

Section A (40 Marks)

1. Name the *hardest part* of a tooth.

2. Which force makes some objects to weigh less when put in water?

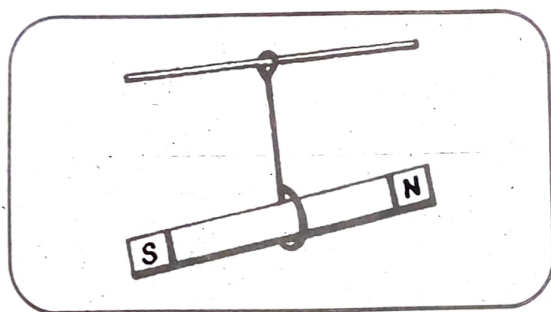
3. Apart from femur, give one other example of a long bone.

4. State the best way a school going pupil can avoid contracting HIV.

5. Give one way in which water can be used as an energy resource.

6. Why are handles of frying pans made of insulators?

The diagram below shows a property of magnets. Use it to answer questions 7 and 8.



7. Name the property of magnets shown in the diagram above.

8. How does the property named in (7) above simplify the work of a pilots?

9. State one role of saliva during digestion of food.

10. *Apart from water*, name one other condition necessary for germination to take place.

11. State the energy change that occurs in a dry cell when the circuit is complete.

12. How are amphibians similar to fish in terms of reproduction?

13. State the main reason why farmers rear Angora goats.

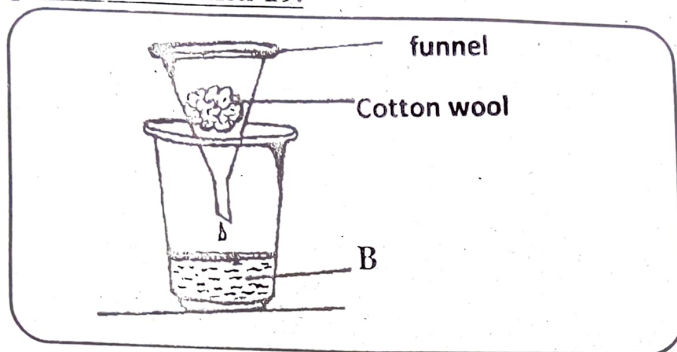
14. How is moulting important to an insect?

15. Why can't distilled water conduct electricity?

16. Mention one element of P.H.C that is promoted by bathing.

17. Name one delicate body organ that is protected by the rib cage.

The diagram below shows a method of making water clean. Use it to answer questions 18 and 19.



18. Name the method of making water clean shown in the diagram above.

19. What *scientific name* is given to liquid marked B?

20. Give the role of testis in male mammals.

21. *Musa usually lacks proteins in his diet*, what deficiency disease is he most likely to suffer from?

22. How can people protect their buildings from effects of lightning?

23. Give a reason why water is called a universal solvent.

24. State the use of a broom in a home.

25. *Apart from drinking clean boiled water*, how else can one prevent the spread of polio?

26. Give one characteristic of arthropods.

27. Mention the *type of soil* used for making glasses.

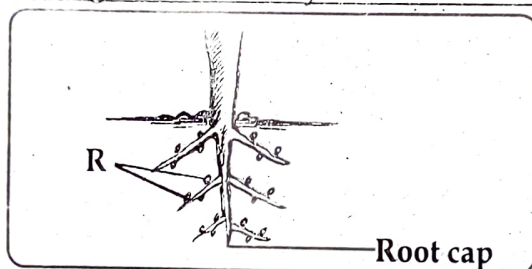
28. What name is given to the *immovable joints of the skull*?

29. Where does respiration occur in the human?

30. Give a reason why solar panels are made of a black surface.

31. How do houseflies spread disease causing germs?

Use the diagram of a root system below to answer questions 32 and 33.



32. Name part marked **R** from the diagram shown above.

33. Mention any one plant with such kind of roots shown in the diagram above.

34. Apart from alcohol, name one other liquid used in thermometers.

35. In which way do tape worms enter into the body of human beings?

36. How does crop rotation control crop pests in the garden?

37. Name the food value got from eating honey?

38. Why is the hutch made of wire mesh?

39. State one role of a child at home.

40. How are rubber gloves useful to electricians during electrification?

Section B (60 Marks)

41. (a) State **two** primary sex characteristics in adolescent boys.

(i) _____

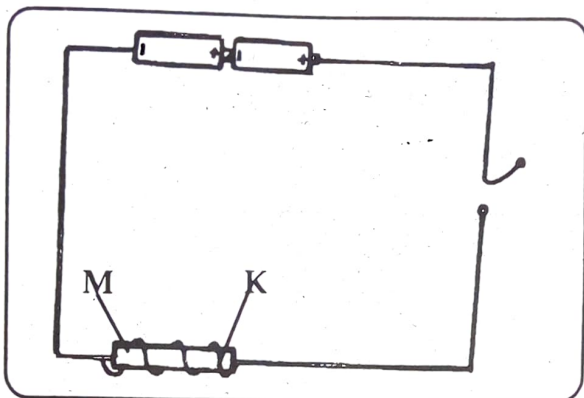
(ii) _____

(b) Where do the following occur in the female reproductive system?

(i) **Implantation**

(ii) **Conception**

42. The diagram below shows a method of magnetization. Use it to answer the questions that follow.



(a) Name the method of magnetization shown in the diagram above.

(b) What will pole marked K be after magnetization?

(c) State **two** ways of increasing the strength of the magnet shown in the diagram above.

(i) _____

(ii) _____

43. Give any **two** principles of P.H.C.

(i) _____

(ii) _____

(b) State **one** role of each of the following members in the promotion of PHC.

(i) **individual**

(ii) **family**

44. Match the items in A to those in B correctly.

A	B
Wind vane	measures humidity.
Barometer	measures speed of wind.
Anemometer	shows the direction of wind.
Hygrometer	measures air pressure.
Wind vane	_____
Barometer	_____
Anemometer	_____
Hygrometer	_____

45. (a) Write down any **two** items that can be used in reducing the spread of COVID 19 in the community.

(i) _____

(ii) _____

(b) Give **two** ways of preventing the spread of COVID 19.

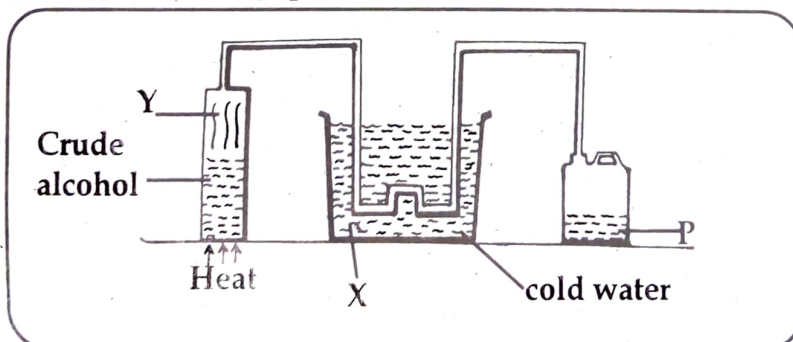
(i) _____

(ii) _____

46. (a) Write **e.m.f** in full.

(b) Calculate the total e.m.f of 4 drycells if one drycell has 1.5v. (03 marks)

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



(a) Name the processes marked Y and X.

(i) X: _____ (ii) Y: _____

(b) What scientific name is given to the liquid marked P in the diagram above.

(c) State the use of cold water in the above process.

48. (a) Apart from animals, give two other examples of renewable energy resources.

(i) _____ (ii) _____

(b) State two ways of conserving animals as energy resources.

(i) _____

(ii) _____

49. (a) Mention any two agents of pollination.

(i) _____

(i) _____

(b) Why are petals of bean plants brightly coloured?

(c) How is a pawpaw plant naturally adapted to cross pollination?

50. (a) What piece of advice can you give to a mother whose child is dehydrated?

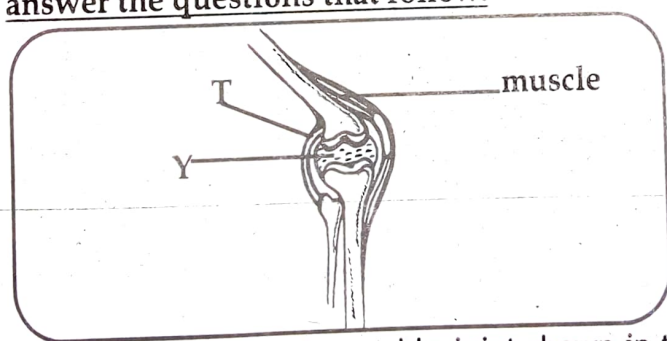
(b) State two possible causes of dehydration among children.

(i) _____

(ii) _____

(c) Write any one mineral salt that is deficient in a dehydrated person.

51. The diagram below shows a joint in the human body. Study it carefully to answer the questions that follow.



(a) Name the type of movable joint shown in the diagram above.

(b) State the role of the parts marked T and Y.

(i) T: _____

(ii) Y: _____

(c) Name one part of the body where the joint shown in the diagram above is located

52. (a) Mention any two devices that can be used to store sound.

(i) _____ (ii) _____

(b) In which one way can echoes be reduced in cinema halls?

(c) *Moses moves by boat everyday*, how are echoes useful to him?

53. (a) Mention any two examples of vulnerable groups of people.

(i) _____ (ii) _____

(b) Why is *Tetanus Toxoid Vaccine* given to pregnant women?

(c) At what age is weaning done in babies?

54. (a) In which season do farmers plant most of their crops?

(b) Name two examples of root tubers.

(i) _____ (ii) _____

(c) State one way of caring for root tubers in the garden.

55. The table below shows different plants. Study it carefully and use it to answer the questions that follow.

Group A	Group B	Group C
Conifers	Beans	Liverworts
		Ferns

(a) How are plants in group A similar to those in group C?

(b) Mention any two examples of plants that belong to group marked A.

(i) _____ (ii) _____

(c) State the similarity between plants in group C and mushroom.