

INTEGRATED SCIENCE

Time Allowed: 2 Hours 15 Minutes

[illegible]

School Name :

Candidate's Signature.....

Read the following instructions carefully:

- [illegible]

SECTION A (50MARKS)

1. Identify the element of weather suitable for winnowing grains.

2. How is evaporation process important in the environment?

3. To which group of simple machines does a ladder belong?

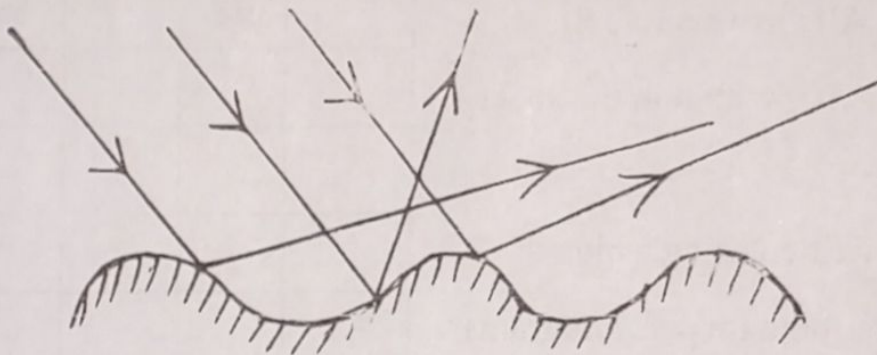
4. State any **one** effect of smoking to a pregnant woman.

5. Suggest any **one** way of controlling skin diseases.

6. How is the ileum adapted to the function of absorbing food?

7. Name the type of energy possessed by a bird resting on a branch of a tree.

8. The diagram below shows reflection. Study it and answer the question.



Name the type of reflection shown above.

9. Apart from animal kingdom, mention another group of living things.

10. How does a caterpillar help itself to overcome enemies?

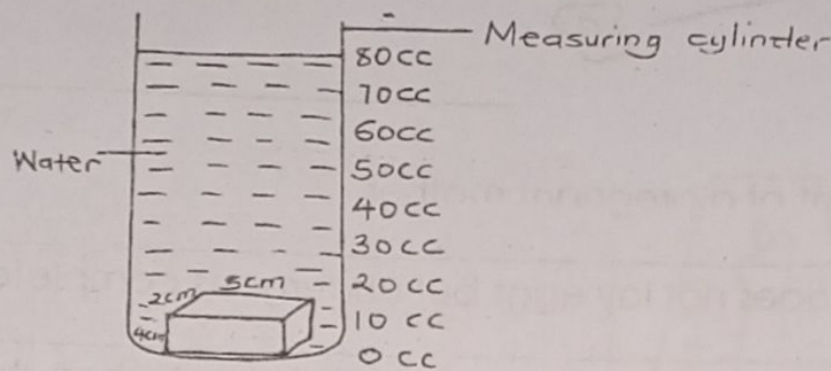
11. Why is it important for all children to learn swimming skills?

12. Suggest a reason why water is referred to as a renewable resource?

13. Write down any one responsibility of a health prefect in a school.

14. Name the human body sense organ that helps in finding the colour of a wall.

Study the diagram below to answer the question.



15. What will be the level of water in the measuring cylinder if an object is removed?

16. Why should cattle be given a block of salt to lick?

17. Suggest the best way of control tapeworms in babies.

18. Of what use is a root cap on every root of a germinating seed?

19. Agatha's child has the following signs, bright eyes. Pot belly and the face, looks like that of an old man. Give the disease Agatha's child is suffering from.

20. Name the special drugs responsible for treating bacterial diseases.

21. What are non-biodegradable materials?

22. Besides calcium, mention another mineral salt for hardening bones and proper growth of human teeth.

23. State the form of energy that is formed when objects vibrate.

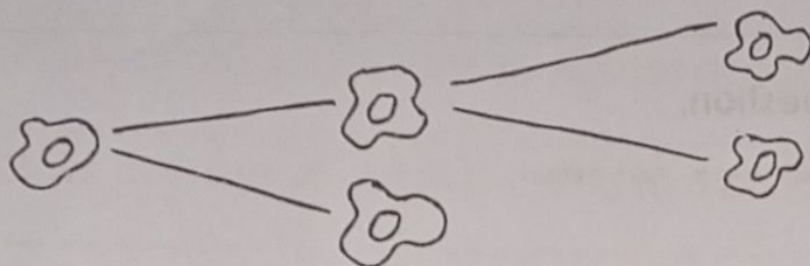
24. Name the garden root used by farmers to dig in stony areas.

25. How is DPT vaccine administered to babies?

26. State the function of a flower to a flowering plant.

27. Write down the non-metallic conductor of electricity found in a dry cell.

28. Identify the mode of reproduction in organisms shown below.



29. Give any **one** requirement of a pregnant mother.

30. Name the vector which does not lay eggs but undergoes complete lifecycle.

31. Tom's sister is 2 years old. What type of fracture will she get when she falls down from the bed?

32. Why does a person doing vigorous exercises like running take in 21% and take out 16% of oxygen?

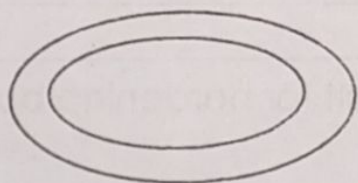
33. Mention any **one** natural factor which may lead to inadequate food supply in a community.

34. Write down any **one** factor that can make a fertilized egg fail to hatch after 21 days.

35. Of what importance are the grips on the handles of bicycles?

36. Why weaning babies should be given mashed food?

Below is a diagram of a blood cell. Use it to answer the question.



37. Name the blood cell shown above.

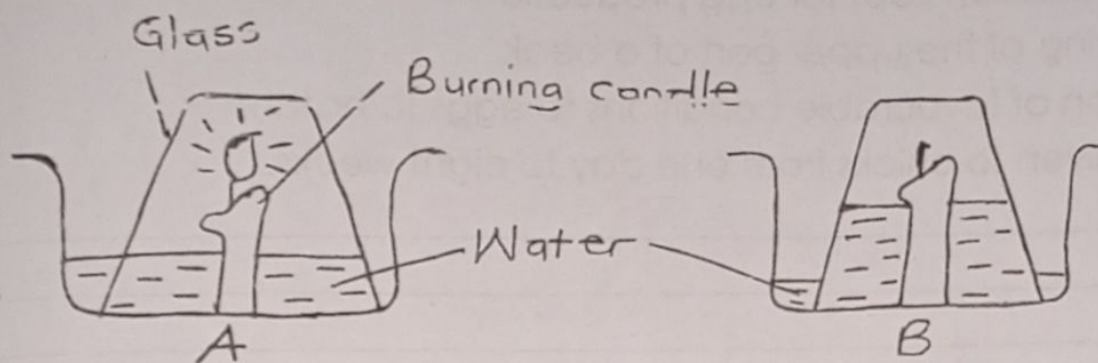
38. To which group of invertebrates do the following animals belong, oyster and octopus?

39. Give a reason why a morant hutch is constructed with a wire mesh.

40. Jane was suffering from malaria and the health worker gave her coartem prescribed (4x2) . state any one factor the health worker based on to prescribe coartem tablets to Jane.

SECTION B

41. A primary three class set up an experiment as shown in the diagrams. Use them to answer the questions.



- a) What was the experiment about?

b) What happened to the candle in diagram B?

c) Give a reason to support your answer.

d) Suggest a reason why the water level rose up in the glass of diagram B.

42. What name is given to the human male reproductive cells?

- b) State the function of the following parts of a male reproductive system.

i) Epididymis _____

ii) Testes _____

- c) Write down any **one** way of caring for a male reproductive system.

43. Use the group of organisms below to answer the questions.

Carrot → rabbit → man

- a) From the above list, identify the,

i) Producer _____

ii) Primary consumer. _____

- b) State the role of the sun in any food chain.

c) Give any **one** decomposer in a food chain.

44. Write down any **two** indicators of a dirty home.

i) _____

ii) _____

b) Identify any **one** item used in promoting sanitation in a classroom.

c) Why is it encouraged to drain away stagnant water in a school compound?

45. Match the terms below with their meanings.

Incubation - Type of chicken kept for egg production

Brooding - Shortening of the upper part of a beak

Layers - provision of favourable conditions to eggs to hatch.

Debeaking - Care given to chicks from one day to eight weeks.

i) Incubation _____

ii) Brooding _____

iii) Layers _____

iv) Debeaking _____

46. State a reason why artificial permanent magnets should be kept with iron keepers.

b) Give **two** ways artificial permanent magnets can be made to lose their magnetism.

i) _____

ii) _____

c) Name **one** method of magnetisation that produces temporary magnets.

47. Study the table below and answer the questions that follow.

LIST A	LIST B
Rat	Tilapia
Goat	Frog
Lion	Crocodile
Whale	Dove

a) What is the similarity in the way animals in B reproduce?

b) To which class of vertebrates do animals in list A belong?

c) In which way is tilapia in list B similar to a whale in list A?

d) What is common about the animals in list A and B?

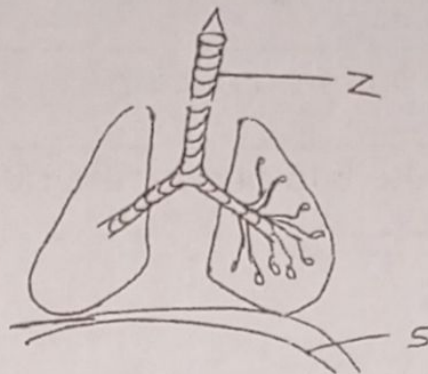
48. Mention any **one** characteristic of insect pollinated flowers.

b) Give a reason why wind pollinated flowers produce a lot of pollen grains.

c) How is the stigma adapted to receiving pollen grains?

d) What is pollination?

49. The diagram below is of the human lungs. Use it to answer the questions that follow.



a) Identify the part of the body in which the lungs are located.

b) Name the part marked z.

c) Write down **two** systems of the body where the lungs belong.

i) _____

ii) _____

50. In one sentence, give the meaning of the term weathering.

b) Identify the layer of the soil which has more living organisms.

c) State any **two** ways of maintaining soil fertility.

i) _____

ii) _____

51. Write down **two** activities done to help in the control of diarrhoea diseases.

i) _____

ii) _____

b) How can a person with severe diarrhea be helped to be rehydrated?

c) Mention any **one** mineral salt lost during dehydration.

52. Which type of insemination denies animals their natural feelings in reproduction?

b) Of what use is a strip cup at a dairy centre?

c) Identify any **one** type of farm records.

d) How do farmers make the use of farm records?

53. What type of immunity is acquired after

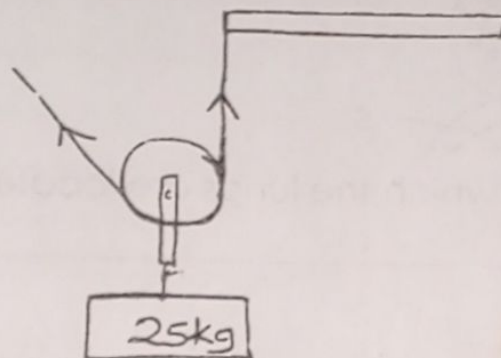
i) Recovering from illness?

ii) Getting immunized?

b) Name the disease all girls of child bearing age are immunized against.

c) Write down any **one** vaccine administered at birth.

54. The diagram is of a pulley system. Use it to answer the questions that follow.



a) Name the type of pulley system shown above.

b) Calculate the effort needed to raise the load of 25kg using the pulley stem above. (2mrks)

c) State any **one** use of a pulley at school.

55. Which type of bees make.

a) a buzzing sound during flight?

b) Name the special food for queen bees in hives.

c) State any **two** causes of swarming in bee keeping.

i)

ii)