



THE SPECTRUM EXAMINATIONS HUB
PRE-MOCK EXAMINATIONS, 2024
INTEGRATED SCIENCE SET 4
Time allowed: 2 hours 15 minutes

	EMIS No.						Personal No.		
Index No.									

PUPIL'S NAME:

SCHOOL NAME:

DISTRICT NAME:

Read the following instructions carefully:

1. This paper has two sections: A and B.
2. Section A has 40 questions (40 marks)
3. Section B has 15 questions (60 marks)
4. Answer all questions. All the working for both sections A and B must be shown in the spaces provided.
5. All working must be done using a blue or blackball point pen or ink. Any work done in pencil will NOT be marked except drawings and diagram.
6. No calculators are allowed in the examination.
7. Unnecessary changes in your work and handwriting that cannot be easily read may lead to loss of marks.
8. Do not fill anything in the table indicated; "For examiners' use only" and the boxes inside the question paper.

FOR EXAMINER'S USE		
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.

1. Name any **one** wedge used in the kitchen.

2. Why are parrots able to fly?

3. Why is it important for people to wear clean clothes regularly?

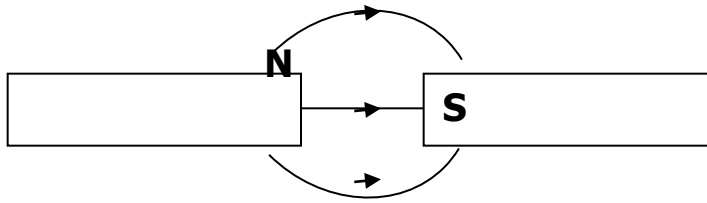
4. Suggest any **one** reason that makes sand soil not good for growing crops.

5. What role do trees play in formation of rainfall?

6. Identify the gas used in fire extinguishers.

7. State the difference between a sty and a hive as used in animal management.

The diagram below shows two magnets. Study them and answer the questions which follow.



8. Which property of magnets is shown above?

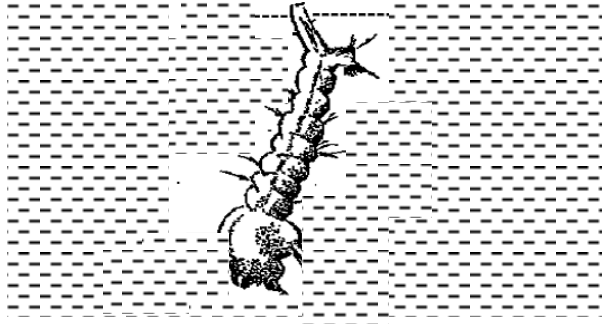
The diagram below shows part of a flower.



9. Name the part of a flower shown above.

10. Give any **one** garden activity done during a wet season.

The diagram below shows the larva stage of a mosquito.



11. What disease is spread by the adult stage of the above mosquito?

12. How best can candidates avoid contracting AIDS?

13. Give any **one** way in which wind can be used as an energy resource.

14. How do trees control soil erosion?

15. Write any **one** advantage of mulching banana gardens.

16. **A cork has a mass of 30gm and a volume of 3cm³.** Find the density of the cork.

17. Why are convalescents advised to eat a lot of foods rich in proteins?

18. Briefly describe the movement of joint at the shoulder.

19. Apart from reptiles, name any other class of cold blooded animals.

20. What type of skeleton do human beings have?

The diagram below shows a tool found in a first aid box.



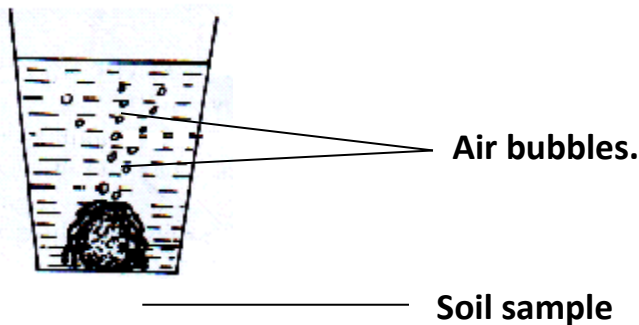
21. Give the use of the above tool to people.

22. How do dogs benefit from plants?

23. Give any **one** way of controlling crop diseases without using chemicals.

24. Give any **one** danger to having long finger nails.

The diagram below shows a property of air.



25. What property of air does the above diagram show?

26. Write any **one** element of P.H.C.

27. How are sperms in human beings similar to pollen grains in plants?

28. Suggest any **one** similarity between a slug and a snail.

29. Mention any **one** vulnerable group of people in our community.

30. Why is burning of paper into ash grouped under chemical changes?

31. Why does the body of a human being become cold shortly after someone has died?

32. Name any **one** type of chicken.

33. In the space below, draw a garden tool used for digging hard soil.

34. How can you prevent food from getting contaminated?

35. What is the main cause of dehydration in children?

36. Briefly describe the first aid for a burn.

37. Suggest any **one** human activity that can lead to pollution of the environment.

38. In the space below, draw a compound pinnate leaf.

39. In which **one** way are bacteria useful to people?

40. Which special instrument do nurses use to measure temperature of people?

SECTION B.

41. **Match the vectors in A with the diseases they spread in B correctly.**

A

mad dogs

female anopheles mosquito

housefly

tsetsefly

(a) mad dogs

B

spreads dysentery

spreads sleeping sickness

spreads malaria

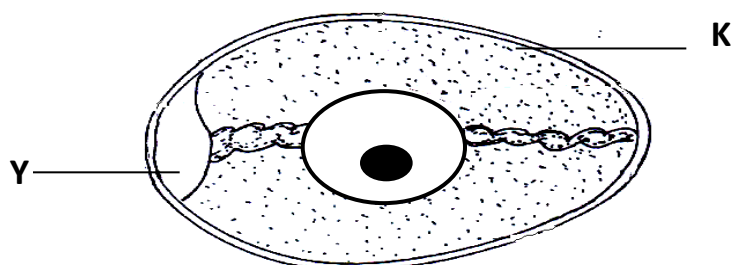
transmits rabies

(b) female anopheles mosquito

(c) housefly

(d) tsetse fly

42. **The diagram below shows an egg of a hen.**



(a) Name the parts labelled **K** and **Y**.

(i) **K** _____ (ii) **Y** _____

(b) By use of arrows and names, show the **yolk** and **egg white**.

43. (a) What is a magnet?

(b) How are magnets made?

(i) _____

(ii) _____

(c) How can you protect your magnet from losing its magnetism?

44. (a) Name any **two** activities involved in washing clothes.

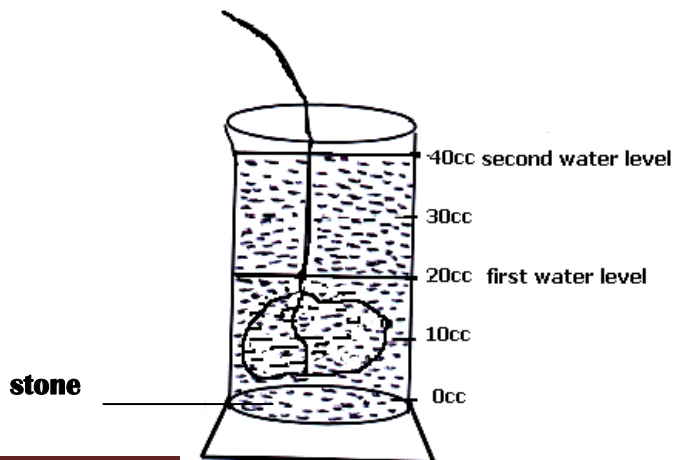
(i) _____

(ii) _____

(b) Why do we use soap when washing clothes?

(c) Give any **one** disease, which can be prevented through proper washing of clothes.

45. **The diagram below shows a method of finding volume of certain objects. Use it to answer questions that follow.**

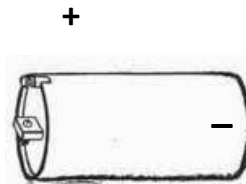


(a) Identify the method used above.

(b) What kind of objects requires the above method of finding volume?

(c) Find the volume of the stone. (**2 marks**)

46. (a) One of the things that can make a torch not to light is poor arrangement of dry cells. In the space below, arrange the dry cells correctly.



(b) What is the use of the above dry cells in a circuit?

(c) Which other component would you add to make the simple electric circuit complete?

47. (a) Write **one** sentence to show the meaning of "echo".

(b) How is echo formed?

(c) Write any **one** use of echo to people.

(d) How do people control echoes in cinema halls?

48. (a) Identify any **one** tick borne disease in cattle.

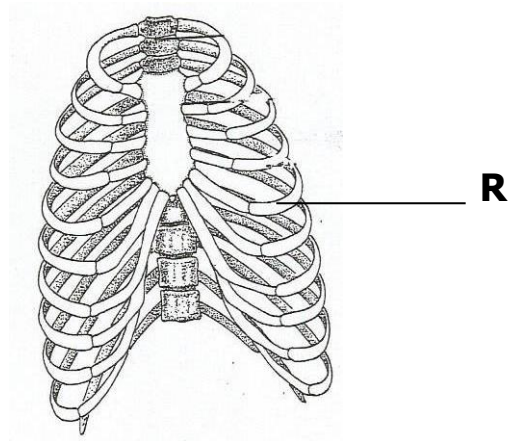
(b) How do modern farmers control tick borne diseases on farms?

(i) _____

(ii) _____

(c) Give any **one** way of controlling tapeworm infection on a farm.

49. The diagram below shows part of the human skeleton.
Study it and answer the questions which follow.



- (a) Identify the bone marked **R**.

- (b) Which body organs are protected by the above structure?

(i) _____

(ii) _____

- (c) Give the mineral part required for the proper strengthening of the above structure.

50. (a) Write **one** sentence to show the meaning of immunity.

- (b) Give the type of immunity acquired through:

- (i) Injecting vaccines into the body.

- (ii) Suffering and recovering from an illness.

(c) What is the best way of controlling immunisable diseases in babies?

51. (a) What is a resource?

(b) Give any **two** example of a renewable resource in our environment.

(i)

(ii)

(c) **Petroleum is a non renewable resource.** How can this resource be conserved?

52. (a) Name any **two** electrical appliances used in our homes.

(i) _____

(ii) _____

(b) How do people protect themselves from being shocked by electricity?

(i) _____

(ii) _____

53. (a) Why are bees grouped under social insects?

(b) Give any **one** use of bees to the following:

(i) people

(ii) plants

(c) Imagine that you have a bee farm at home. How can you protect the

bees from swimming?

54. (a) What name is given to the frequent passing out of watery stool?

(b) Write any **two** causes of dehydration.

(i) _____

(ii) _____

(c) How can dehydration be treated in babies?

55. **Below is a list containing animals and list B containing their defensive mechanisms but in wrong order. Match them correctly.**

List A

Millipedes

Caterpillars

Scorpions

Pythons

(i) Millipedes

(ii) Caterpillars

(iii) Scorpions

(iv) Pythons

E N D.

List B

stinging

coiling

constricting

prickling