



SUREKEY EXAMINATIONS BOARD  
PRIMARY LEAVING MOCK EXAMINATION

2023

INTEGRATED SCIENCE

*Time Allowed: 2 hours 15 minutes*

Index No.	EMIS No.	Personal No.

Pupil's Name: .....

Pupil's Signature: .....

School EMIS No: 

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Read the following instructions carefully:

1. Do not write your **school** or **district name** on the paper.
2. This paper has two sections: **A** and **B**. Section **A** has **40** questions and section **B** has **15** questions. The paper has **16** printed pages.
3. Answer **all** questions. **All** working for both sections **A** and **B** must be shown in the spaces provided.
4. **All** answers **must** be written using a **blue** or **black** ball point pen or ink. Any work written in pencil will **not** be marked.
5. Unnecessary **changes** in your work and handwriting that cannot be read easily may lead to **loss of marks**.
6. Do not fill anything in the table indicated: "**For Examiners' use only**" and boxes inside the question paper.

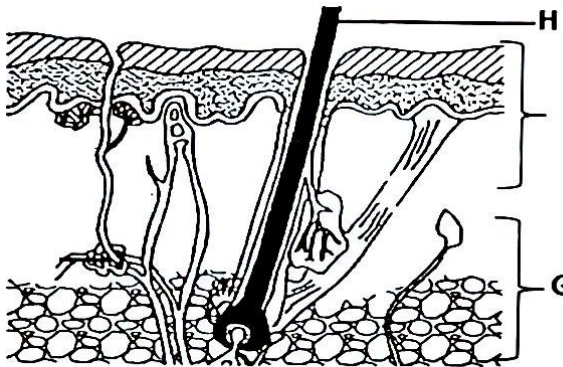
FOR EXAMINERS' USE ONLY		
Qn. No.	MARKS	EXR'S NO.
1 – 10		
11 – 20		
21 – 30		
31 – 40		
41 – 43		
44 – 46		
47 – 49		
50 – 52		
53 – 55		
TOTAL		

## SECTION A: 40 MARKS

Questions 1 to 40 carry **one mark** each

1. Name the main food value that is not found in distilled water.  
.....
2. Which intestinal worm lives in the rectum of human beings?  
.....
3. State any **one** way in which typhoid affects the digestive system.  
.....
4. Give any **one** example of a bird with sharp curved talons.  
.....
5. Which type of pit latrines provide manure to crop farmers?  
.....

The diagram below shows the human skin. Use it to answer questions 6 and 7.



6. Name the layer marked **G** on the skin above.  
.....
7. Give the function of part marked **H** to the human skin.  
.....

8. Why is it not advisable to use cold water when performing tepid sponging on a patient with high fever?

.....

9. Which type of hutch in rabbits is similar to the fold unit system of keeping poultry?

.....

10. Why does a butterfly lay its eggs beneath the leaves of the plant?

.....



11. How does a dolphin benefit from echoes?

.....

12. Write down any **one** activity done during land preparation.

.....

13. State any **one** feature of the lungs which makes them suitable for their function.

.....

14. Why are holes found on a queen excluder in a modern bee hive made very small in size?

.....

15. State any **one** factor to consider when choosing a variety of tuber crops to grow.

.....

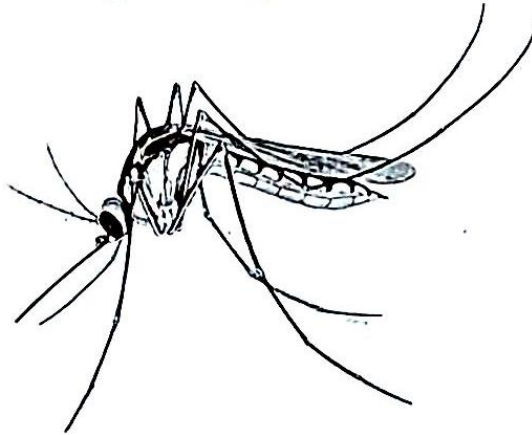
16. State any **one** characteristics of coniferous plants.

.....

17. Give any **one** way in which people can use nonrenewable resources sparingly.

.....

The diagram shows a type of mosquito. Use it to answer questions **18** and **19**.



18. Which infectious disease is transmitted by the type of mosquito shown above?

- .....
19. Give any **one** way of controlling the breeding of the type of mosquito above.

- .....
20. State the property of light that enables people to see their images in plane mirrors.

- .....
21. State any **one** activity done by family members to promote health in the family.

- .....
22. State any **one** advantage of keeping Zebu cattle over Friesian cattle.



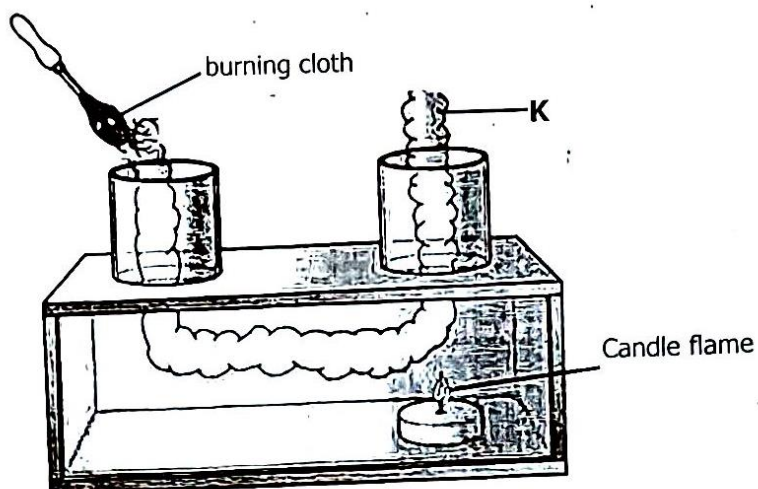
23. Mention any **one** form of energy that does not require a medium of transmission.

.....

24. Why should the pit in which a banana sucker is planted be dug big enough?

.....

The diagram below shows a wooden box with a piece of cloth burning. Use it to answer questions 25 and 26.



25. Name the substance marked **K**.

.....

26. Which method of heat transfer is demonstrated by the diagram above?

.....

27. In which way are short bones important to the circulatory system?

.....

28. State any **one** chemical method of controlling bacterial diseases in people.

.....

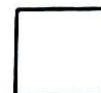
29. State any **one** reason why mothers are encouraged to breastfeed their babies for at least two years.

.....

30. Name the essential drug made from penicillium mould.

.....

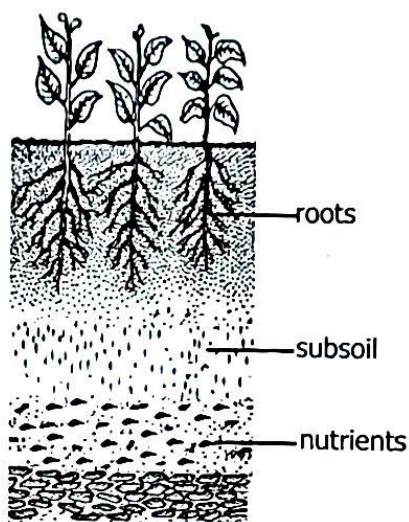
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31. Apart from Merino sheep, name any **one** other exotic breed of sheep that is useful to textile Industries.

.....

The diagram below shows a condition in soil. Use it to answer question 32 and 33.



32. Identify the soil condition shown in the diagram above.

.....

33. How does the condition shown in the diagram above affect soil?

.....

34. Which communicable intestinal disease leads to dehydration?

.....

35. Give any **one** example of nitrogenous wastes removed from the body.

.....

36. How do nursery children benefit from a seesaw at school?

.....

37. Give any **one** reason why an onion is grouped under monocotyledonous plants.

.....

38. Apart from polio, mention any **one** other immunisable disease whose vaccine is administered through oral method.

.....

39. Which part of a cassava plant is affected by the white flies?

.....

40. How does tar affect the human teeth?

.....

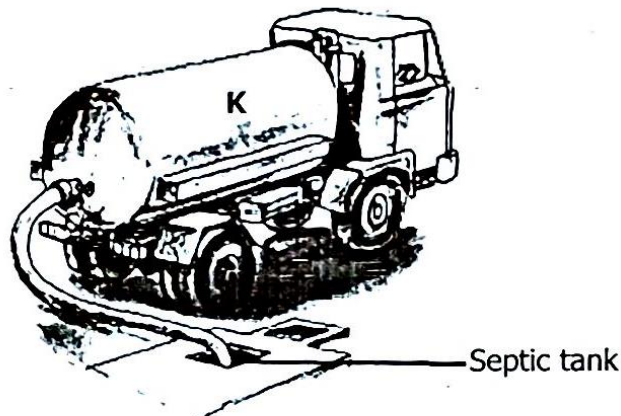


## SECTION B: 60 MARKS

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

41. a) Name the body organ in the human body that controls the level of;
- i) Salt .....
  - ii) Sugar .....
- b) Give any **two** health habits that maintain the efficiency of the body organs named in a) above.
- i) .....
  - ii) .....

42. The diagram below shows a vehicle commonly found in the community. Study and use it to answer the questions that follow.



- a) Name the part marked **K** on the vehicle shown in the diagram above.
- .....
- b) Which element of Primary Health Care (P.H.C) is promoted by the vehicle above?
- .....



- c) How does the vehicle help to promote the element of Primary Health Care (P.H.C) above?

.....

- d) Mention any **one** place where the above vehicle is commonly found.

.....

43. A girl in primary five wanted to find the volume of an Irish potato tuber.

- a) State the method that the girl would use.

.....

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

.....

- c) Write down any **two** other objects whose volume can be found in the same as that of an Irish potato.

i) .....

ii) .....



44. a) Write down **two** signs and symptoms of sleeping sickness.

i) .....

ii) .....

- b) Give any **two** ways of controlling the outbreak of sleeping sickness in area.

i) .....

ii) .....

45. In the table below, part **A** shows practices carried out in farm animals and part **B** has the importance of the practices.

Part A: practices	Part B: importance
Steaming up	Reduces injuries to other animals.
Castration	Increases chances of ovulation.
Flushing up	Controls inbreeding.
Dehorning	Promotes proper foetal growth.

Use the importance in part B of the table to match the practices below.

- a) Steaming up.....
- b) Castration .....
- c) Flushing up .....
- d) Dehorning .....

46. a) Write down any **two** examples of venomous snakes.

i) .....

ii) .....

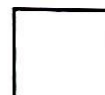
- b) Give any **one** way in which snakes are useful to a crop farmer.

.....

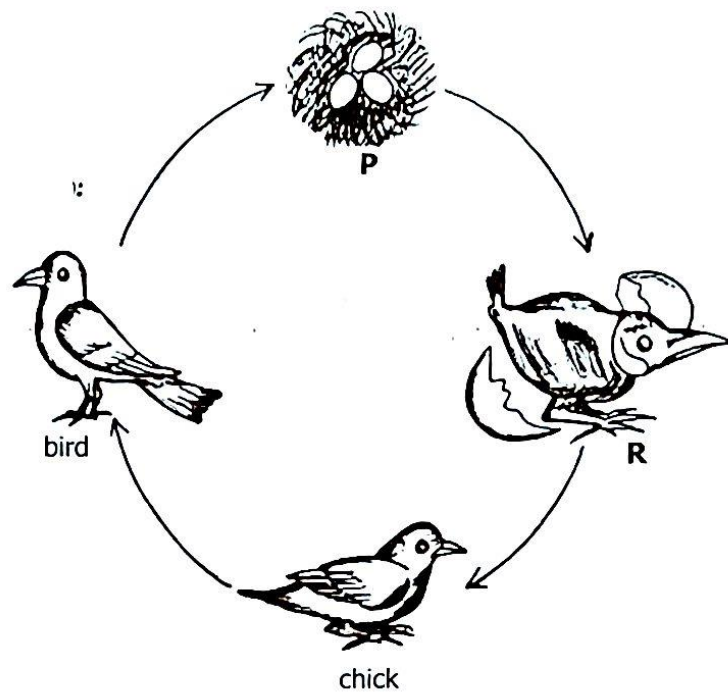
- c) In which way are snakes different from other reptiles in body structure?

.....

.....



47. The diagram below shows the life cycle of a bird. Study and use it to answer the questions that follow.



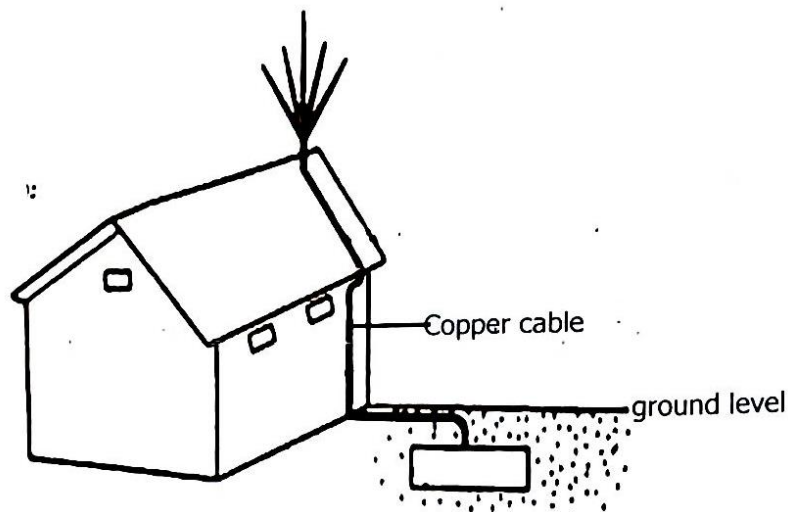
- a) Name the process that takes place at part **P** before stage **R** hatches.
- .....
- b) Identify the type of change shown in the diagram above.
- .....
- c) How does the bird benefit from the type of change shown in the diagram above?
- .....
- d) State any **one** condition necessary for process marked **R** to take place.
- .....

48. a) Name the basic method of soil formation.  
.....
- b) State any **two** factors that lead to the method of soil formation named in a) above.  
i) .....  
ii) .....
- c) Which composition of soil is formed as a result of the method of soil formation named in a) above?  
.....
49. a) Apart from using sacks, state any **two** other ways in which farmers store their crops after harvesting.  
i) .....  
ii) .....
- b) How can farmers prevent sacks containing stored crops from absorbing moisture on the ground?  
.....
- c) Give any **one** reason why crop farmers store their crops after harvesting.  
.....





50. The diagram below shows a structure installed on top of buildings. Study and use it to answer the questions that follow.



- a) Name the form of electricity that the structure above protects the building against.
- .....
- b) How does the structure protect the building against the danger of the form of electricity named in (a) above?
- .....
- c) State the function of the copper cable on the structure above.
- .....
- d) Give any **one** danger of building a house without installing the structure above on it.
- .....

51. a) How are the following parts important in the human heart?
- i) Septum.....
  - ii) Aorta.....
- b) Give any **one** way in which the heart is adapted to its function.  
.....
- c) State any **one** importance of having regular physical exercises to the circulatory system.  
.....
52. a) At what stage do maize plants develop prop roots?  
.....
- b) How are prop roots important to the maize plants during the stage above?  
.....
- c) Give any **two** reasons why prop roots are able to carry out the importance stated in (b) above.
- i) .....
  - ii) .....



53. a) How does sugar behave when put in liquid tea?

.....

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

.....

c) Mention any **two** other substances in which sugar behaves as stated in (a) above.

i) .....

ii) .....

54. a) Which health condition in human beings results from reduced supply of oxygenated blood to the brain?

.....

b) Write down any **two** factors that can lead to the health condition above in human beings.

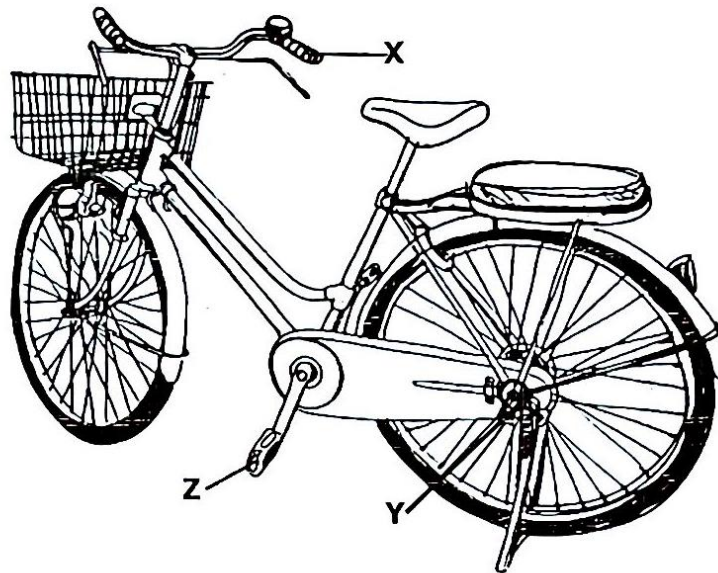
i) .....

ii) .....

c) How can a casualty with the health condition above be helped to allow the flow of oxygenated blood to the brain?

.....

55. The diagram below is of a bicycle showing some parts under simple machines. Study and use it to answer the questions that follow.



- a) Name the structures on the bicycle handles marked **X**.  
.....
- b) State the importance of the structure named in a) above on the bicycle handles.  
.....
- c) How does part marked **Z** simplify work when riding a bicycle?  
.....
- d) State any **one** way of reducing friction in part marked **Y**.  
.....

