



UGANDA NATIONAL EXAMINATIONS BOARD

**PRIMARY LEAVING EXAMINATION
2012**

INTEGRATED SCIENCE

Time Allowed: 2 hours 15 minutes

Index No.

--	--	--	--	--	--	--	--	--	--

Candidate's Name

Candidate's Signature

School Name

District Name

Read the following instructions carefully:

1. The paper has **two** sections: **A** and **B**.
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 fountain pen. Diagrams should be drawn in pencil.
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 shown: "**For Examiners' Use Only**" and those inside the question paper.

FOR EXAMINERS' USE ONLY		
Qn. No.	MARKS	EXRS' 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. Give any **one** example of a root tuber.
.....
2. State **one** disadvantage of keeping finger nails long.
.....
.....
3. What is the importance of including calcium in chicken feed ?
.....
.....
4. What is the use of a wedge as a simple machine ?
.....
.....
5. Name the type of lens used to correct long sightedness.
.....

The diagram below shows a person with an injury. Use it to answer question 6.



6. How useful is the structure marked **M** to the injured person ?
.....
.....



7. Apart from mosses, give **one** other example of a spore bearing non-flowering plant.

.....

8. Name any **one** mammal that lives in water.

.....

9. Give a reason why people keep cats in their homes.

.....

.....

10. Why does a farmer cut off the leaves of a banana sucker before planting it ?

.....

.....



11. Apart from pasteurizing, give any **one** way milk can be prevented from going bad.

.....

.....

12. Why is it important for a husband and his wife to be treated together if they have got gonorrhoea ?

.....

.....

13. Why do farmers carry out de-beaking in poultry farms ?

.....

.....

14. State any **one** habit which helps to promote oral health.

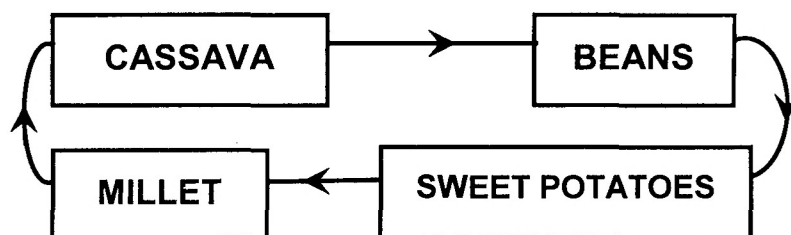
.....

15. State **one** use of soil to earthworms.

.....

.....

The diagram below shows a crop rotation cycle.



16. What is the importance of beans in this cycle to the rest of the crops ?

.....

.....

17. Which communicable disease in humans affects both the skin and the skeletal system ?

.....

.....

18. Apart from carbohydrates, name **one** other class of food that gives the body energy.

.....

.....

19. In which way is the sun important in the formation of rain ?

.....

.....

20. State any **one** method used to make dirty water clean.

.....

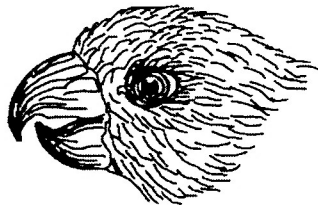


21. How does a sweater help to keep a person warm during cold days ?

.....

.....

The diagram below is of a head of a bird. Use it to answer question 22.



22. What does a bird with this type of beak eat ?

.....

.....

23. Give any **one** effect of poor disposal of human wastes in the environment.

.....

.....

24. Apart from the egg stage, at what other stage of development is a housefly **not** active ?

.....

.....

25. Why does a clay-made charcoal stove use less charcoal than a metallic one ?

.....

.....

26. Apart from production of eggs (ova), mention **one** other use of the ovaries in the human body.

.....
.....

27. State **one** way in which a child gets natural immunity.

.....
.....

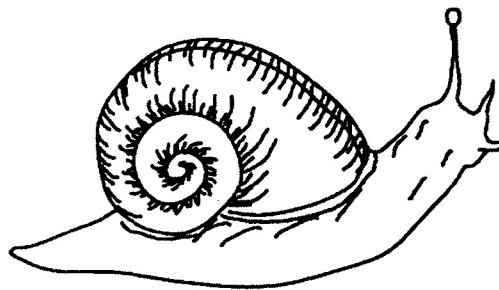
28. State the injury that results from tearing of muscles.

.....
.....

29. Which gas is used by food manufacturers for preserving drinks like sodas ?

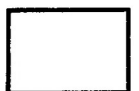
.....
.....

The diagram below is of a common animal. Use it to answer question 30.



30. Which disease does the above animal spread to humans ?

.....
.....



31. Why are the legs of a person who has fainted raised higher than the head as a way of giving first aid ?
.....
.....
32. What name is given to a place where seedlings are grown before transplanting ?
.....
.....
33. Which part of the human ear equalises pressure in and outside the ear ?
.....
.....
34. Name **one** other disease caused by fungi in humans apart from ring worm.
.....
35. What class of food is digested in the stomach ?
.....
.....
36. Give any **one** advantage of castrating farm animals.
.....
.....
37. In the space below, draw a simple diagram of a fibrous root system.

38. How are plastics and glass materials dangerous to soil ?

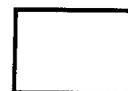
.....
.....

39. Apart from liquids, name **one** other state of matter through which heat is transferred by convection.

.....
.....

40. In which human body organ does gaseous exchange take place ?

.....
.....



SECTION B: 60 MARKS

Questions 41 to 55 carry **four** marks each.

41. (a) Give any **two** examples of a physical change.

(i)

(ii)

(b) State **two** characteristics of a chemical change.

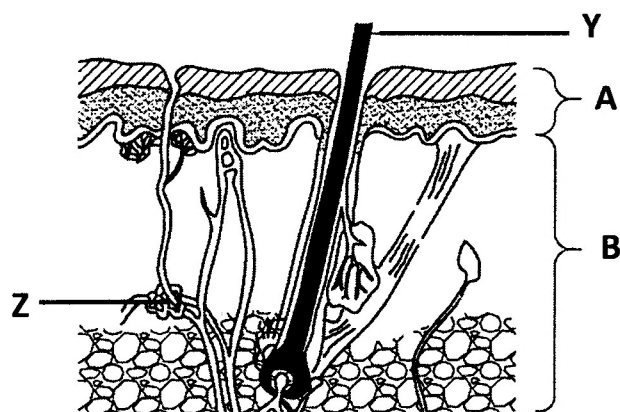
(i)

.....

(ii)

.....

The diagram below is of a human skin. Use it to answer question 42.



42. (a) Name the layers **A** and **B**.

(i) **A**

(ii) **B**

(b) Give the function of the parts labelled **Y** and **Z**.

(i) **Y**

.....

(ii) **Z**

.....

43. (a) Name the **two** types of pollination in flowering plants.

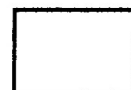
(i)

(ii)

(b) Write any **two** agents of pollination.

(i)

(ii)



44. (a) Give any **two** disadvantages of keeping local breeds of poultry.

(i)

.....

(ii)

.....

(b) Apart from getting money, give any **two** other ways a farmer benefits from keeping poultry.

(i)

.....

(ii)

.....

45. Match each animal in **A** with the correct group to which it belongs in **B**.

A	B
Chameleon	Mammals
Toad	Birds
Bat	Reptiles
Ostrich	Amphibians

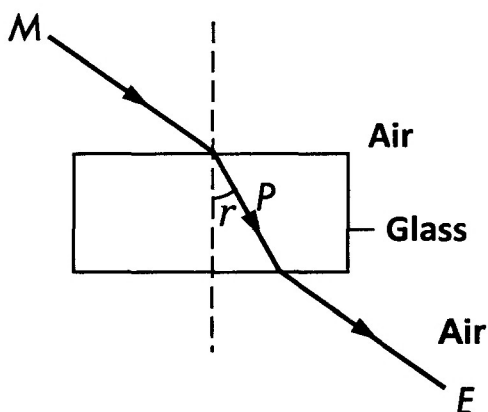
(a) Chameleon

(b) Toad

(c) Bat

(d) Ostrich

The diagram below shows how light passes through a glass block. Study and use it to answer question 46.



46. (a) Name the rays *M* and *P*.

- (i) *M*
- (ii) *P*

(b) Name the angle marked *r*.

.....

(c) Give a reason why ray *P* bends as shown in the diagram.

.....

.....



47. (a) Give **one** reason why dehydration is dangerous to humans.

.....

.....

(b) In which way is Oral Rehydration Solution (ORS) a good treatment for diarrhoea?

.....

.....

(c) Apart from taking ORS, how else can one prevent dehydration ?

.....

(d) How can a person preparing ORS prevent it from contamination ?

.....

48. The table below shows source of food, the food nutrient in it and the related deficiency disease. Complete it correctly.

	Source of food	Food Nutrient	Deficiency disease
(i)	Fruits	Vitamin C	
(ii)	Beans		Kwashiorkor
(iii)		Vitamin A	Night blindness
(iv)	Iodised salt	Iodine	

49. (a) Which type of blood vessels return blood to the heart ?

.....

(b) What is the function of valves in the blood vessels during blood circulation?

.....

(c) What type of blood is carried by most blood vessels with valves ?

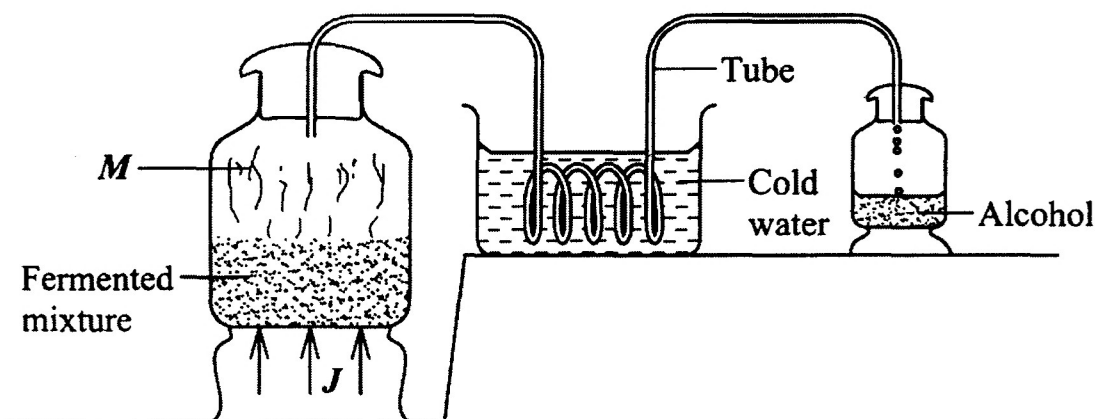
.....

(d) Give any **one** waste material carried by blood.

.....



The diagram below shows one of the methods of preparing alcohol. Study and use it to answer question 50.



50. (a) Name the method used in the diagram.

.....

(b) What do the arrows labelled *J* represent?

.....

(c) Why is the tube passed through cold water?

.....

(d) What process forms *M*?

.....

51. (a) Apart from ante-natal care, give **two** other ways of caring for pregnant women.

(i)

.....

(ii)

.....

(b) In which **one** way should pregnant women protect their unborn babies from malaria ?

.....

.....

(c) Why are pregnant women advised **not** to smoke ?

.....

.....

52. (a) Name the force that brings down all objects thrown up.

.....

(b) (i) When a piece of paper and a rubber are dropped from the same height, which one reaches the ground first ?

.....

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

.....

.....

(c) Why do some objects float on water ?

.....

.....



53. (a) State any **two** reasons why farmers thin their crops.

(i)

.....

(ii)

.....

(b) Apart from thinning, give any **two** other ways farmers care for their crops.

(i)

.....

(ii)

.....

54. (a) Name the type of joint found in each of the following parts of the human body.

(i) Shoulder

(ii) Wrist

(b) What advice would you give to a person to keep the skeletal system in healthy working condition.

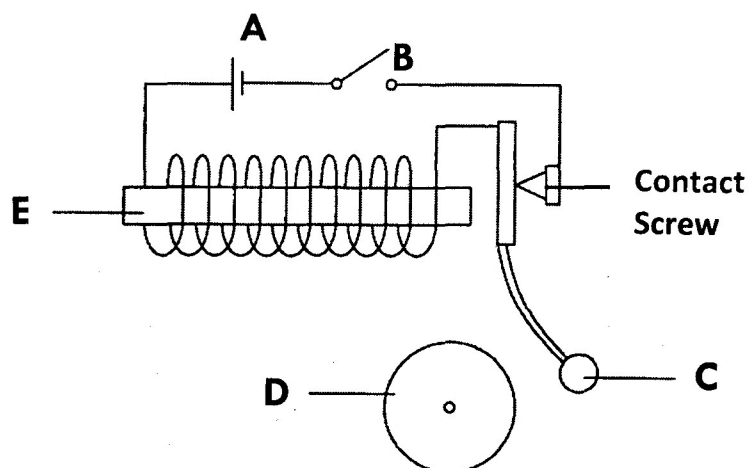
(i)

.....

(ii)

.....

Study the diagram of an electric bell below and use it to answer question 55.



55. (a) Name the parts marked **A** and **C**.

(i) **A**

(ii) **C**

(b) What will happen to **E** when **B** is closed.

.....

(c) How useful is part **D** on the electric bell ?

.....

