

NEXUS EXAMINATIONS BOARD

PRE-PRIMARY LEAVING EXAMINATION SET IV

2023

INTEGRATED SCIENCE

Time Allowed: 2 hours 15 minutes

Random No.						Personal No.		

Candidate's Name:.....

Candidate's Signature:.....

District ID No.

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Read the following instructions carefully:

1. Do not write your **school** or **district name** anywhere on this paper.
2. This paper has two sections: **A** and **B**.
Section **A** has **40** questions and Section **B** has **15** questions.
3. Answer **all** questions. **All** answers for both sections **A** and **B** must be written in the spaces provided.
4. **All** answers must be written using a **blue** or **black** ball point pen or ink. Any work written in pencil will **not** be marked.
5. Unnecessary **changes** in your work and handwriting that cannot easily be read may lead to loss of marks.
6. Do not fill anything in the table indicated:
"FOR EXAMINERS' USE ONLY"

FOR EXAMINERS' USE ONLY		
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: 40 MARKS

1. What class of food is used by the body as petrol is used in a car?

2. Identify one element of PHC that helps to prevent the spread of infectious diseases.

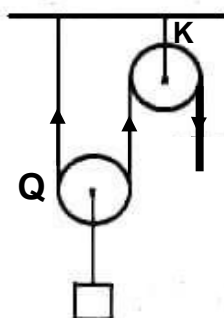
3. Give one characteristic of root crop pests.

4. How is a parlour shed important on a cattle farm?

5. Why is a cistern tank put on a raised level in a flush toilet?

6. Give one storage device where stored sound can be reproduced using a piano.

The diagram below shows a block and tackle pulley. Use it to answer questions **7** and **8**



7. Name the type of pulley system at **K**.

8. State the advantage of using pulley system **Q** over **K**.

9. Why does porridge in a metallic cup cool faster than in a plastic cup of the same size?

10.Suggest one way of reusing old metals in the environment.

11. What immunisable disease affects the brain?

12. State one role of carbon dioxide to plants during photosynthesis.

13. Give one heart disease that can be caused by tobacco smoking.

14. What part of the human tooth is strengthened by feeding on foods rich in calcium?

15. Why is soil erosion more serious in hilly areas than flat areas?

16. Suggest one role of NEMA in the prevention of environmental degradation.

17. Identify the disease whose germs are spread by the organism



18. How is weather forecasting useful to a crop farmer?

19. What type of change takes place when iron is magnetized using electricity?

20. State the use of cilia to a paramecium.

21. Why do farmers cut off leaves of banana suckers before planting?

22. How does charcoal burning affect the environment?

23. Give one device that converts electrical energy to sound energy.

24. In which one way does wind affect the speed of sound?

25. How does a stem support the process of pollination in plants?

26. Why are people advised not to construct houses on steep slopes of hills?

27. Suggest one way of caring for wild birds in the environment.

28. Besides the feelers, what other part of an insect can be used for hearing?

29. Give one way of saving water at home.

30. State one advantage of using ARVs by AIDS patients.

31. Identify the type of simple leaf drawn below.



32. Which poultry disease causes a greenish diarrhoea?

33.Suggest one role of young farmers clubs in a school.

.....
34.Name one organism that produces sound by stridulation.

.....
35.Name one method of applying manure to seeds during planting.

.....
36.Why is yellow fever referred to as an other immunisable disease not a childhood immunisable disease?

.....
37.Apart from determining skin colour, state another role of melanin in the human body?

.....
38.Name one local material that can be used to make door mats.

.....
39.State the effect of the intestinal worms drawn below to the human body.



.....
40.Why is a thrown stone able to shutter a glass window?

SECTION B: 60 MARKS

41. Concentrates are animal feeds with high nutrients and less moisture content.

List F carries some examples of concentrates and the food nutrients each contains in G but in a wrong order.

Match them correctly.

F

Bone meal

Maize bran

Rock salt

Blood meal

G

iron

sodium

calcium

carbohydrates

- i) Bone meal
- ii) Maize bran.....
- iii) Rock salt.....
- iv) Blood meal.....

42.a) Give any two methods that can be used to separate insoluble solids from liquids.

- i)
- ii)

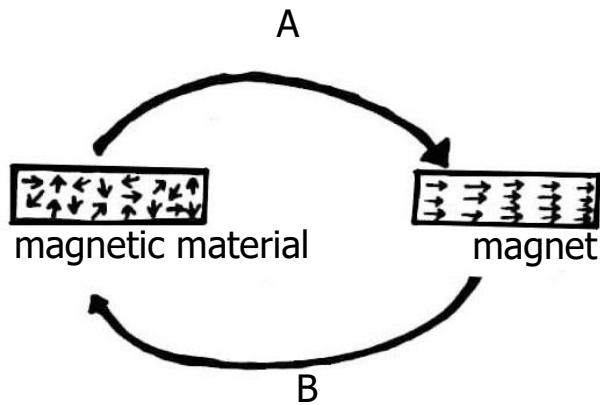
b) Name one mixture that can be separated by winnowing.

.....

c) Why is winnowing always done during a windy weather?

.....

43. Study the diagram below and use it to answer the questions that follow.



a) Identify processes represented by A and B.

A

B

b) Suggest one way of carrying out processes A and B.

A

B

44.a) State the meaning of the term self inflicted diseases.

.....
.....

b) Give any two examples of self inflicted diseases.

i)

ii)

c) Which element of PHC can help us to prevent self inflicted diseases?

.....

45. a) Name any two crop growing practices that control pests and weeds.

i)

ii)

b) Which method of plant training is used in banana plants?

.....

c) Why is planting normally carried out in the wet seasons?

.....

46.a) What are non biodegradable materials?

.....

b) Write down any two examples of non biodegradable materials.

.....

c) How are non-biodegradable materials dangerous in the soil?

.....

47.a) State any two dangers of using wet wood for making furniture.

i)

ii)

b) Why should wood seasoning be done on a flat surface?

.....

c) Name the best method of harvesting trees that provide wood for electricity poles.

.....

48. a) To which groups of living-things do the following organisms belong?

i) Mushroom.....

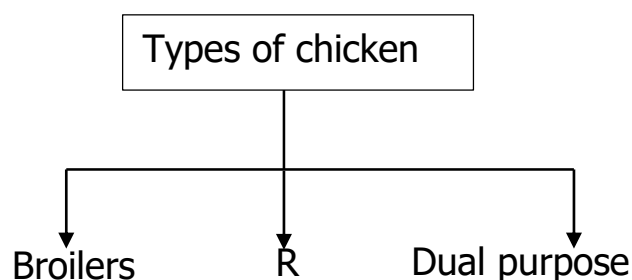
ii) Bacteria.....

b) How do the following organisms reproduce?

i) mushroom.....

ii) bacteria.....

49. Use the above diagram to answer questions that follow.



a) Name the type of chicken marked R.

.....

b) State any one example of the type of chicken marked R.

.....

c) In which one way can farmers improve local breeds of chicken?

.....

d) Which disease affects both poultry and people?

.....

50.a) What do we call the angle between a leaf and the stem of a plant?

.....

b) State the importance of auxin hormone to plants?

.....

c) Compose any two dangers of some plants to people.

i)

ii)

51.The diagram below shows a common farm structure. Use it to answer questions that follow.



a) Name the farm structure drawn above.

.....

b) How is the above structure useful at the farm?

.....
c) Besides the structure above, name any other farm structure that can be used for the same purpose.

.....
d) State one effect of external parasites to farm animals.

.....
52. a) How is a pumice stone useful in the promotion of personal hygiene?

.....
b) State one health problem that may arise from poor personal hygiene.

.....
c) What element of personal hygiene can help to kill external parasites?

.....
d) What type of water does not easily form lather with soap?

.....
53.a) What is food poisoning?

.....
b) Give any two causes of food poisoning.

i)

ii)

c) Name the first aid administered to a person who has taken a non-corrosive poison.

54. The table below shows blood groups compatibilities for transfusion purposes. Use it to answer questions about it.

BLOOD GROUP	DONOURS' BLOOD GROUP			
	O	A	B	AB
O	✓	✖	✖	✖
A	✓	✓	✖	✖
B	✓	✖	✓	✖
AB	✓	✓	✓	✓

KEY

✓ Compatible with recipient

✖ Incompatible with recipient

a) If a patient of blood group B requires transfusion, name the two blood groups required to be the possible donors.

i)

ii)

b) What name is given to a person with blood group AB?

.....

c) Name any one disease that can be spread through blood transfusion?

.....

55. a) What body organ:

i) controls body movement?

.....

ii) controls body balance?

.....

b) In which one way are the human hands useful to other body organs?

.....

c) What condition in humans is similar to wilting in plants?

.....

END