

SURE KEY EXAMINATIONS BOARD
PRIMARY LEAVING EXAMINATION
2020

INTEGRATED SCIENCE

Time Allowed: 2 hours 15 minutes

Index No.	Random No.						Personal No.		

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 **15 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. Mention any **one** process in plants which requires oxygen to take place.

.....

2. What is the importance of maggots in a pit latrine?

.....

3. Which germ causes anthrax in livestock?

.....

4. Name the state of matter, where water is in vapour form.

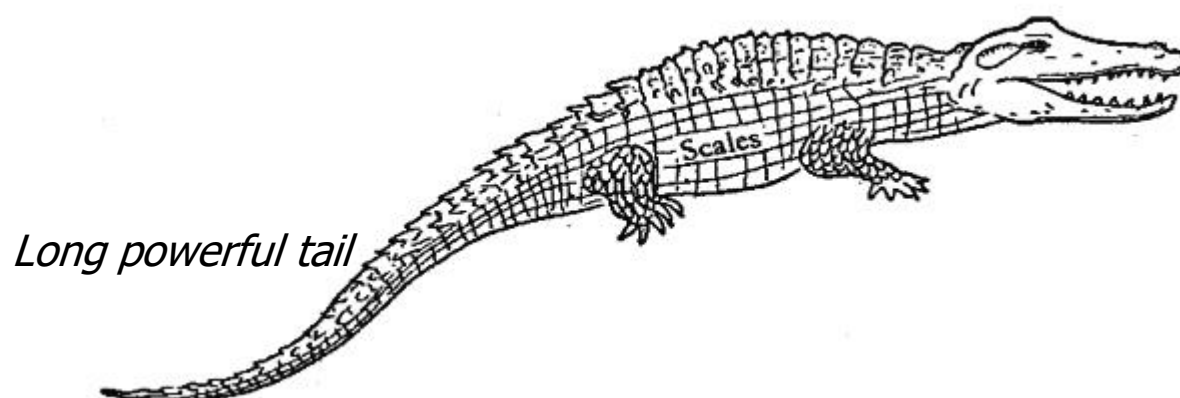
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5. How is the cactus tree or plant able to reduce the rate of transpiration?

.....

.....

The diagram below shows a reptile. Study it and answer questions **6** and **7**.



6. State **one** characteristic of the above reptile.

.....

7. Give **one** use of the long powerful tail to the reptile above.

.....

8. Why is hair of importance on the body of mammals?

.....

9. What is the importance of the micropyle to the bean seed?

.....

10. How does a duck billed platypus differ from all other mammals in the mode of reproduction?

.....

.....



11. State the only excretory organ that excretes the carbon dioxide gas as a waste matter from our body.

.....

12. What is the important role carried out by the skin in earthworms?

.....

13. Mention any **one** permanent birth control method in men.

.....

14. Why doesn't sandy soil hold water for a long time?

.....

.....

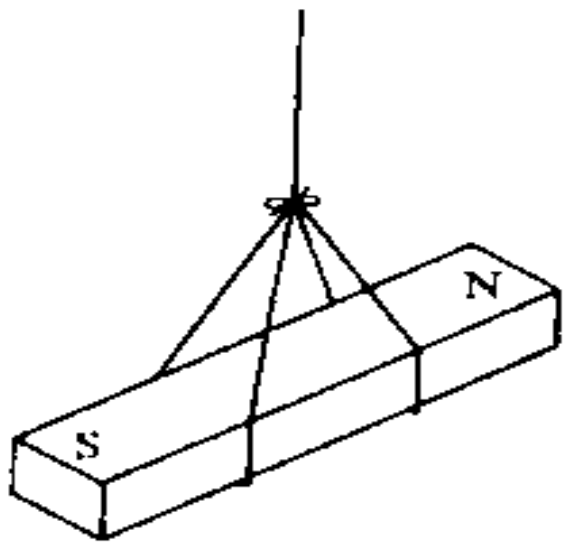
15. How is a jack fruit seed adapted to its mode of dispersal?

.....

16. What is the use of a lactometer to a milk vendor?

.....

Below is an illustration of a property of magnet. Use it to answer Question **17**.



17. Name the property of magnet illustrated above.

.....

18. State any **one** way in which a water pond near a school is of great danger.

.....

19. Give **one** importance of trees in controlling of air pollution.

.....

20. Gilamia touched a kettle full of water and found it to be hot. Which body sense enabled her to tell that the kettle was hot?

.....



21. Why should both partners go for treatment if a wife or husband has gonorrhoea?

.....

.....

22. Why should a community care for water sources?

.....

23. Give the importance of the albumen during incubation of birds' eggs.

.....

24. Name the organ in the body which controls the amount of sugar in the blood.

.....

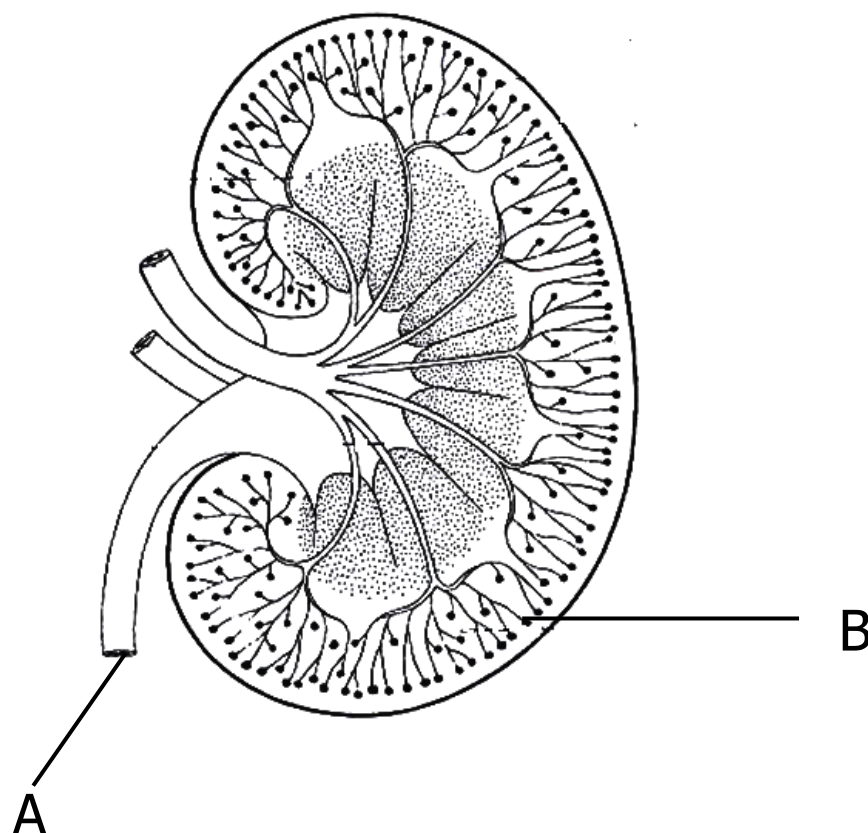
25. State the similarity between rickets and poliomyelitis as skeletal system diseases.

.....

26. Which force causes tear and wear in the moving parts of machines?

.....

The diagram below is of a kidney. Use it to answer questions **27** and **28**.



27. Name part marked **A**.

.....

28. State the importance of part marked **B** in the kidney.

.....

29. What is the importance of the stigma in flowers during pollination?
.....
30. How does oiling of metallic tools prevent rusting?
.....
- A small empty rectangular box with a black border, positioned to the right of the question number 30.
31. Give the danger of over cultivation to the soil.
.....
32. Apart from rubber and metals, mention **one** other recyclable resource.
.....
33. Which form of energy causes water to exist in all the three states of matter?
.....
34. Why should farmers test seed viability before planting them?
.....
35. State the resource in the environment that enables the skin to make vitamin D.
.....
36. What disease is someone most likely to suffer from when bitten by a dog?
.....
37. Give the insect whose larva stage is called grub.
.....

38. Why is the rate of urinating higher on cold days?

.....

.....

39. State the danger of rats to human health.

.....

40. How is regular blinking important to the eye?

.....

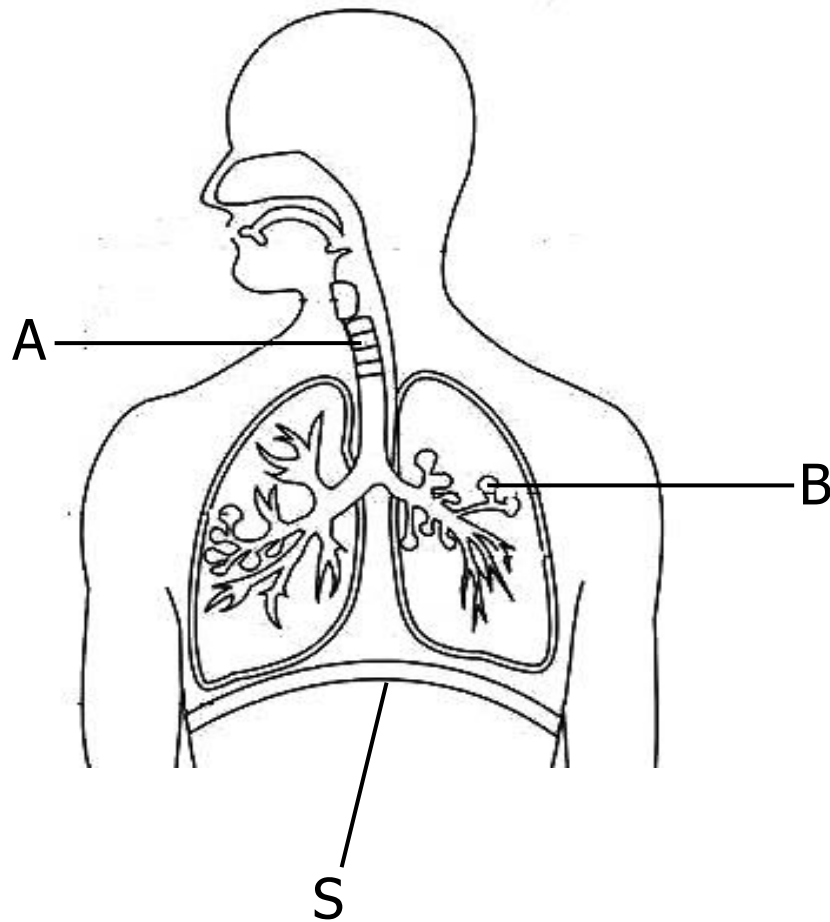
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SECTION B: 60 MARKS

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

41. The diagram below is of a body system. Study it and answer the questions that follow.



- (a) Name parts marked with letters,

A

B

- (b) What happens to part marked **S** during,

- (i) inhalation

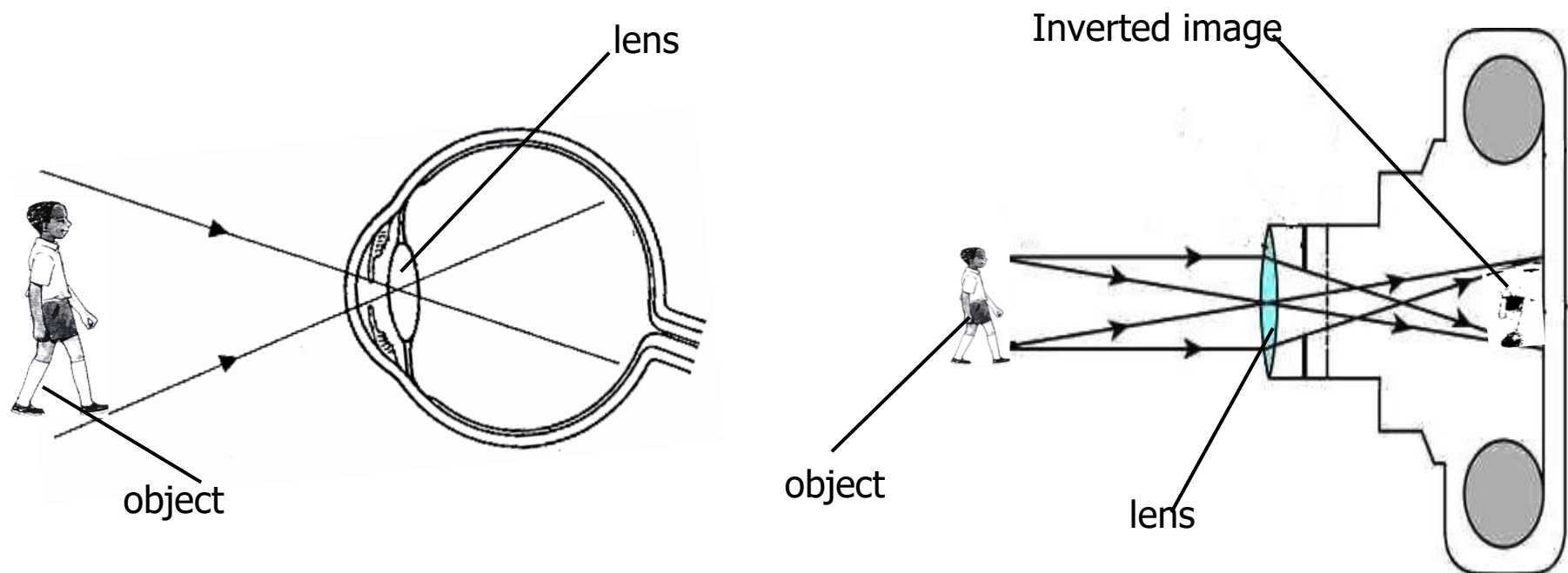
.....

- (ii) exhalation

.....

42. (a) What are malnutritional diseases?
.....
- (b) Mention any **two** examples of malnutritional diseases.
- (i)
- (ii)
- (c) State the best way of avoiding malnutritional diseases.
.....
43. (a) Give any **two** components of the soil.
- (i)
- (ii)
- (b) Which component of soil improves upon its water holding capacity?
.....
- (c) What component of the soil does the use of chemicals excessively affect?
.....
-
44. (a) State any **two** ways in which school pupils benefit from a school garden.
- (i)
- (ii)
- (b) Give any **two** ways the pupils can get involved in caring for crops in a garden.
- (i)
- (ii)

45. The diagrams below show how images are formed in a human eye and a lens camera. Study them and answer the questions that follow.



(a) In the human eye above, draw a diagram showing how the image of the object will be formed.

(b) What type of lens is in both the human eye and a lens camera?

.....

(c) Apart from having a similar lens, state **one** other way a human eye is similar to a lens camera.

.....

(d) Which part of the lens camera is similar to the pupil in the human eye?

.....

46. (a) How is photosynthesis useful in plants?

.....

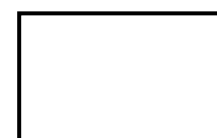
(b) State the **two** raw-materials for photosynthesis.

(i)

(ii)

(c) Give any one product of photosynthesis?

.....



47. A child's temperature was measured and it was 40°C.

(a) Which thermometer could have been used to measure the child's temperature?

.....

(b) What could be the equivalent of the above temperature reading on the Fahrenheit scale?

(03 marks)

48. (a) What is communal grazing in livestock keeping?

.....

.....

(b) State any **two** advantages of communal grazing to herdsmen.

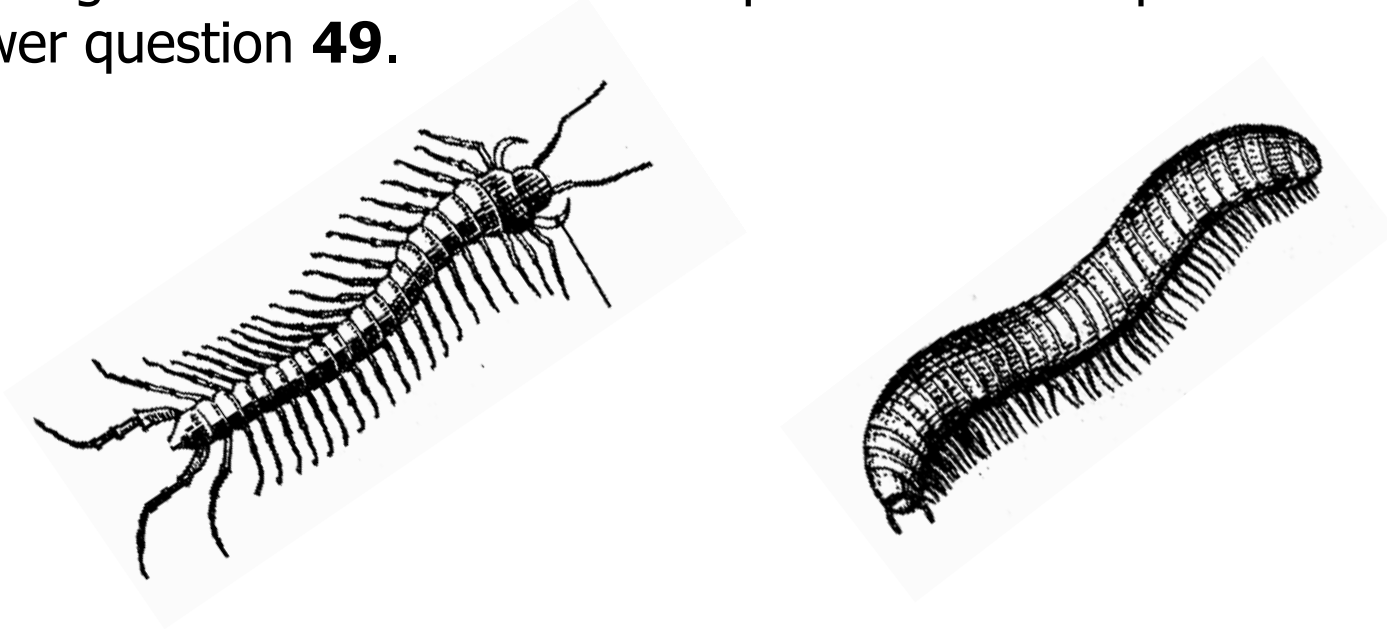
(i)

(ii)

(c) Mention the disadvantage of communal grazing to livestock.

.....

49. The diagrams below shows a centipede and a millipede. Use them to answer question **49**.



- (a) Name the sub group of arthropods to which the centipede and millipede belong.

.....

- (b) How do the above arthropods differ in the way they feed?

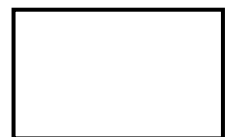
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.....

- (a) Give any **two** similarities between a centipede and a millipede.

(i)

(ii)



50. (a) Why is it wrong to say that plants are non-renewable resources?

.....

- (b) Give **two** examples of non-living renewable resources.

(i)

(ii)

- (c) State **one** way how animals are used as energy resources.

.....

51. Match the items in List A with those in B correctly.

A

B

- | | |
|---------------|------------------------------|
| (i) Platelets | Regulates water in the body. |
| (ii) Plasma | Clots blood in case of cut. |
| (iii) Kidney | Produces bile juice. |
| (iv) Liver | Transports food. |

- (i) Platelets
- (ii) Plasma
- (iii) Kidney
- (iv) Liver

52. (a) Briefly explain the term “an electrolyte”.

.....

.....

(b) Give **two** examples of electrolytes.

- (i)
- (ii)

(c) Why is it dangerous to touch live electric wires with bare wet hands?

.....

.....



53. (a) State a farm activity that enables a farmer to;

(i) control plant population.

.....

(ii) break the life cycle of pests.

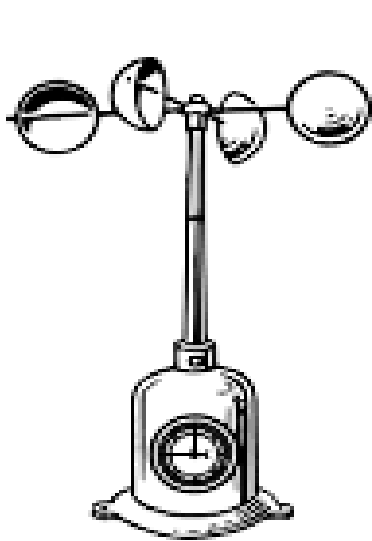
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(a) Give **two** reasons why farmers use herbicides on their farms.

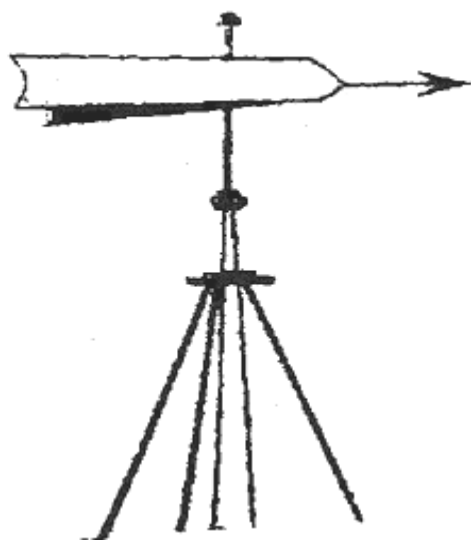
(i)

(ii)

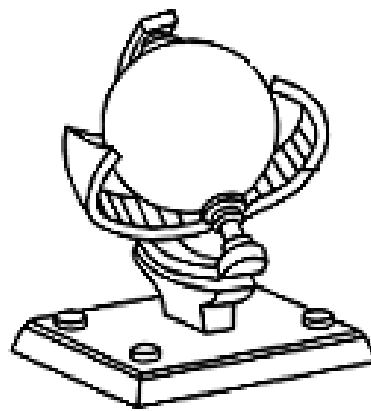
54. The diagrams below show some weather instruments. Study them and answer the questions that follow.



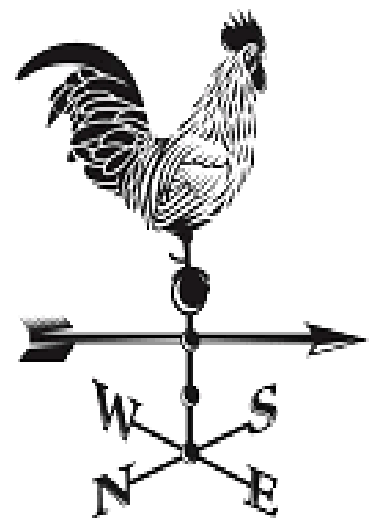
A



B



C



D

(a) Name instrument **A**.

.....

(b) Mention the element of weather recorded by instrument **C**.

.....

(c) How is the function of instrument **B** similar to that of **D**?

.....

.....

(d) Which weather instrument shows the strength of wind?

.....

55. Study the table and answer the given questions.

P	Q	R	S
Beans	Cypress	Mangoes	Ferns
Cowpeas	Podo	Avocado	Mosses
Groundnuts	Cedar	Coconut	Horsetail

(a) State **one** way in which plants in group **P** benefit;

(i) people.

.....

(ii) soil.

.....

(b) Why are fruits from plants in group **R** termed as drupes?

.....

(c) How do plants in group **Q** reproduce?

.....



