



SUREKEY EXAMINATIONS BOARD

PRIMARY SEVEN PLACEMENT SET

2023

INTEGRATED SCIENCE

*Time Allowed: 2 hours 15 minutes*

Index No.						Personal No.		

**Pupil's Name:** .....

**Pupil's Signature:** .....

**School Name:** .....

**District Name:** .....

**Read the following instructions carefully:**

1. Do not forget to 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 **14** 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		
<b>TOTAL</b>		

## SECTION A: 40 MARKS

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

1. Name the gas used by leguminous plants to make proteins.

.....

2. State the vector that spreads elephantiasis to people.

.....

3. Which condition is caused by foreign bodies in the throat?

.....

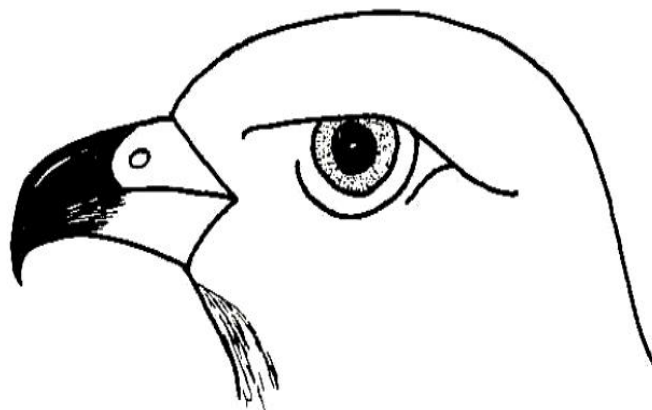
4. Name the group of crops that provide single harvests.

.....

5. State any **one** way of controlling the spread of scabies among children.

.....

The diagram below is of a beak of a certain group of birds. Study and use it to answer question **6** and **7**.



6. Which group of birds have the above beak?

.....

7. How are birds with such a beak dangerous to a poultry farmer?

.....

8. Which type of manure is got from animal droppings?

.....

9. Give any **one** role played by school children in promoting PIASCY messages.

.....

10. Apart from hearing, in which other way is the ear useful to a person?

.....



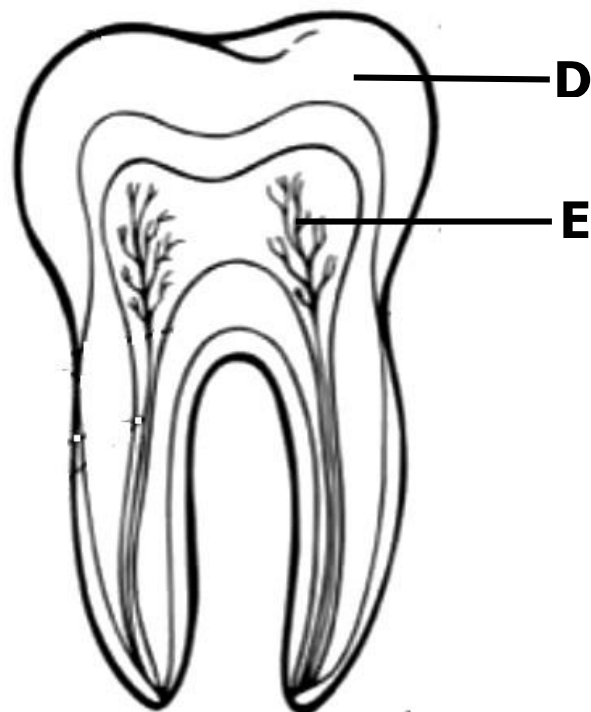
11. State any **one** way in which propolis is important to worker bees.

.....

12. Which process in plants is similar to sweating in human beings?

.....

The diagram below shows a molar tooth. Use it to answer questions **13** and **14**.



13. Name the part labelled **D**.

.....

14. Give the function of part marked **E** to the tooth.

.....

15. How is a strip cup useful to cattle farmer?

.....

16. Give **one** way of improving immunity in children.  
.....
17. State any **one** danger of buying drugs from local shops.  
.....
18. What type of weather is suitable during planting crops?  
.....
19. Give any **one** natural factor that degrades the environment.  
.....
20. Apart from eating food rich in iron, state any **one** other way of increasing the volume of blood in the body.  
.....
21. Which part of the fish is used for detecting sound waves in water?  
.....
22. State any **one** characteristic that shows a grasshopper is an arthropod.  
.....
23. Which breed of goat is mainly kept for mahair production?  
.....
24. Give any **one** condition that can lead to bottle feeding.  
.....
25. State any **one** way in which heat transfer by convection is useful to people.  
.....



26. Name the deficiency disease that causes gums to bleed.

.....

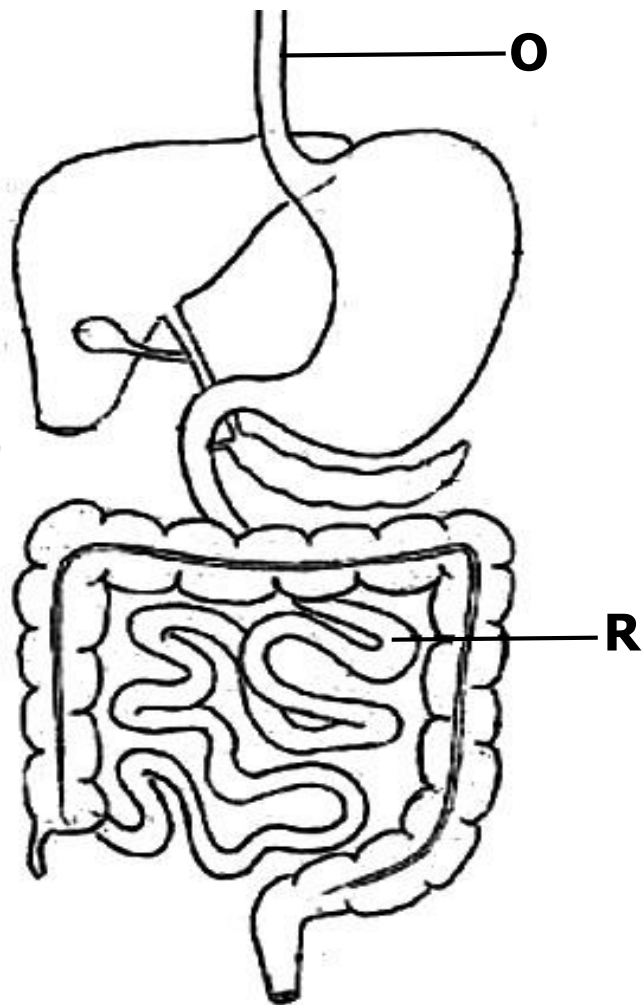
27. Give any **one** way in which polythene bags cause soil exhaustion.

.....

28. State any **one** way in which doing regular physical exercises are important in the body.

.....

The diagram below shows part of the digestive system. Study and use it to answer questions **29** and **30**.



29. Name the part marked **O**.

.....

30. State any **one** way in which part marked R is able to absorb digested food.

.....



31. Why is water called matter?

.....

.....

32. Which system of keeping poultry does not restrict the movement of birds?

.....

33. What form of energy enable the eyes to function?

.....

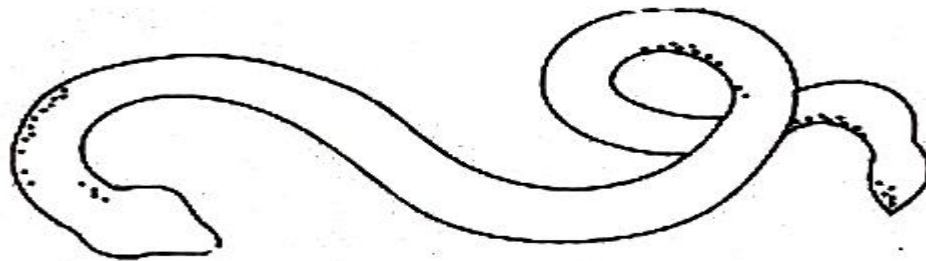
34. Give any **one** way seed dispersal is important in the environment.

.....

35. Give any **one** reason why animals move from one place to another.

.....

The diagram below shows an intestinal worm. Use it to answer questions **37** and **38**.



36. Identify the intestinal worm shown in the diagram above.

.....

37. How is feeding of the above worm different from that of a tape worm?

.....

.....

38. State any **one** factor to consider when sorting clothes for washing.

.....

39.

Name **one** bacterial disease that spreads through drinking contaminated water.

.....
40.

Give any **one** life skill that safeguards school children against smoking.

.....

**SECTION B: 60 MARKS**  
Questions **41** to **55** carry four marks each.

41.

a)

State any **two** ways in which vectors spread germs.

i)

.....

ii)

.....

b)

Give any **two** ways of controlling insect vectors.

i)

.....

ii)

.....

42.

a)

Give any **two** elements of Primary Health Care (PHC).

i)

.....

ii)

.....

b)

State any **two** principles of Primary Health Care (PHC).

i)

.....

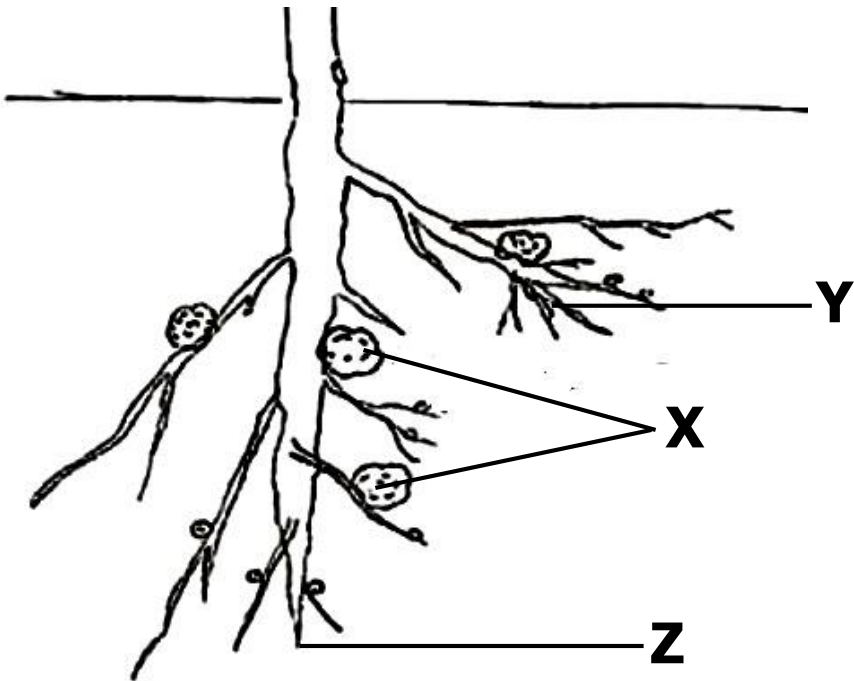
ii)

.....

7

Turn Over

43. The diagram below is of the root system. Study and use it to answer the questions that follow.



- a) Name the part marked **Z**.  
.....
- b) Give the function of part marked **Y** to a plant.  
.....
- c) Write down any **one** plant that has part marked **X** on its roots.  
.....
- d) What type of root system is shown above?  
.....



44. a) What type of changes form new permanent substances?  
.....
- b) Give any **one** characteristic of such changes.  
.....
- c) Mention any **two** examples of such changes.
- i) .....
  - ii) .....



45. In the table below, part **A** shows terms commonly used in measurement and part **B** shows their meaning.

Part <b>A</b> : Terms.	Part <b>B</b> : Meanings
Mass	Force of gravity acting on an object
Volume	Mass per unit volume of a substance
Density	Quantity of matter an object contains
Weight	Amount of space an object occupies

Match correctly the terms with their meanings in the spaces provided below.

- i) Mass .....
- ii) Volume .....
- iii) Density .....
- iv) Weight .....

46. a) Write down any **two** things that happen to air in the nose during inhalation.

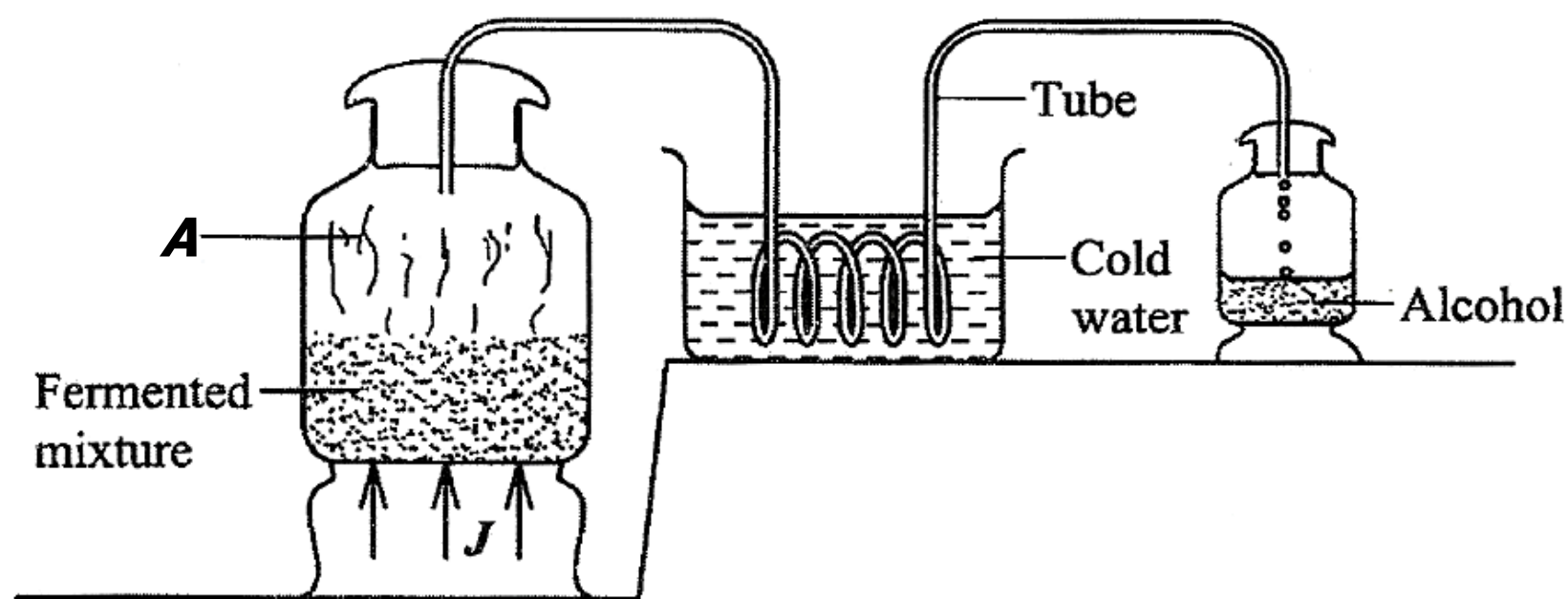
- i) .....
- ii) .....

b) How are the following parts important to the trachea?

- i) epiglottis. ....  
.....
- ii) rings of cartilage. ....  
.....



47. The diagram below shows a method of obtaining pure alcohol. Study carefully and use it to answer the questions that follow.



- a) Identify the method of making alcohol shown in the diagram above.  
.....
- b) Name the physical process that takes place at **A**.  
.....
- c) State the importance of cold water in the above method of making alcohol.  
.....
- d) Give the reason why the delivery tube is coiled as shown in the diagram above.  
.....

48. a) Give the meaning of the term steaming up.  
.....  
.....
- b) Identify the class of food used for steaming up cows.  
.....

c) State any **two** advantages of steaming up a cow before calving.

i) .....

ii) .....

49. a) Apart from raising the hutch above the ground, write down any **two** other qualities of a good hutch.

i) .....

ii) .....

b) Why should the rabbit hutch be raised above the ground?

.....

c) State any **one** way of controlling diseases in rabbits.

.....



50. a) Give the meaning of the following terms.

i) Puberty .....

.....

ii) Adolescence .....

.....

b) State any **two** secondary sex changes in male adolescents.

i) .....

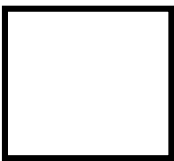
ii) .....

51. The diagram below shows a structure that is commonly put in the garden by crop farmers. Study and use it to answer the questions that follow.



- a) Name the structure shown in the diagram above.  
.....
- b) Why do crop farmers put the above structure in their gardens?  
.....  
.....
- c) Mention any **one** local material that can be used to make the above structure.  
.....
- d) What form of mechanical energy is possessed by the above structure when put in the garden?  
.....

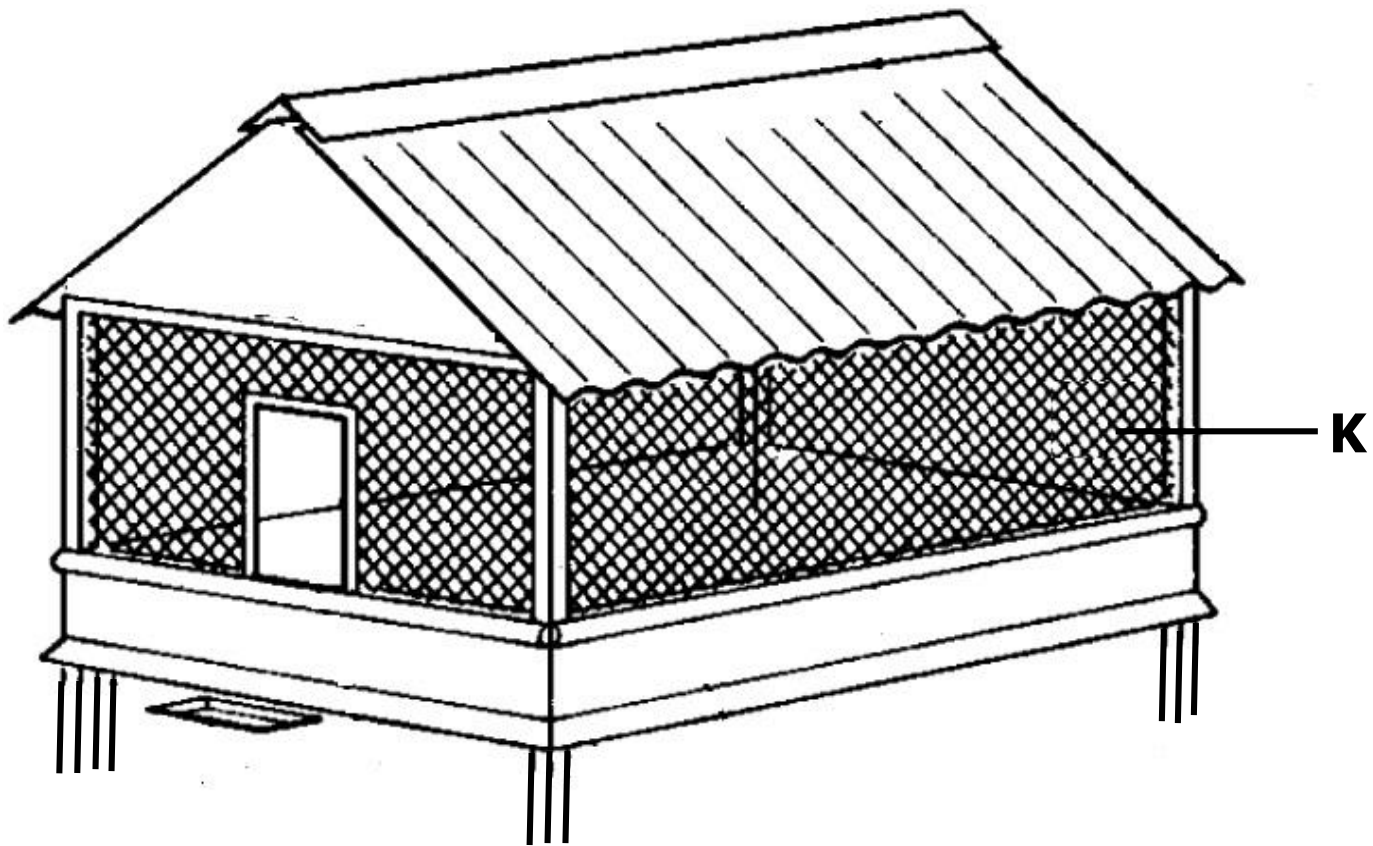
52. a) Name any **two** examples of fungi.
- i) .....
- ii) .....
- b) Give any **two** ways in which fungi are useful to people.
- i) .....
- ii) .....



53. a) Apart from salting, mention any **two** other methods used to prevent meat from going bad.
- i) .....
- ii) .....
- b) In which way does salting prevent meat from going bad?
- .....
- c) Name any **one** element of a balanced diet.
- .....

54. a) State the main cause of fainting.
- .....
- c) Give any **two** conditions that can lead to fainting.
- i) .....
- ii) .....
- d) Why should the legs of a person who has fainted be raised slightly higher than the head?
- .....

55. The diagram below shows a system of keeping poultry. Study and use it answer the questions that follow.



- a) Name the system of keeping poultry shown above.
- .....
- b) State any **one** reason why part marked K is used when constructing the above shown poultry house.
- .....
- c) Give any **two** advantages of using the above system of keeping poultry.
- i) .....
- ii) .....





