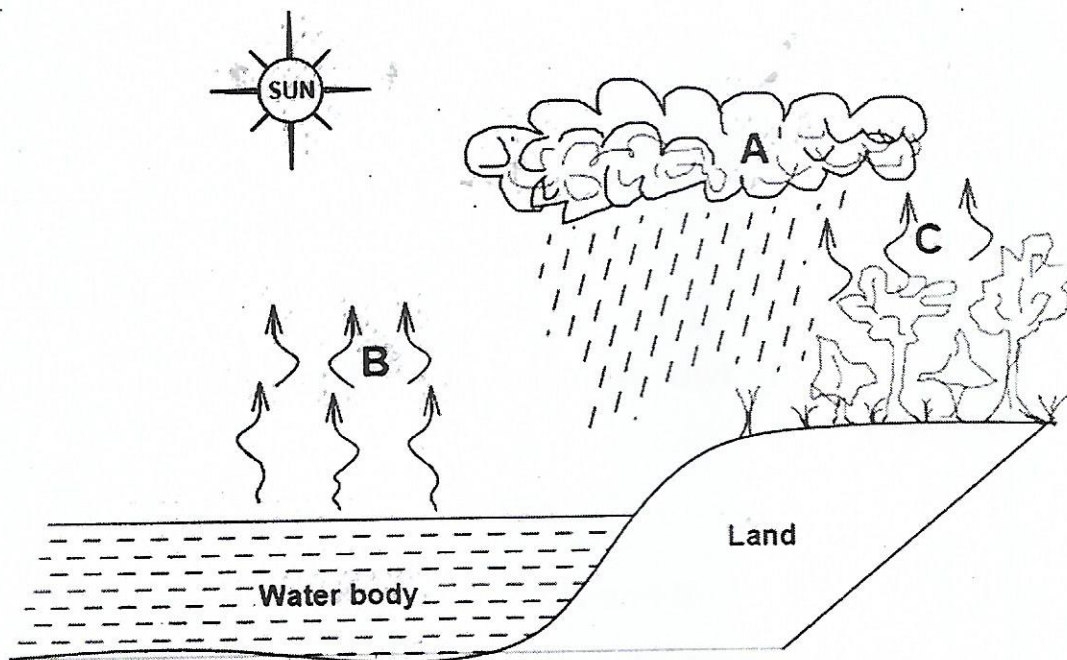
(ii)

(b) Name **two** instruments used to reproduce the sound stored by solfa notation.

(i)

(ii)

55. The diagram below shows the water cycle. Study and use it to answer the questions that follow.



- (a) Name the type of clouds represented by letter **A**.

.....

- (b) State the processes taking place at **B** and **C**.

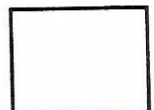
(i) **B**

(ii) **C**

- (c) What is the importance of the sun in the above diagram?

.....

.....



END