THE HENRY VAN STRAUBENZEE MEMORIAL CENTRE

FOR ACADEMIC AND PROFESSIONAL DEVELOPMENT

PRIMARY LEAVING EXAMINATION MOCK

2024

INTEGRATED SCIENCE

Time Allowed: 2 Hours 15 Minutes

EMIS No.						Personal No.		

Candidate's Name: .....

Candidate's Signature: .....

School: .....

District Name: .....

Read the following instructions carefully:

1. This paper has two **sections A** and **B**. Section **A** has **40** questions and section **B** has **15** questions. This paper has **8** pages altogether.
2. **Answer all** questions. All answers to both sections **A** and **B** must be written in the spaces provided.
3. **All** answers must be written using a **blue** or **black ball point pen** or **ink**. Any work written in pencil other than graphs, pictures and diagrams will not be marked.
4. Unnecessary changes of work will lead to **loss of marks.**
5. Any handwriting that cannot easily be read may lead to **loss of marks**.
6. Do not fill anything in the boxes indicated: **"For Examiners' Use Only".**

For Examiners' Use Only		
Pg. No.	**Marks**	**EXR'SNO.**
Page 2		
Page 3		
Page 4		
Page 5		
Page 6		
Page 7		
Page 8		
TOTAL		

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SECTION A: 40 MARKS

1. Name the human body sense part that helps in finding the colour of a leaf.

.....

2. Write down the importance of a slasher at home.

.....

3. How is the leaf venation of monocotyledonous plants different from that of dicotyledonous?

.....

4. State **one** cause of a natural change in the environment.

.....

Study the feather below and answer questions **5** and **6**.

5. Name part marked with letter **M**.

.....

6. Identify the body part of a bird where the above type of feather is found.

.....

7. How is evaporation process important in the environment?

.....

8. Why do most farmers prefer keeping rabbits to cattle?

.....

9. Give a reason why an antelope is grouped under ruminant animals.

.....

10. Of what importance is digestive juice during digestion of food?

.....

Study the experiment below and answer the questions **11** and **12**.

11. Identify the property of air being demonstrated by the girl above.

.....

12. Besides the above property, state any other property of air.

.....

13. How does yeast reproduce?

.....

14. State **one** way how trachoma is spread among people.

.....

15. Most people feel warm immediately after bathing cold water. Give a reason for that.

.....

16. In the space below, draw the symbol of a dry cell.

17. Name the disease which is vaccinated by PCV vaccine.

.....

18. What do you understand by the term energy resource?

.....

19. Write down **one** method which is done by farmers to control wind erosion.

.....

20. Name the condition for bacteria which is removed from cassava during sun drying.

.....

21. Give a reason why farmers carry out harvesting of crops during a dry season.

.....

22. Write down the characteristic of living thing which help to produce energy for the body.

.....

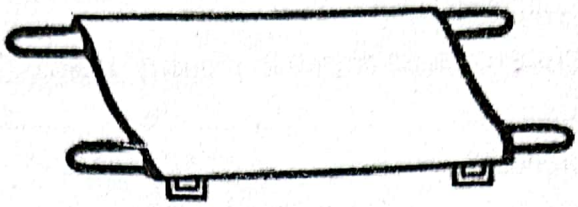
23. A primary seven child switched on a torch, it gave light for sometime and it went off. Suggest **one** reason why the torch went off.

.....

24. Apart from animal kingdom and plant, mention one other group of living things.

.....

25. State the function of the first aid tool below.



.....

26. How does the feeding of hookworms affect a person's health?

.....

27. How do bacteria multiply in number?

.....

28. Of what importance is water during seed germination?

.....

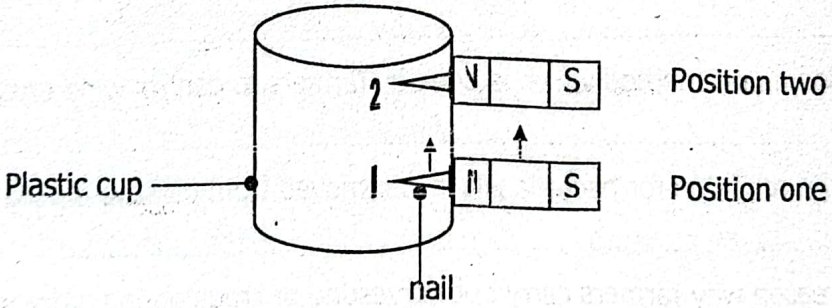
29. State the form of energy which is formed when objects vibrate.

.....

30. Give a reason why people cannot see objects in corners but can hear sound from corners.

.....

Below is a property of magnets. Use it to answer questions **31** and **32**.



31. Name the above property of magnetism.

.....

32. State **one** function of magnets to people in our daly life.

.....

33. What food value is got from eating eggs?

.....

34. How is the reproduction of ferns different from that of beans?

.....

35. Using displacement method, the amount of water displaced is equal to the volume of an irregular object. Mention **one** object with that property.

.....

36. In which **one** way is rusting similar to burning as chemical changes?

.....

37. State the functional difference between arteries and veins.

.....

38. Name the element of PHC which is promoted by using birth control pills.

.....

39. How do trees control soil erosion?

.....

40. Calculate the voltage of a torch which uses two dry cells.

.....

.....

.....

.....

SECTION B

41. Match items in list A with those in list B.

List A	List B
Flying mammals	monetremes
Egg laying mammals	chiloptera
Pouched mammals	rodents
Gnawing mammals	marsupials

i) Flying mammals .....

ii) Egg laying mammals .....

iii) Pouched mammals .....

iv) Gnawing mammals .....

42a) State the reason why a dry cell is grouped under primary electric cells.

.....

b) Besides a dry cell, mention any other one example of a primary cell.

.....

c) Mention the form of energy which is

i) stored in a dry sell .....

ii) produced by a dry cell .....

43a) Give a reason why cattle farmers rear dairy breeds of cattle.

.....

b) Write down **two** examples of dairy breeds of cattle.

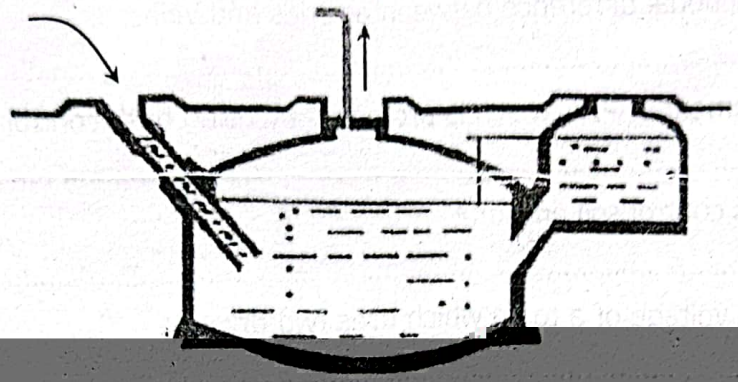
i) .....

ii) .....

c) Name the instrument which helps to detect the presence of water in milk.

.....

44. **Study the diagram below and answer questions that follow.**



a) Name the diagram illustrated above.

.....

b) Why is the above diagram important in our homes?

.....

c) Mention **two** materials which are used to produce the gas produced in that diagram.

i) .....

ii) .....

45a) What name is given to a meal that contains all food values in their right amount?

.....

b) State **two** components that make up the above in (a)

i) .....

ii) .....

c) What is the health effect of lacking some food values in our bodies?

.....

46a) How do the following parts of a vacuum flask prevent heat loss?

i) Vacuum .....

ii) Silvered walls .....

b) State the importance of a vacuum flask.

.....

c) Why are vacuum flasks not common in village areas?

.....

47. Write the following in full.

i) HIV .....

ii) D.C .....

iii) PHC .....

iv) AC .....

48a) What type of soil has got balanced soil components?

.....

b) How is soil texture different from soil structure?

.....

.....

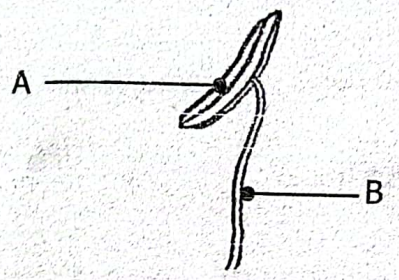
c) Give a reason why clay soil has got high water retention.

.....

d) By what process of soil formation is humus formed?

.....

49. The diagram below shows a part of a flower. Use it to answer questions that follow.



a) Name part marked with letter **B**.

b) Of what importance is part **A**?

.....

c) What name is given to the above part of a flower?

.....

d) How are flowers important to plants?

.....

50a) How is a queen excluder important in a modern bee hive? (*Give two*)

i) .....

ii) .....

b) Beside a modern bee hive, mention another type of bee hive.

.....

c) How is a swarm catching net important to a bee keeper?

.....

51a) How do people acquire natural immunity?

.....

b) Besides the childhood immunisable diseases, mention any other two immunisable diseases.

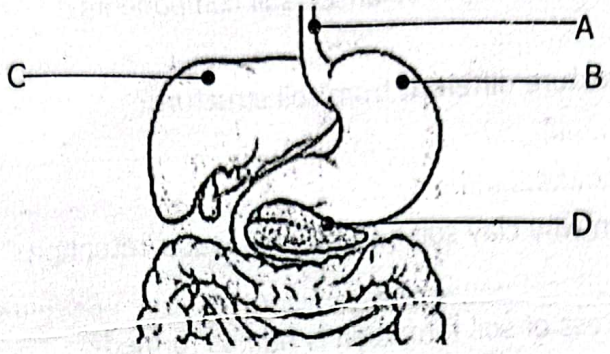
i) .....

ii) .....

c) Write one reason why people take their children for immunization.

.....

52. Below is a part of the alimentary canal of a person. Use it o answer questions that follow.



a) Name part marked with **C** and **D**.

i) C.....

ii) D.....

b) By what process does food bolus pass through part **A**?

.....

c) To which body system does the above diagram belong?

.....

53a) How is pitch sound of string instruments changed?

i) .....

ii) .....

b) Give **one** example of a string instruments.

.....

c) Give a reason why a smaller drum has got higher pitch than a bigger drum.

.....

54a) What are irreguiar objects?

.....

.....

b) State **two** examples of irregular objects.

i) .....

ii) .....

c) How is the volume of regular objects found?

.....

55. (a) During making of ORS one must measure ..... litres of safe water and add ..... spoonful of salt and ..... spoonful of sugar into the container of water. Stir the mixture to make a solution.

b) What do you understand by the term rehydration?

.....

Integrated Science Marking Guide

SECTION A

1. Seeing
2. For slashing tall grass// cutting tall grass
3. Monocotyledonous plants have parallel leaf venation while dicotyledonous plants have network leaf venation.
4. Deforestation// bush burning// overgrazing// swamp drainage.
5. After shaft
6. Wings// tail
7. Evaporation helps in rain formation// helps in distillation of alcohol
8. Rabbits multiply faster than cattle// rabbits require small piece of land.
9. An antelope chews the cud and has four stomach chambers.
10. Digestive juice contains enzymes which speed up digestion
11. Air occupies space
12. Air exerts pressure// air has weight
13. By budding.
14. Sharing face towels with infected people
15. Due to vasoconstriction
16. —|I—
17. Pneumonia
18. An energy resource is any component of the environment that provides useful energy to human being
19. Planting trees
20. Moisture
21. There is enough sunshine to dry the harvested crops.
22. Living things respire// living things feed
23. The dry cells had got used up or expired// may be the bulb had blown
24. Protoctista// fungi// monera// bacteria
25. To carry casualties who can't walk
26. Hook worms feed on blood that leads to anaemia
27. By means of cell division// binary fission.
28. Water dissolves food nutrients for the growing seed embryo
29. Sound energy
30. Light travels in a straight line while sound travels by sound waves in all directions.
31. Magnetism can pass through non-magnetic materials.
32. Magnets are used in loud speakers// electric bells
33. Proteins
34. Ferns reproduce by means of spores while beans reproduce by means of seeds.
35. Stone// metals
36. Both rusting and burning need the presence of oxygen gas to take place.
37. Arteries carry blood away from the heart while veins carry blood towards the heart.
38. Family planning
39. Trees act as wind breaks// tree roots hold soil particles together.
40. 1 dry cell → 1.5 v 2 dry cells → 1.5 2 v = 3 v

SECTION B

41. (i) *flying mammals* chiloptera
    (ii) *egg laying mammals* monotremes
    (iii) *pouched mammals* marsupials
    (iv) *gnawing mammals* rodents
42. (a) A dry cell cannot be recharged when exhausted.
    (b) Wet cell.
    (c) Chemical energy// electrical energy
43. (a) For milk production.
    (b) Friesian// Jersey// brown Swiss// Guernsey// Ayrshire// Fleckvieh.
    (c) Lactometer
44. (a) Biogas digester.
    (b) For production of biogas.
    (c) Animal remains// cow dung, plant remains//.
45. (a) A balanced diet.
    (b) Proteins// Carbohydrates// Vitamins.
    (c) Lacking some food values lead to deficiency diseases in our bodies
46. (a) *Vacuum*: by conduction or convection. *Silvered walls*: by radiation.
    (b) To keep hot things or cold things cold.
    (c) Vacuum flasks are more expensive.
47. (i) Human Immunodeficiency Virus
    (ii) Direct Current
    (iii) Primary Health Care
    (iv) Alternating Current
48. (a) Loam soil.
    (b) Soil texture refers to how rough or smooth soil particles while soil structure refers to the arrangement of soil particles.
    (c) Clay soil has got small air spaces between its particles.
    (d) By decomposition of organic matter.
49. (a) Filament.
    (b) To produce pollen grains.
    (c) Stamen.
    (d) Flowers are used for reproduction.
50. (a) A queen excluder prevents a queen bee from laying eggs in a honey chamber// A queen excluder prevents drone bee from crossing to the honey chamber.
    (b) Traditional beehive.
    (c) For stocking bees in a hive.
51. (a) Through breast feeding.
    (b) Cholera// COVID 19.
    (c) Prevents immunisable diseases.
52. (a) *C* → Liver. *D* → Pancreas.
    (b) Peristalsis.
    (c) Digestive system.
53. (a) By tightening or loosening the strings// increasing the thickness or thinness of the strings// changing the material of string.
    (b) Guitar.
    (c) A smaller drum has got a smaller vibrating surface.
54. (a) Irregular objects are objects without a definite shape.
    (b) Stones// keys// fruits// potatoes// cassava// piece of broken brick/ glass/ wood.
    (c) By using the formula of calculating length times width times height// V = LxWxH.
55. (a) ... one ... // ... one ... // ... eight... .
    (b) Rehydration is the replacement of the lost water and mineral salts in the body.