

KAMPALA PRIMARY SCHOOLS' SKYLINE EXAMINATIONS™

P.L.E Preparation - 2023

Set 03

INTEGRATED SCIENCE AND HEALTH EDUCATION

Time Allowed: 2 hours 15 minutes

Index No.

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

Candidate's Name:.....

Candidate's Signature:.....

School Name:.....

District Name:.....

DO NOT OPEN THIS BOOK LET UNTIL YOU ARE TOLD TO DO SO.

Read the following instructions carefully;

1. The paper has two Sections: A and B.
2. Section A has 40 short questions (40 marks).
3. Section B has 15 questions (60 marks).
4. Attempt ALL questions. All answers to both Sections A and B must be written in the spaces provided.
5. All answers must be written using blue or black ball-point pen or ink. Only diagrams and graphs work may be done in pencil.
6. Unnecessary alteration of work will lead to loss of marks.
7. Any handwriting that cannot easily be read may lead to loss of marks.
8. Do not fill anything in the boxes indicated for examiners' use only.

FOR
EXAMINERS'
USE ONLY

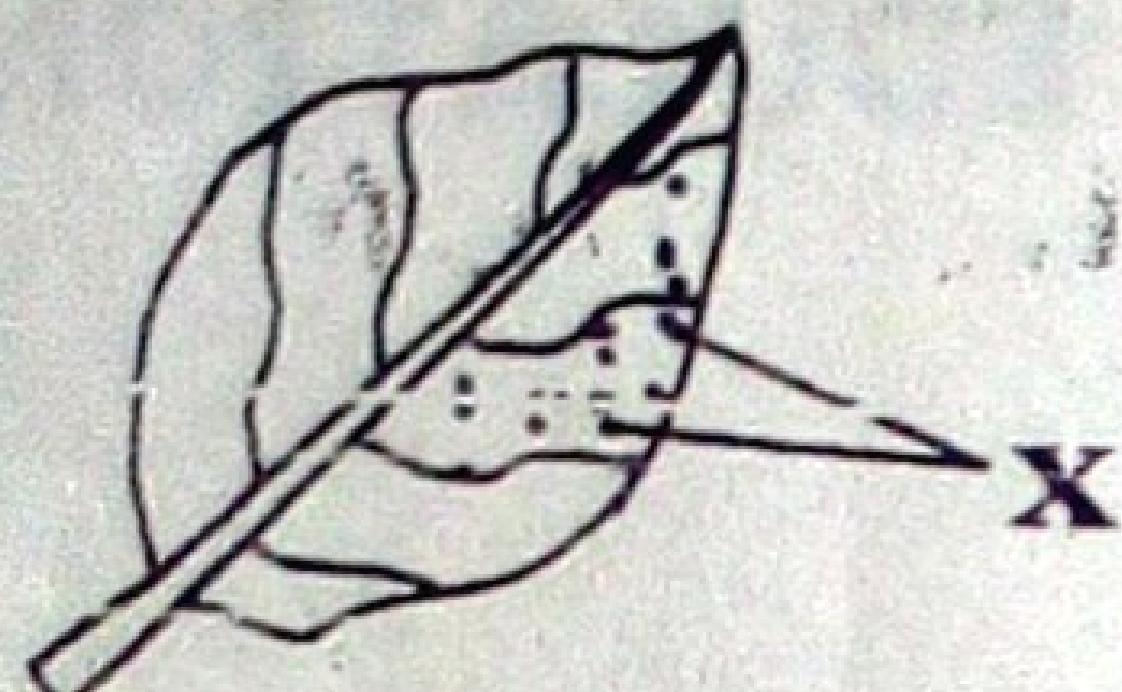
Qn. No.	MARK	SIGN
1 - 10		
11 - 20		
21 - 30		
31 - 40		
41 - 43		
44 - 46		
47 - 49		
50 - 52		
53 - 55		
TOTAL		

SECTION A

1. Why are lungs an essential body organ in human beings?

2. Give the role of the stigma in a flower.

Study the part of a plant below and use it to answer question 3.



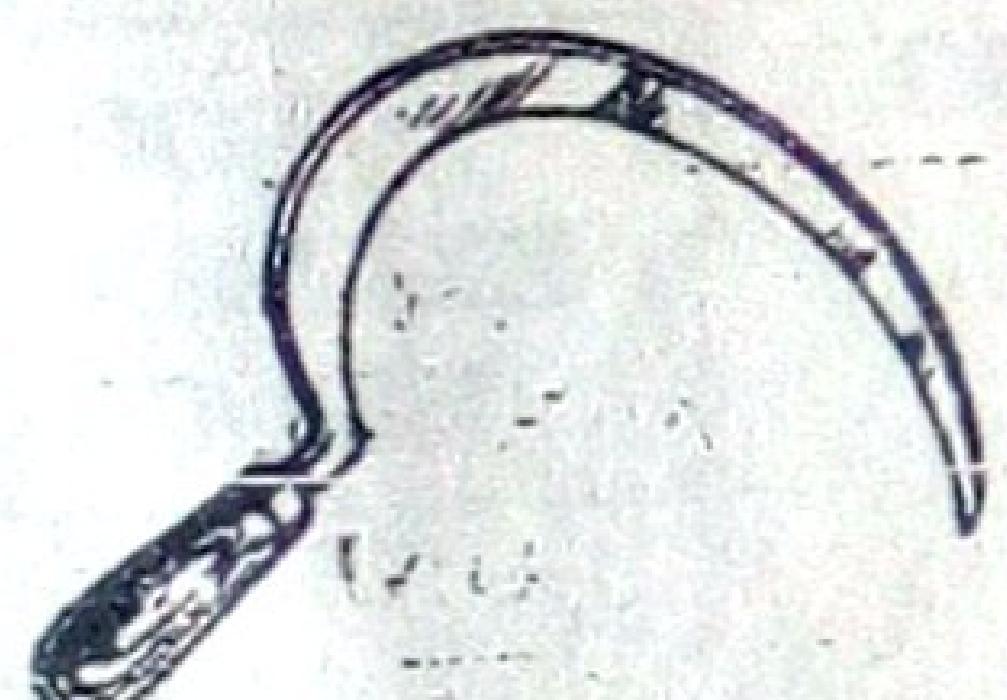
3. How are the structures marked X useful to a plant?

4. In which way are birds' feathers important during incubation?

5. Why is a wind vane important in a weather station?

6. Name an exotic dairy breed of cattle.

Study the garden tool below and use it to answer question 7.



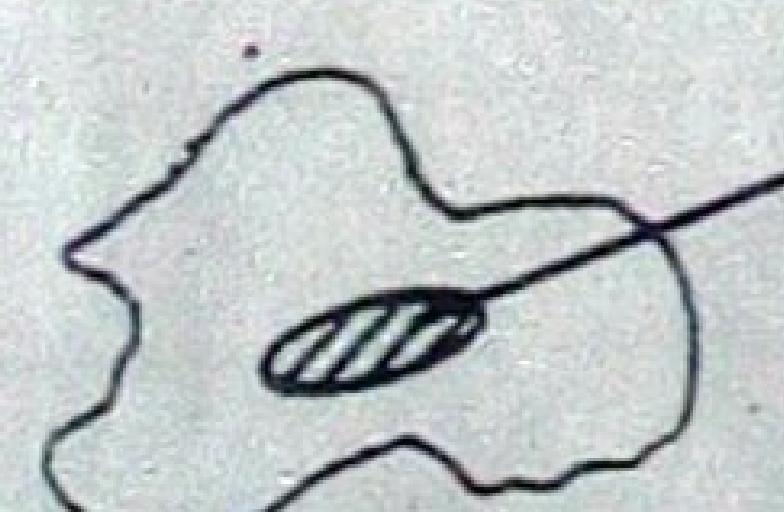
7. Name the garden tool at the side!

8. What is current electricity?

9. Give one example of exotic breed of rabbit.

10. State one way you can describe a poisonous snake.

Study the diagram of a blood cell and use it to answer question 11.



11. Identify the blood cell shown at side.

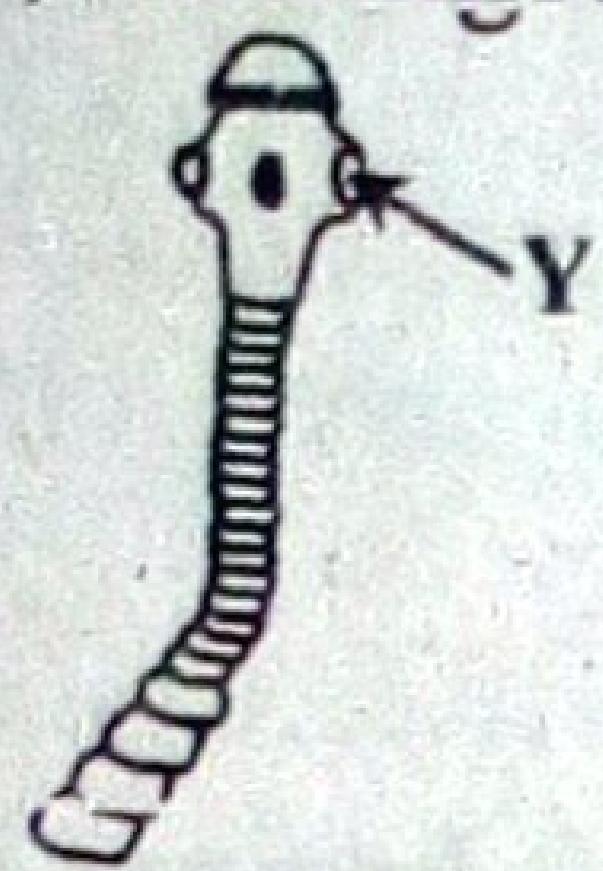
12. Why can't sound travel through a vacuum?

13. How are nimbus clouds important in **YOUR COMMUNITY**?

14. Name the body organ that regulates the level of glucose in the blood.

15. Mention the natural form of static electricity.

Study the diagram below and use it to answer question 16.



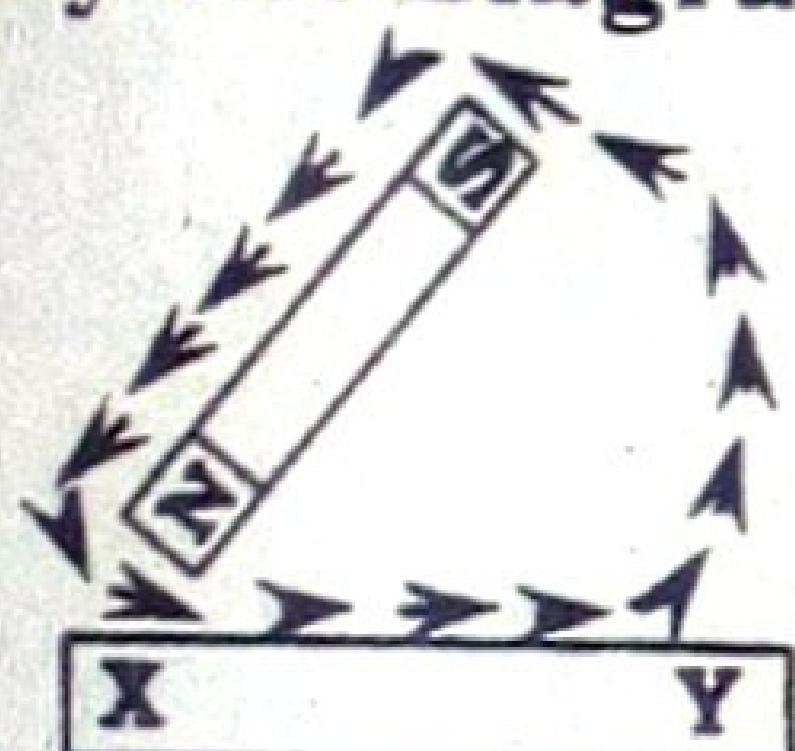
16. Name part Y of the worm shown.

17. What is flossing?

18. Why are seedlings mainly transplanted in the evening?

19. Mention one disease that affects the human lungs caused by smoking.

Study the diagram below and use it to answer question 20.



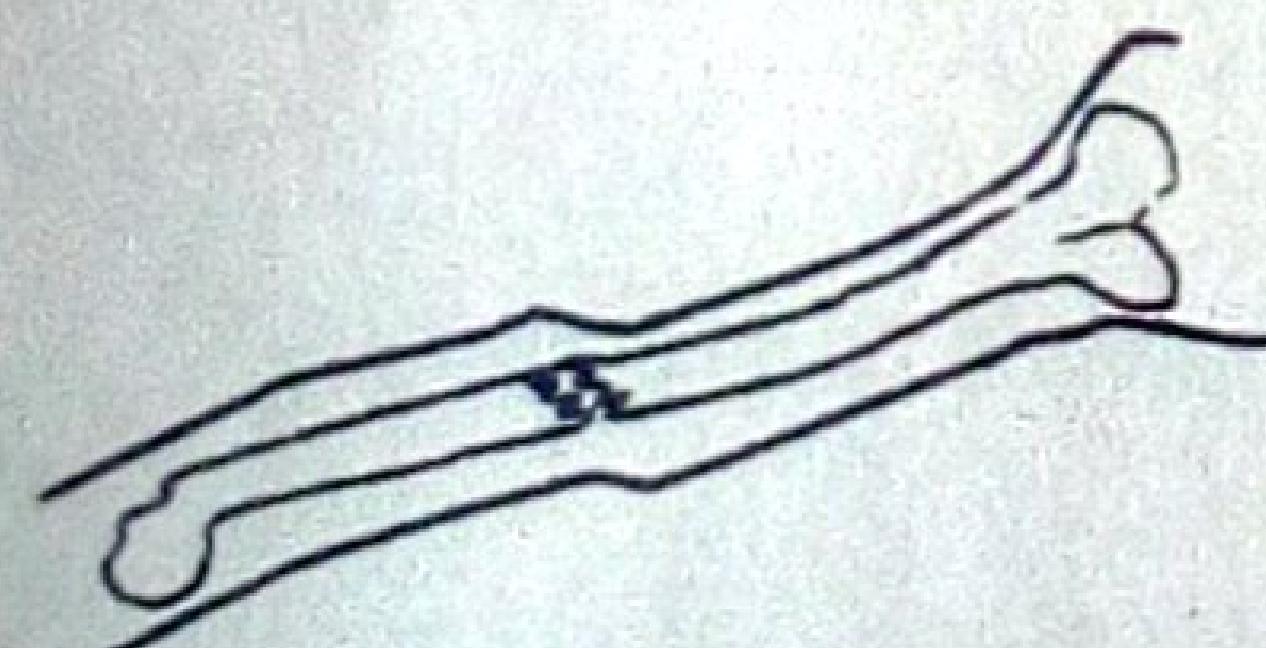
20. Which method of making a magnet is illustrated?

21. Give one sign of heat period in cows.

22. Mention the part of the human ear that helps to give body balance.

23. State a reason why distilled water is not suitable for drinking.

Study the diagram below and use it to answer question 24.



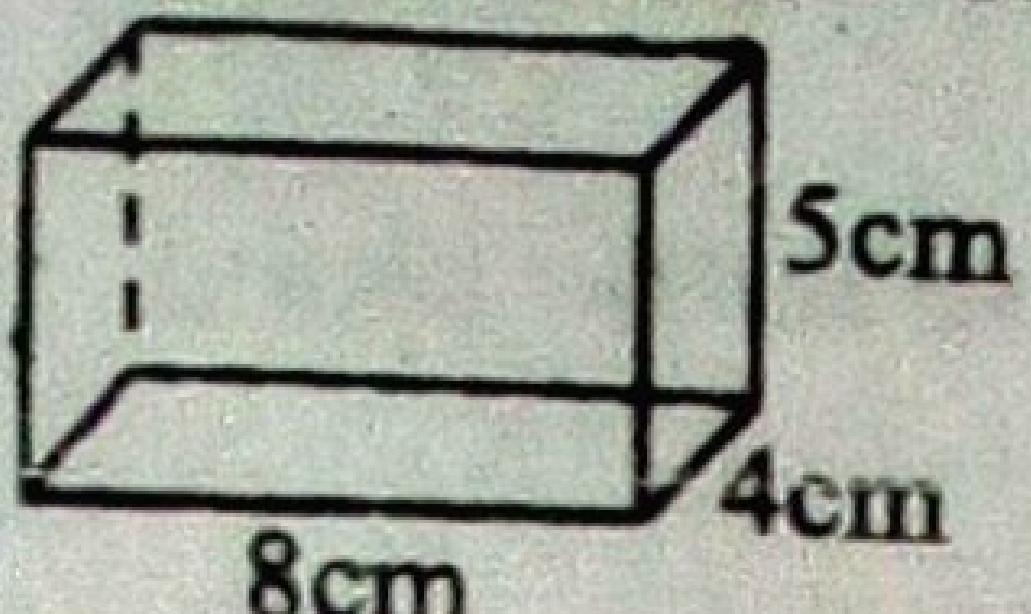
24. Identify the type of fracture shown at the side.

25. How do ferns reproduce?

26. Why should drugs need to be kept out of reach of children?

27. How are valves very important in the human heart?

28. Work out the volume of the cuboid below:



29. Give one example of a traffic accident.

30. Mention one example of a natural magnet.

31. Give one example of a fossil fuel.

32. Why should people in the community be encouraged to use pit latrines or toilets we

33. Mention the component of air that leguminous crops use to process proteins.

34. Give any one example of a flightless bird.

35. Show the magnetic lines of force in the given bar magnets below.



36. State the difference between diarrhoea and dysentery.

37. How can fumes produced by vehicles, factories and industries affect rainfall formation?

38. Why is breast milk the best food for babies?

39. Mention any one energy fuel.

40. Give any one example of a stem tuber.

SECTION B

41. a) What is immunity?

b) Write down the two types of immunity.

(i)

(ii)

c) How is immunity important to babies?

.....
.....
42. a) Which sexually transmitted diseases cause blindness in:

(i) babies:

(ii) adults:

b) State one way in which Candida is spread.
.....

c) What germs cause Athlete's foot disease?
.....

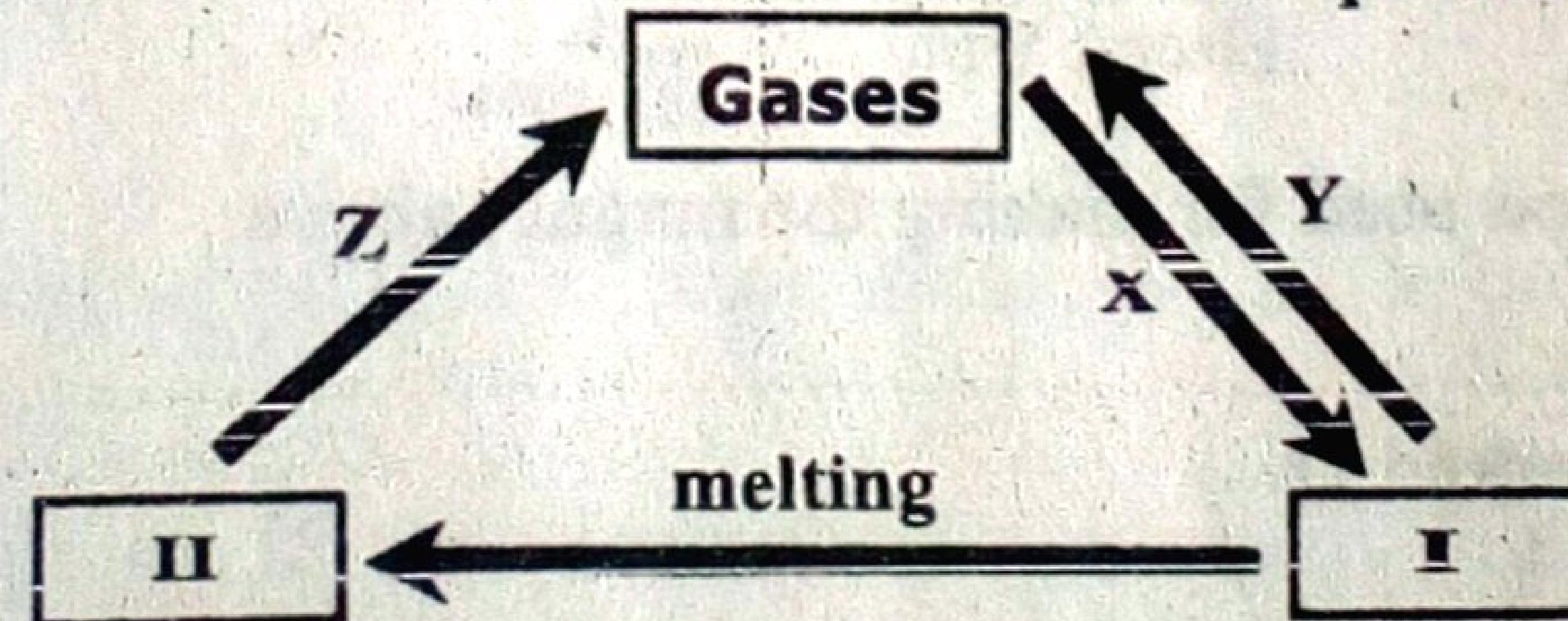
43. a) What is a fracture?

.....
.....
.....
b) State the difference between a simple fracture and a compound fracture.
.....

.....
.....
c) How is the ligament useful in a joint?
.....

.....
d) What disease at a secondary stage of infection can cause disfigurement in some parts of limbs of the skeletal system?
.....

Study the diagram below and use it to answer the questions that follow.



44. a) Identify the states of matter above:

I

II

b) Name the process marked Y.

.....
c) What form of energy enables process Z to take place?

45. a) State the difference in reproduction between amoeba and yeast.

b) In which way is fungi similar to bacteria in a food chain?

c) Mention the example of fungi used in:

(i) fermentation and brewing of alcohol:

(ii) the making of antibiotics:

46. a) What is a wetland?

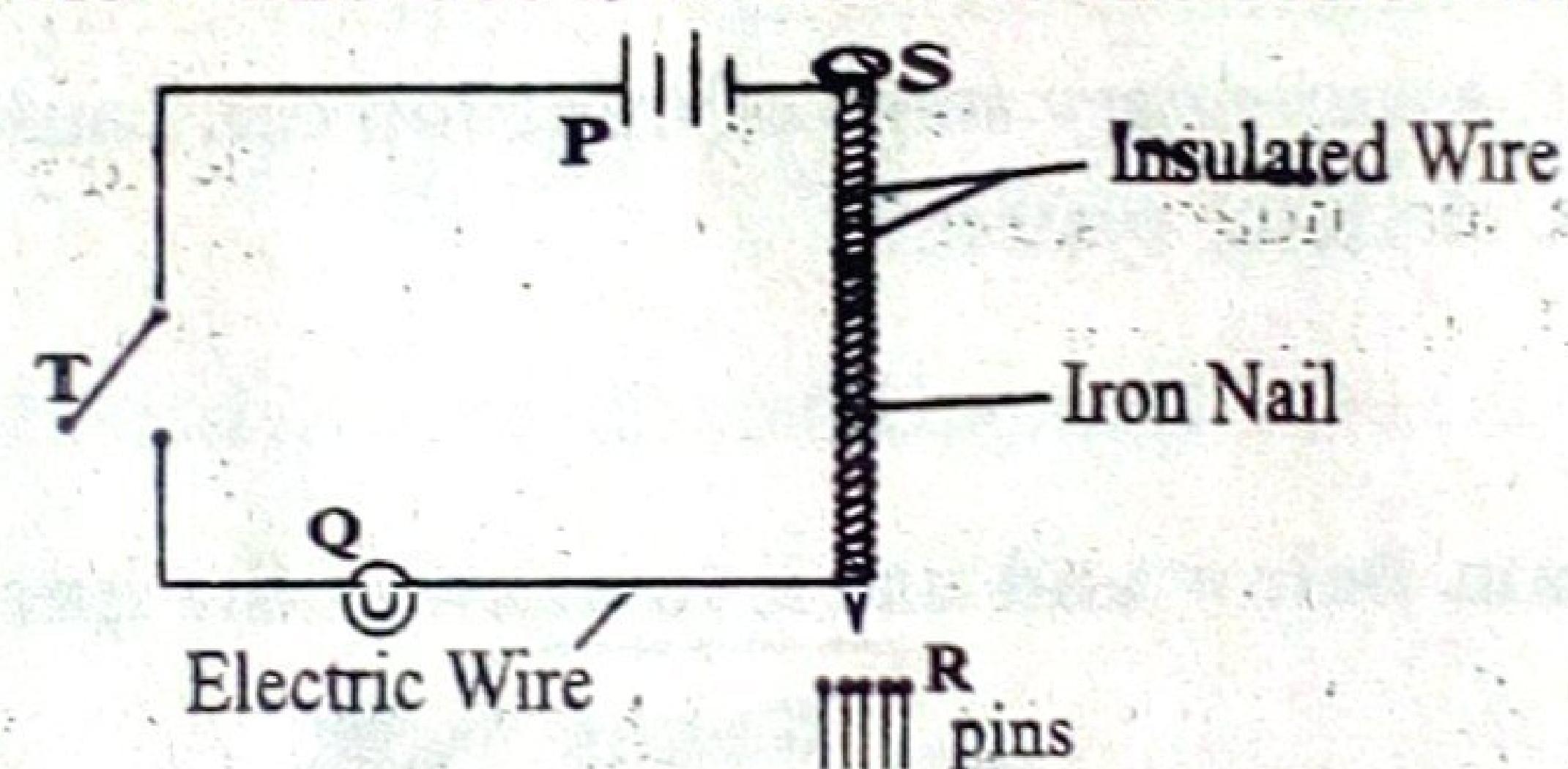
b) Give one example of a wetland.

c) State two ways the people of Uganda have abused wetlands.

(i)

(ii)

Study the diagram below and use it to answer the following questions.



47. a) Name the method used for making the magnet above.

b) Identify part marked Q.

c) What energy will be at P when T is completed?

d) What will happen to the pins at R when T is completed?

48. a) Which component of blood is transported by:

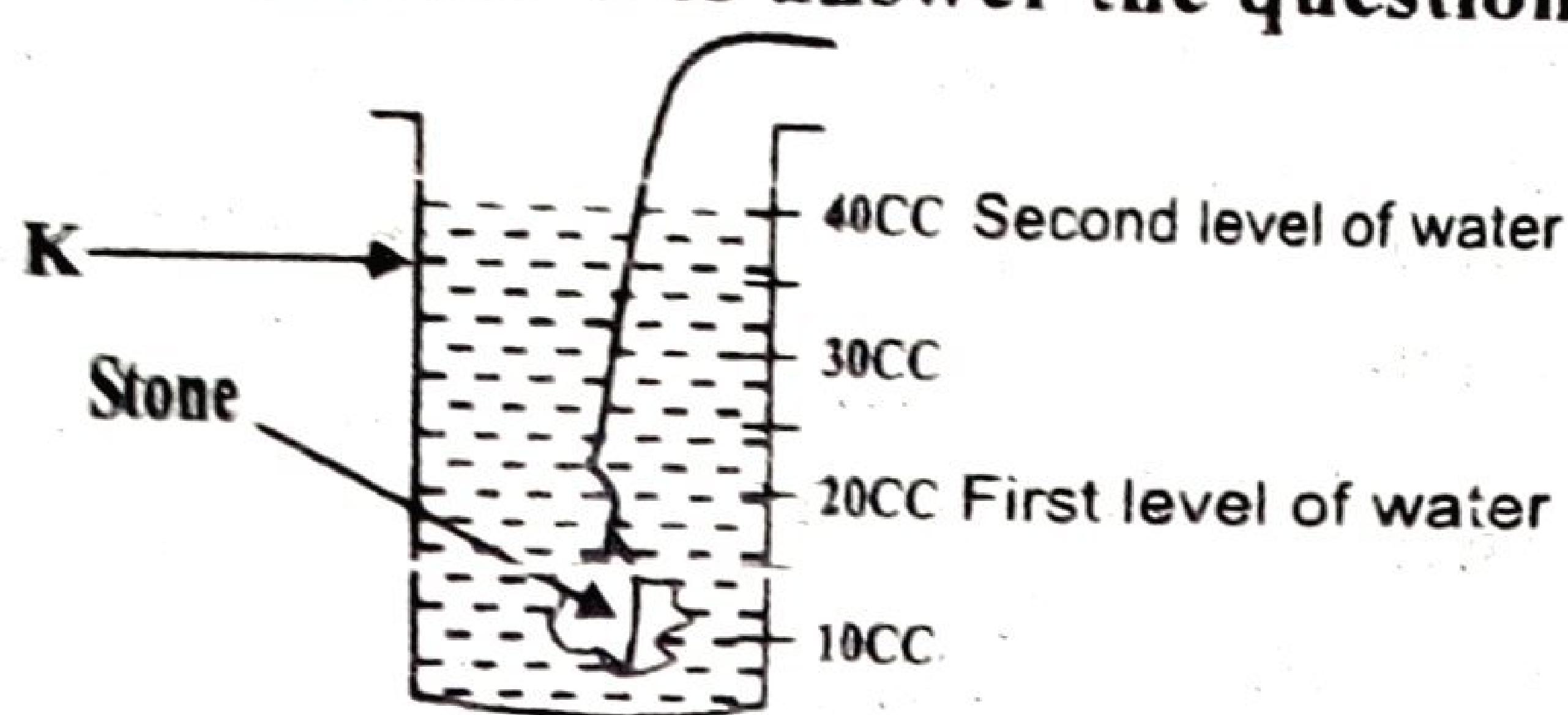
(i) vena cava:

(ii) pulmonary vein:

b) Why is the lower left side of the heart at the ventricle thicker than the right side?

c) Name the component of blood that transports oxygen to all body parts

Study the diagram below and use it to answer the questions that follow.



49. a) Mention the method used for finding the volume of the stone.

b) Work out the volume of the stone.

c) Why is such a method used for finding the volume of the stone?

d) If the mass of the stone is 80gm, work out its density.

50. a) Who is a first aider?

b) State the importance of using cold water while giving first aid to a victim of a burn.

c) Why should a person with a third degree burn need to take plenty of fluids and water?

d) Give the difference between a strain and a sprain.

51. a) Give the two types of current electricity:

(i)

(ii)

b) What force enables the production of hydro electricity?

1) Mention the type of cattle that are trained to do work such as ploughing and transport.

b) Give one example of such cattle.

c) Write down any two advantages of breeding cattle.

i)

(ii)

53. a) Name the two types of energy resources.

(i)

(ii)

b) What form of energy in the environment is needed for transpiration to take place?

c) What does radiant heat and light rays from the sun provide us with?

54. a) Mention the type of soil erosion which can take place in hilly areas.

b) How can soil erosion be controlled in hilly areas?

c) Give two agents of soil erosion.

(i)

(ii)

55. Match the items in List A to those in List B correctly.

LIST A	LIST B
Whooping cough	caused by smoking tobacco
Influenza	a hereditary disease
Lung cancer	caused by a virus
Asthma	caused by bacteria

(i) Whooping cough:

(ii) Influenza:

(iii) Lung cancer:

.....

P.7 INTEGRATED SCIENCE SET THREE MARKING GUIDE.

1. It is the main organ for respiration (helps to take in water)
2. To receive pollen grains
3. Help in breathing and transpiration
4. They help preserve heat/warmth.
5. It helps to detect the direction of wind.
6. Jersey, Guernsey, Friesian, Ayrshire.
7. A sickle
8. Is a type of electricity where electrons flow through a conductor.
9. Chinchilla, Angora, New Zealand white
10. It has a triangular head, has fangs.
11. A white blood cell
12. The vacuum has no media for sound transmission
13. It provides rain to the community
14. The liver
15. Lightning and thunder
16. Suckers
17. Is the process of removing plaque that form between teeth using a floss.
18. To prevent transpiration there is less sunlight energy to cause high transpiration.
19. Emphysema/lung cancer.
20. A single stroking/touch method.
21. A cow is restless, makes a lot of noise. Urinates frequently, vulva swells and appears red.
22. The semi-circular canal.
23. The mineral salts get killed or destroyed by heat. (lacks mineral salts)
24. A closed fracture (simple fracture)
25. Through seeds
26. To avoid drug poisoning
27. It prevents the back flow of blood.
28. $V = (L \times W \times H) \text{cm}^3$
 $V = 8\text{cm} \times 4\text{cm} \times 5\text{cm}$
 $V = 32\text{cm}^2 \times 5\text{cm}$
 $V = 160\text{cm}^3$
29. A car accident on road. A motorcyclist knocking school child.
30. The earth/Lodestone.
31. Crude oil(petrolium). Coal, uramum
32. To prevent water borne diseases

33. Nitrogen
34. Kiwi, Ostrich, Emu, Rhea, Penguin, Cassowary.
35. 
36. Diarrhoea is the passing out of watery stool watery stool while dysentery is watery stool with blood.
37. They cause higher temperature that fails condensation
38. It has almost all food values and antibodies.
39. Petrol, Diesel, Paraffin, coal, uranium, charcoal.
40. Yams/Irish potatoes
41. a) Is the body's ability to fight germs that cause diseases.
b) Natural Immunity /Artificial Immunity.
c) It helps babies to resist germs that cause diseases and they live healthy.
42. a)i) Gonorrhea ii) Syphilis
b) Through sexual intercourse with an infected person, sharing towels, basis, under wears.
c) Fungus
43. a) Is a cracked or a broken bone in the body
b) Simple fracture bone breaks and it not seen outside while compound fracture bone break and seen outside affected area.
c) It helps aid movement in a joint.
d) Leprosy.
44. a) i)- solids ii)Liquids
b) Sublimation
c) Heat energy
45. a) Acoba reproduces by cell division or binary fussion while yeast is by budding
b) Both are decomposers.
c) i) Yeast ii) Penecilium fungi(special kindof mould)
46. a) Is a water logged area with vegetation.
b) Swamp
c) Dumping of toxic wastes, draining to create farm land.
47. a) Electrical method
b) Bulb
c) Electrical energy .
d) The pins will be pulled or attracted.
48. a) i) De oxygenated blood
ii) oxygenated blood
b) It pumps blood with high pressure to distant parts of the body.

48. a) Red blood cells.
b) Displacement method
c) V=20ml. 1ml. of water
 $V = 10\text{cc} : 20\text{cc}$
 $V = 20\text{cc}$
- d) A stone has an irregular shape.
e) $V = 20\text{cc}, M = 80\text{gm}$
 $D = m/v$ $D = \underline{\underline{80\text{gm}}}$
 20cc
 $D = 4\text{gm/cc}$
50. a) A person who provides first aid to causalities
b) To reduce heat in affected area
c) To replace the lost water in the burn and reduce burning pain
d) A strain.
51. a) Alternating current and direct current
b) Kinetic force from fast flowing water
c) Potential energy.
52. a) Work type (draught cattle)
b) Zebu, Borsan and Sahiwal
c) It improves quality of breeds in meat/milk production and resistance to diseases.
53. a) Kinetic and Potential energy
b) Heat energy from the sun
c) Solar electricity.
54. a) Gully erosion
b) By terracing/ planting trees and grass
c) Wind, moving animals fast flowing water.
55. a) Whooping cough-caused by bacteria
b) Influenza -caused by virus
c) Lung cancer- caused by smoking
d) Asthma - a hereditary disease.