

SURE KEY EXAMINATIONS BOARD  
SPECIAL PRIMARY LEAVING EXAMINATION  
2021  
INTEGRATED SCIENCE

**Time Allowed: 2 hours 15 minutes**

<b>Index No.</b>	<b>Random No.</b>	<b>Personal No.</b>

**Candidate's Name:** .....

**Candidate's Signature:** .....

**School Random No.** .....

**District ID:**.....

**Read the following instructions carefully:**

1. Do not write your **school** or **district name** anywhere on this 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** altogether.
3. Answer **all** questions. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
4. **All** working must be done using a **blue** or **black** ball point pen or ink. Any work done in pencil will **not** be marked.
5. Unnecessary **changes** in your work and handwriting that cannot easily be read 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 component of blood attacked by plasmodia parasites.

.....

2. Which thermometric liquid is used in the six's thermometer to measure maximum temperature?

.....

3. State any **one** effect of accidents to the body.

.....

4. How does the continued use of polythene papers harm the environment?

.....

.....

5. Mention any **one** group of people who need special care and diet.

.....

6. How does painting of metals prevent them from rusting?

.....

.....

7. What happens to pollen grains after they have been deposited on the stigma?

.....

8. Name the fluid that allows the smooth movement of bones at a joint.

.....

9. Give any **one** feature that proves a bat to be a mammal.

.....

10. What structures enable the absorption of food to take place in the ileum?

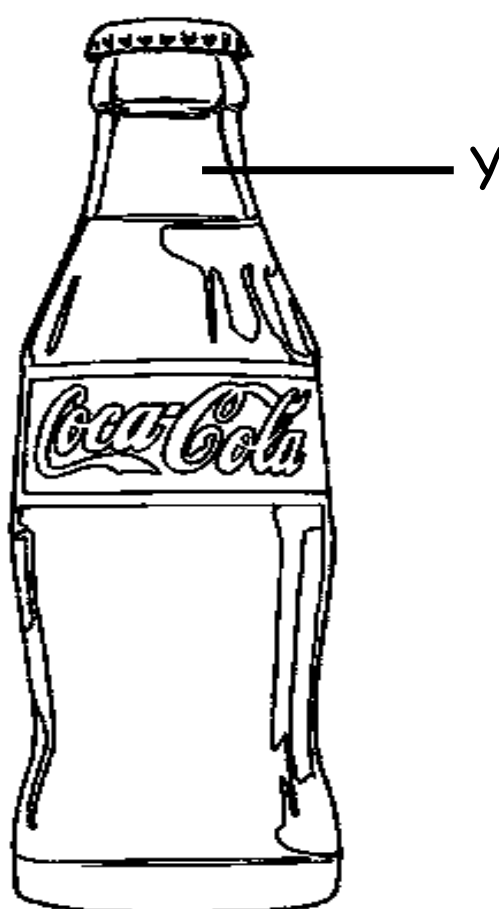
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11. What makes clay soil to have a high water retention capacity?

.....

The diagram below is of a sealed soda bottle. Use it to answer questions 12 and 13.



12. Why is the space labeled **y** left in the bottle?

.....

13. Name the gas that bubbles out when the bottle is opened.
- .....
14. Why is it important for people to go for regular medical check-ups even if they are not sick?
- .....
- .....
15. Why should a pit latrine be built far away from the water source?
- .....
16. How can the School Health Committee tell whether a child is already immunized against Tuberculosis without referring to the child Health Card?
- .....
17. In what way is iodine important in our diet?
- .....
18. Which blood group is considered to be a universal donor?
- .....
19. Apart from fish, name one other example of an animal that breathes through gills.
- .....
20. How does the washing of hands after visiting a latrine and before eating food help in the control of diarrheal diseases?
- .....



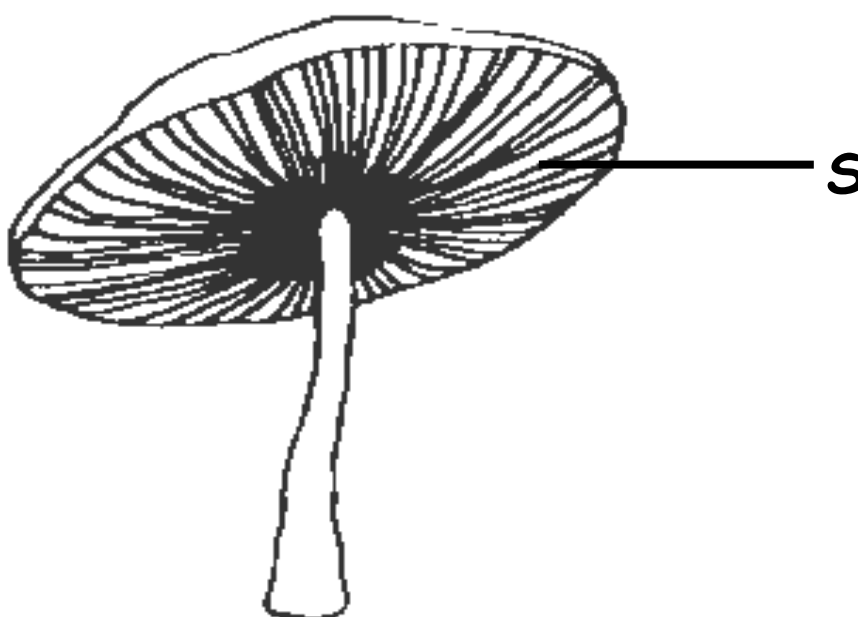
21. Why is milk left in an open place become sour after some time?

.....

22. State the importance of keeping fingernails short.

.....

Below is a diagram of mushroom. Use it to answer questions  
**23 and 24**



23. To which group of living things does the mushroom belong?

.....

24. Give the function of part marked **S** on the mushroom above.

.....


25. In which way does draining of stagnant water help in the control of elephantiasis?

.....

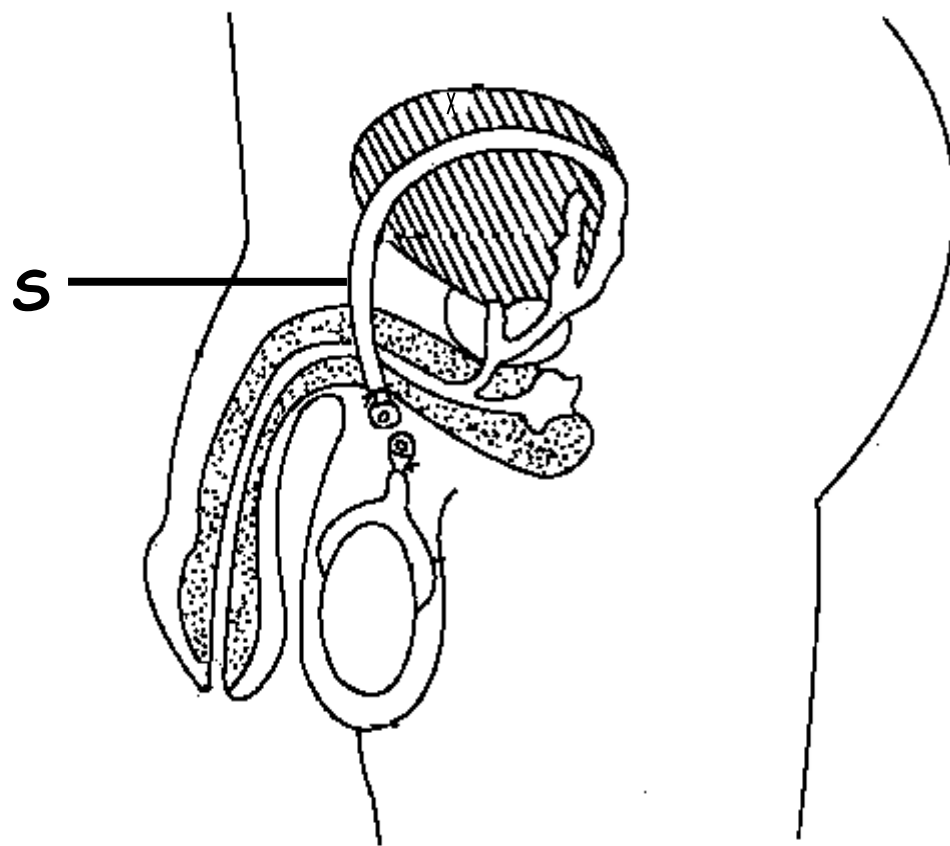
26. Why are the muscular walls of the left ventricle in the mammalian heart thick?

.....

.....

27. Give any **one** way a cassava plant obtains its food when its leaves have fallen off.
- .....
28. Which process in dogs is similar to sweating in humans?
- .....
29. What type of change takes place when rubbish is burnt?
- .....
30. How does breast milk boost the immunity of a baby?
- .....
- 
31. State any **one** way in which friction is useful to a candidate who is writing his / her Primary Leaving Examinations (PLE).
- .....
32. Why shouldn't people with HIV /AIDS be isolated?
- .....
33. Give any **one** way in which pulleys are applied at school.
- .....
34. Give **one** non metallic substance that conducts electricity in an electric circuit?
- .....

The diagram below shows a permanent birth control method in males. Use it to answer questions **35** and **36**.



35. Which permanent method of birth control is shown in the diagram?

.....

36. State the function of part marked **S** during mating.

.....

37. Why are walls of a vacuum flask silvered?

.....

38. Why do farmers who keep pigs carry out tooth clipping in piglets?

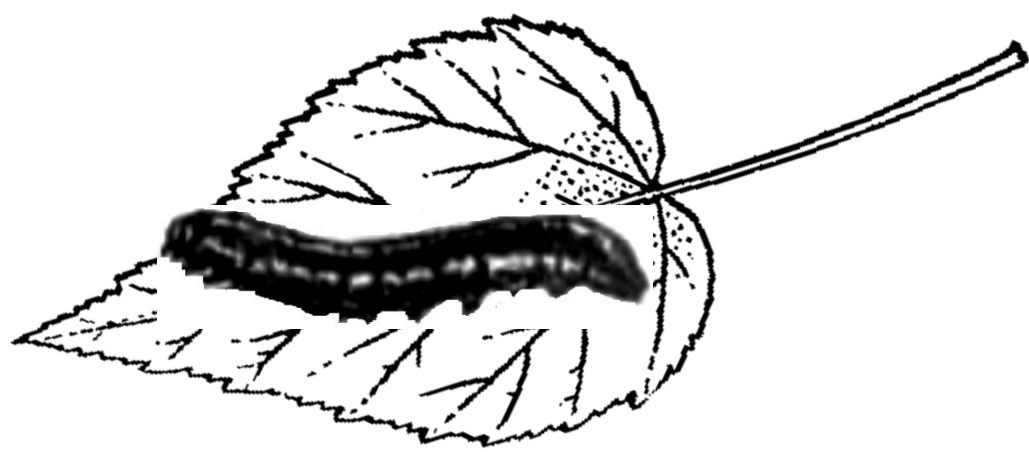
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39. How is the reproduction of toad stool different from that of yeast?

.....

.....

The diagram below shows a crop pest. Use it to answer questions **40**.



40. Name **one** crop attacked by the above pest.

.....



**SECTION B: 60 MARKS**

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

41. (a) Name the viral water borne disease of the muscular skeletal system.

.....

(b) Give any **one** way in which the disease in (a) affects the body.

.....

(c) State any **two** ways through which the spread of the above viral disease can be controlled among human beings.

(i) .....

.....

(ii) .....

.....



42. (a) Give any **two** examples of plants that are grouped under Corms.

(i) .....

(ii) .....

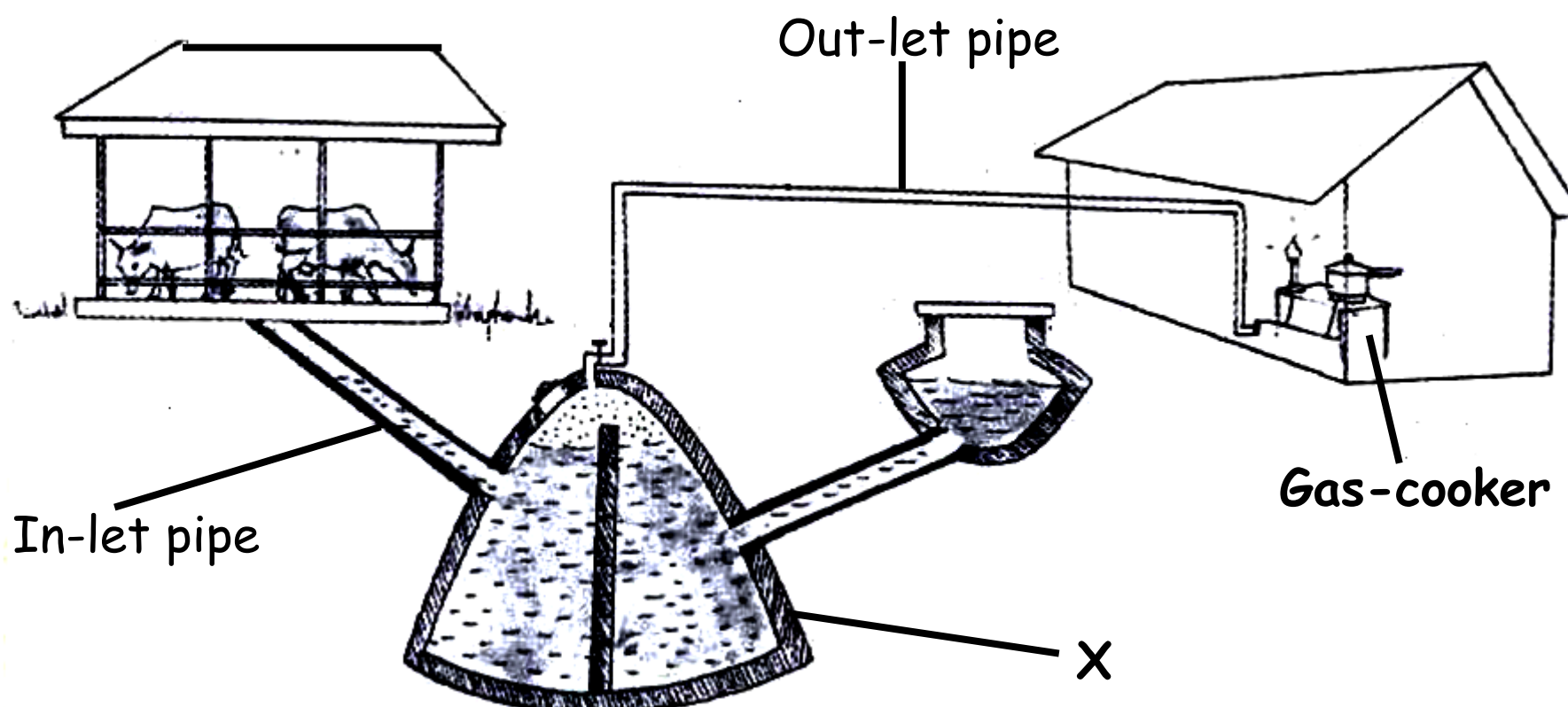
(b) Apart from planting suckers, state any **one** other way of propagating pineapples.

.....

(c) Why is a sugarcane plant not grouped under stem tubers yet it stores its food in the swollen stem?

.....

43. The diagram below shows a method of producing fuel at home. Use it to answer the questions that follow.



(a) Name the fuel used by the gas-cooker in the diagram above.

.....

(b) Mention any **one** material used to produce the above fuel.

.....

(c) How does the production of the above fuel help in promoting sanitation in the environment?

.....

(d) Give **one** reason why equipment marked X should be buried under ground.

.....



44. (a) Give any **two** reasons why a spider is not called an insect.

(i) .....

(ii) .....

(b) In which **one** way is a spider useful to humans?

.....

(d) How does a spider benefit from its cobweb?

.....

45. (a) Apart from digestive system, to which other body system does the liver belong?

.....

(b) Give any **two** functions of the liver in the body.

(i) .....

(ii) .....

(c) State any one way of keeping the liver in proper working conditions.

.....

46. (a) Write down any **two** causes of soil exhaustion.

(i) .....

(ii) .....

(b) State any **one** way in which soil exhaustion affects crop production.

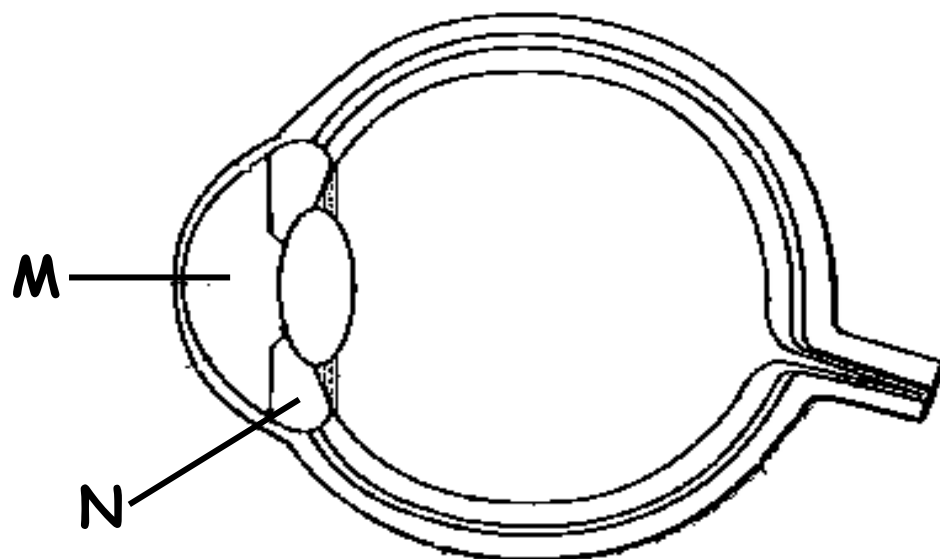
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(c) Give any **one** way of controlling soil exhaustion in an area.

.....



47. Below is a structure of a human eye. Use it to answer the questions that follow.



(a) Name parts marked M and N

**M** .....

**N** .....

(b) State the function of part marked N in the eye.

.....

(c) What change would occur in part N when a person entered a room with bright light?

.....

48. The list below is of living things in the environment. Use it to answer the questions that follow.

**Grass, Leopard, chicken, locust.**

- (a) Use the given list to construct a correct food chain.

.....

- (b) Which living thing in the list above is a;

(i) producer .....

(ii) secondary consumer .....

- (c) Name the source of energy for the above producer.

.....

49. (a) Why are victims that have taken poison such as petrol and paraffin noted to vomit?

.....

- (b) Apart from petrol and paraffin, give any other example of a corrosive poison.

.....

- (c) Why should a poisoned person be given a lot of fluids?

.....

- (d) Give any **one** way of preventing poisoning at home.

.....



50. In the table below, part A shows terms used in poultry farming and part B has the meanings of the terms.

Part A	Part B
(i) Debeaking	Removal of un productive birds from the flock.
(ii) Incubation	Provision of care to young chicks.
(iii) Brooding	Shortening of the birds upper beak
(iv) Culling	Provision of necessary conditions for eggs to hatch.

Use the meaning in part B of the table to match the terms below.

- (i) Debeaking .....  
 .....
- (ii) Incubation .....  
 .....
- (iii) Brooding .....  
 .....
- (iv) Culling .....  
 .....



51. (a) Mention any **two** causes of truancy among school children.
- (i) .....  
 (ii) .....

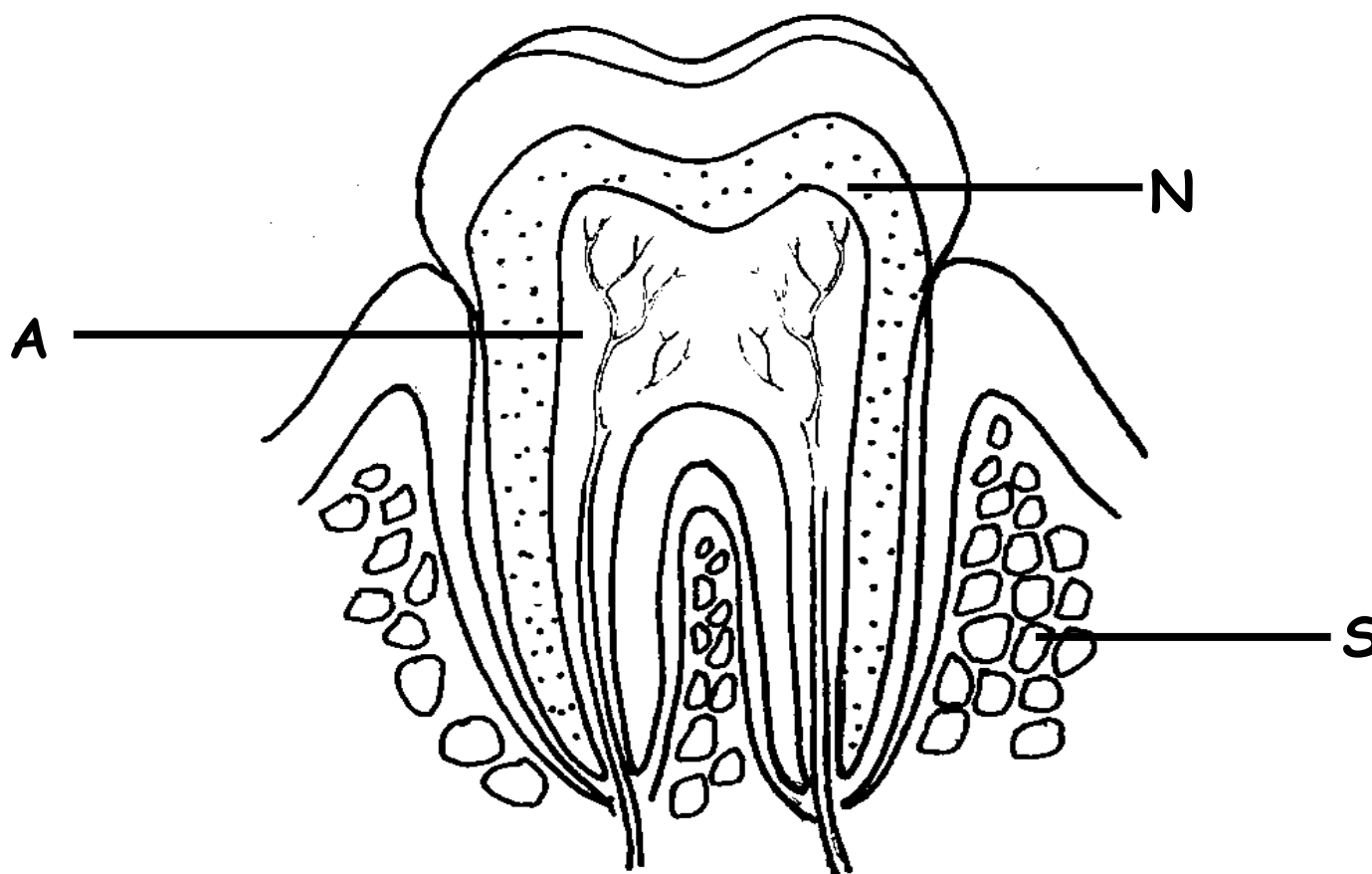
- (b) State any **one** way truancy can be prevented among school children .

.....

- (c) Apart from truancy, give any **one** other example of anti-social behavior commonly practiced by school children.

.....

52. Below is a structure of a molar tooth. Use it to answer the questions that follow.



- (a) Name part marked N.

.....

- (b) Mention the vitamin that helps to strengthen the gum and part marked S.

.....

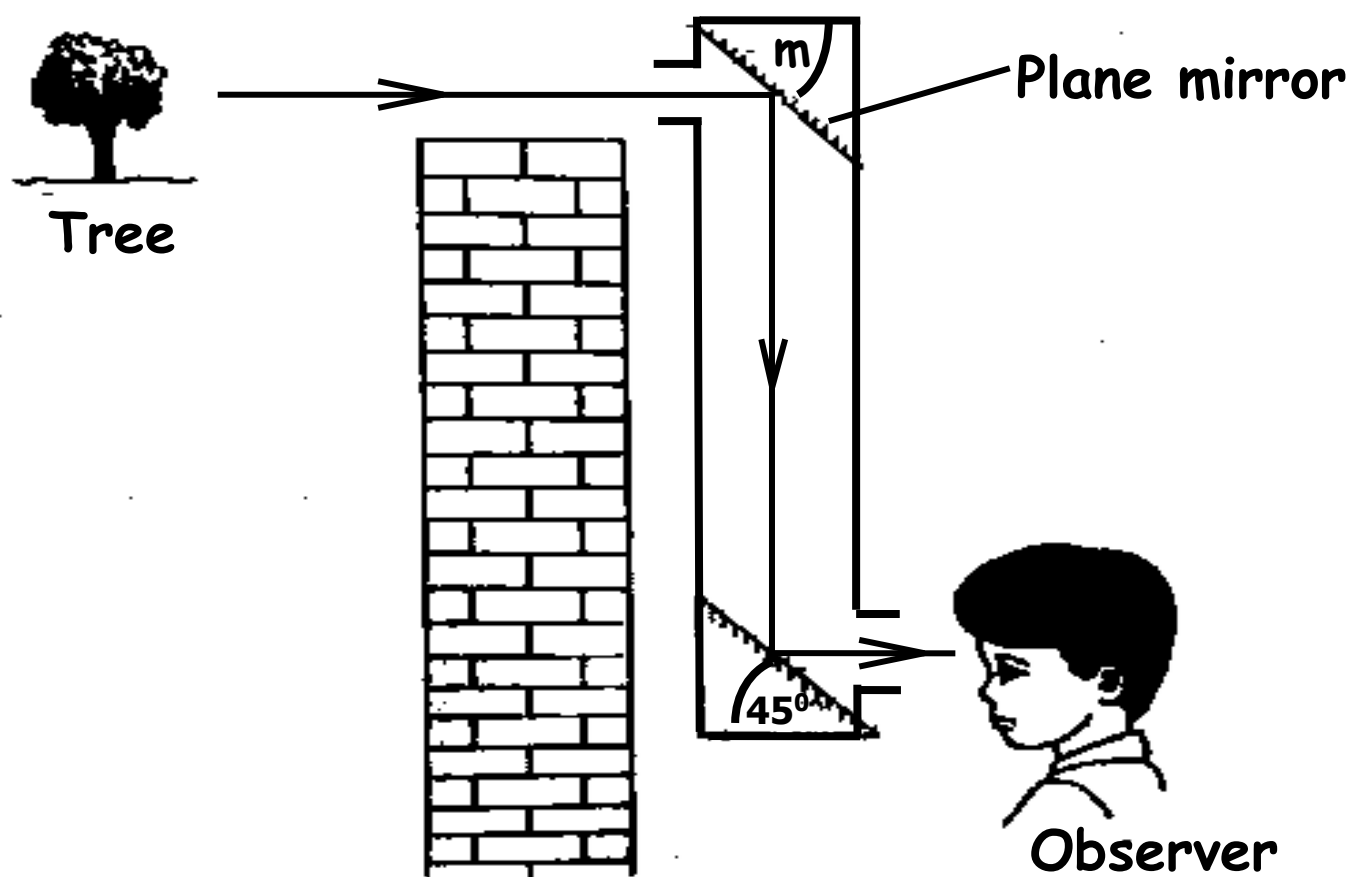
- (c) State the function of part marked A.

.....

- (d) How is the above tooth adapted to its function?

.....

53. The diagram below shows an optical instrument. Use it to answer the questions that follow



- (a) Name the optical instrument shown above.  
.....
- (b) State **one** way the above optical instrument is applied in daily life.  
.....
- (c) How is the observer able to see the tree?  
.....
- (d) What is the value of angle **m** in the diagram above?  
.....



- 54. (a) Give **one** structural difference between monocotyledonous and dicotyledonous plants in the following parts ,
  - (i) leaves .....  
.....
  - (ii) roots .....  
.....

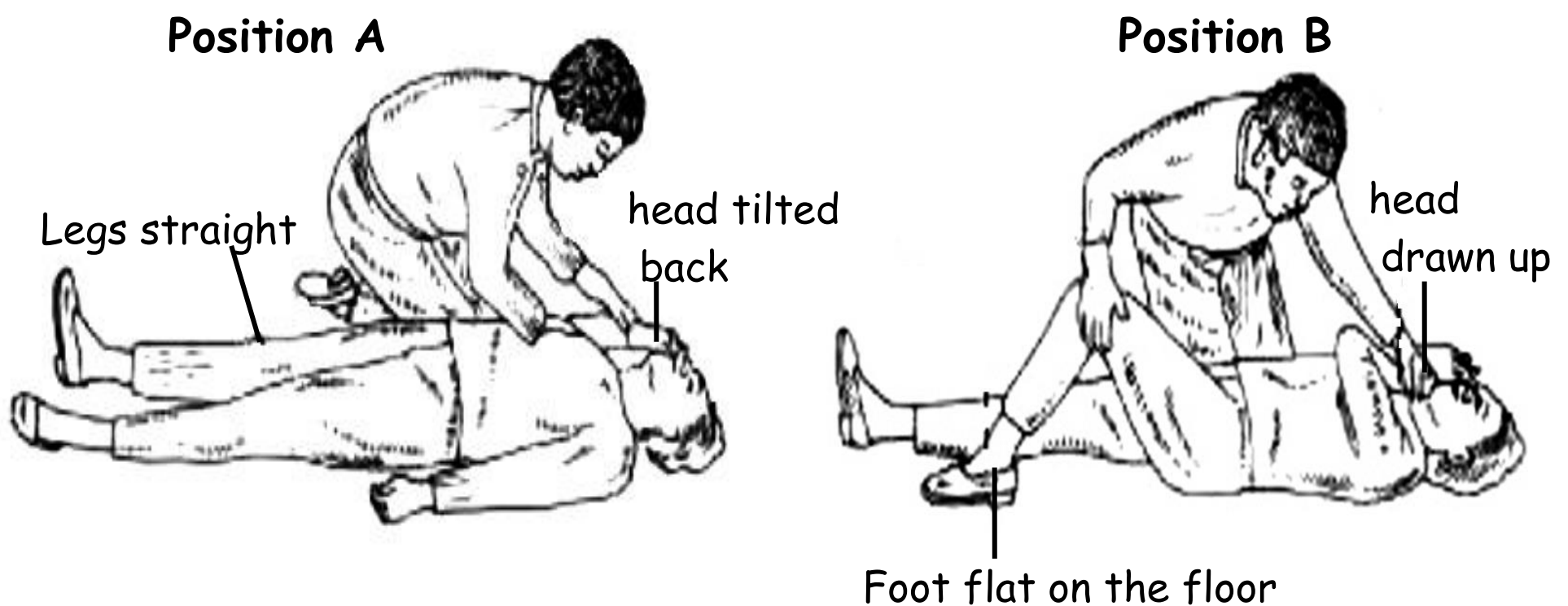
(b) How are leaves of green plants adapted to photosynthesis?

.....  
.....

(c) Where in dicotyledonous plants is food stored during germination?

.....

55. The diagrams below shows two recovery positions from a certain accident. Use them to help you answer the questions that follow.



(a) Identify the kind of accident shown in the diagram above.

.....

(b) What is the major cause of the above accident in human beings?

.....

(c) State **one** factor that can lead to the above accident.

.....

(d) What is the advantage of drawing the leg up when giving first aid for the above accident?

.....

