

THE SPECTRUM EXAMINATIONS HUB
PRE-MOCK EXAMINATIONS, 2024 SET 1
INTEGRATED SCIENCE

Time allowed: 2 hours 15 minutes

Index No.

EMIS No.						Personal No.		

Pupil's Name:

School Name:

District Name:

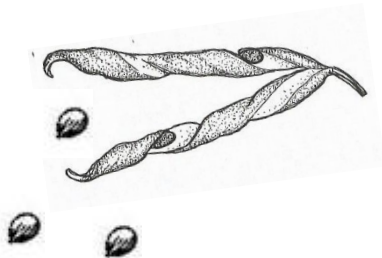
Read the following instructions carefully:

1. This paper has two sections: A and B.
2. Section A has 20 questions (40 marks)
3. Section B has 12 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. Which general name is given to materials that do not allow heat or electricity to pass through them?
.....
2. Identify any **one** type of weather that requires the use of an umbrella.
.....
3. If the mass of an object is 45g and its volume is 5cc. find its density.
.....
4. Which component of blood is responsible for defending the body against disease causing germs?
.....
5. Which human food is got from cotton seeds?
.....
6. In which way is melanin in the skin useful to people?
.....
7. Identify the method of seed dispersal shown below.



-
8. Give an example of a plant which is dispersed through the above method.

.....

9. Why is it dangerous to eat under cooked pork?

.....

10. **John's torch uses 3 dry cells to light** .Calculate the voltage of John's torch.

11. Write any **one** advantage of fencing animal to farmers.

.....

12. Apart from a measuring cylinder, name any other instrument used in measurement of volume of irregular objects.

.....

13. Which form of energy enables plants to make starch?

.....

14. Give any one advantage of reading medical instructions before using a drug.

.....

15. Give any **one** property of floating objects.

.....

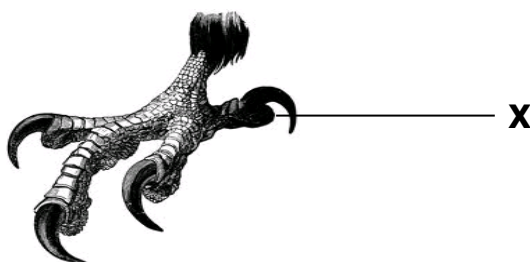
16. Why is it important to teach children oral and dental care?

.....

17. Apart from a watch, name any **one** other device at home that uses dry cells.

.....

The diagram below shows a leg of a bird. Use it to answer question 18 and 19.



18. Name the kind of food that the above bird feeds on.

.....

19. How are structures labelled **x** useful to such birds?

.....

20. How can you help a crop farmer to improve the fertility of his land?

.....

21. Mention any **one** material used for building a permanent house.

.....

22. Why would you encourage all people at home to use an insecticide treated mosquito net?

.....

23. How is a cat of help to a crop farmer?

.....

24. State any **one** use of water at school.

.....

25. What action can you take to help a child who has an insect in the ear?

.....

26. Name the mineral nutrient responsible for the formation haemoglobin in blood.

.....

27. Identify any one health problem which is associated with population increase.

.....

28. Apart from being used for food, write any other use of seeds to people.

.....

29. In which way is the function of muscles similar to the one of joints in the body?

.....

30. Give any **one** use of animal cow dung to people.

.....

31. Name any **one** disease that can spread due to poor dispersal of refuse.

.....

32. Why should people spread out their beddings regularly in the sunshine?

.....
33. Draw a diagram of an example of a wedge in the space below.

34. Why is it important for a community to clean their water sources regularly?
.....

35. Which part of the human alimentary canal produces hydrochloric acid?
.....

36. Name the process in plant which is similar to sweating in people.
.....

37. Give any **one** disadvantage of refraction of light to people.
.....

38. What advise would you give to a breast feeding mother to help her produce more milk for her baby?
.....

39. State any **one** advantage of using electricity for cooking.
.....

SECTION B.

40. (a) Match the following types of joints with their locations in the body correctly.

A

Gliding joints

Pivot joints

Ball and socket joints

Hinge joint

B

Elbow and knee

wrist and ankle

at the neck

shoulder and hips.

A

B

Gliding joints

Pivot joints

Ball and socket joints.....

Hinge joint

41. (a) Which part of the following crops can be used for producing alcohol?

Millet

Cassava

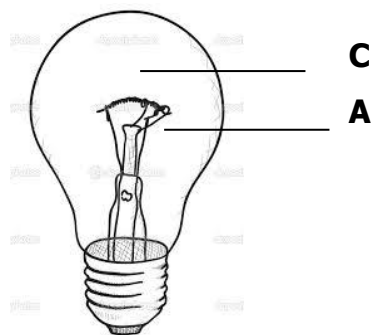
(b) Name the fungus which is used in the production of alcohol.

.....

(c) Apart from waragi, give any other example of an alcoholic drink.

.....

42. The diagram below is of an electric bulb; use it to answer the questions that follow.



- (a) Name the part labelled **A**.

.....

- (b) Why is part marked with letter A coiled?

.....

- (c) What is the use of gas found in part marked **C**?

.....

- (d) What energy changes take place when an electric bulb is in use?

.....

- 43 (a) Write any **one** example of each of the following

Solute

Solvent

- (b) How can you separate a mixture of beans and stones?

.....

- (c) Give a method of separating mixtures used when getting juice from passion fruits.

.....

44. The diagram below shows a human being with a certain deficiency disease.



(a) Name the deficiency disease affecting the person in the diagram above.

.....

(b) State the main cause of the disease named above.

.....

(c) How best can such a disease be prevented?

.....

(d) Give any one other deficiency disease that affects human beings.

.....

45. (a) Name the second stage of the life cycle of a cockroach.

.....

(b) State any **one** disease spread by cockroaches to people.

.....

(c) How can you help family members to reduce cockroach infestation in a home?

(i)

(ii)

46. Use the list of items below to answer questions that follow.

Goat	wind	coal	sisal	petroleum
------	------	------	-------	-----------

(a) Name any **two** items above that belong to renewable resources.

(i)..... (ii)

(b) Identify **one** item that is a fossil fuel.

.....

(b) Apart from providing meat, give any one other product provided by the goat.

.....

47. (a) What type of birds do farmers keep for the following purposes?

(i) Meat production

.....

(ii) Egg production

.....

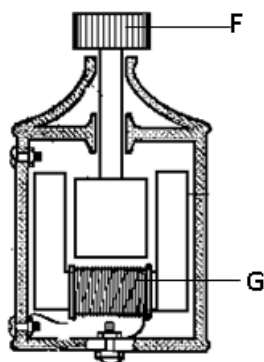
(c) Give **one** disadvantage of keeping poultry birds under free-range system.

.....

- (d) Write any **one** advantage of keeping records in a poultry farm.

.....

48. Study the diagram below and answer questions about it.



- (a) Name part marked F on the above diagram.

.....

- (b) On which principle does a dynamo work?

.....

- (c) In which way does a bicycle tyre help the dynamo to produce electricity?

.....

- (d) How can a bicyclist make the bicycle headlamp connected to a dynamo produce brighter light?

.....

49. (a) Write **one** way through which HIV spreads from an infected person to a healthy person.

.....

.....

(b) State any **one** effect of HIV/AIDS to the community.

.....

(c) Why should children be taught about HIV/AIDS?

.....

(e) Give **one** way of caring for a person with HIV/AIDS.

.....

50. (a) Identify any **two** objects that produce light on their own.

(i)..... (ii)

(b) Give **two** uses of light in the environment.

(i)

(ii)

(a) Mention any **one** condition for rusting to occur in metallic materials.

.....

(b) Why is rusting regarded as a chemical change?

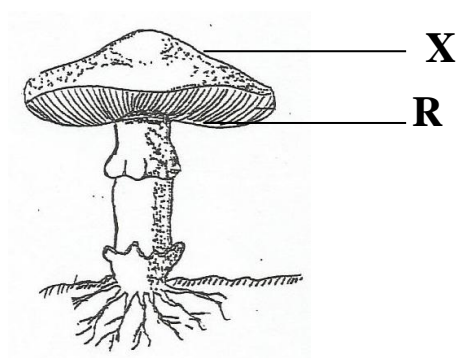
.....

(c) How can you protect metallic materials from rusting?

(i)

(ii).....

- 51. The diagram below shows mushroom.**
Study it and answer the questions that follow.



- (a) Name part labelled **x**.

.....

- (b) Of what use are structures marked **R** to mushrooms?

.....

- (c) How do mushrooms feed?

.....

- (d) How do people benefit from growing mushrooms?

.....

- 52. (a) State the importance of the stomata on the plant leaf.**

.....

- (b) Give the **two** types of venation in plant leaves.

- (i)..... (ii)

- (c) Why do some plants shed their leaves in dry seasons?

.....

53. The table below shows characteristics of different types of soil. Use it to answer the questions below.

A	B	C
Dark in colour Has a lot of humus. Has silt	coarse or rough largest air spaces Highly aerated Has bigger particles	Sticky or slippery when it rains. water logged Has finest particles.

(a) Identify the type of soil at **A** and **C**.

(i) **A**

(ii) **C**

(b) Which soil sample would you use for the following?

(i) Making pots

(ii) Filtering muddy water

54. (a) Write down any two devices used to store sound.

(i).....

(ii).....

(b) Suggest one reason why sound is stored.

.....

(c) Mention one example of a wind musical instrument.

.....

55. **Re-arrange the following steps of making ORS in their correct order.**

- a. Measure one litre of drinking water in a clean container.
- b. Stir the mixture and taste before it is given to a patient.
- c. Measure eight levelled teas poons of sugar and one levelled tea spoon of salt in the container.
- d. Wash your hands with clean water and soap.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

THE END