



BUSOGA EXAMINATION COUNCIL

PRE-PLE EXAMINATION, 2024
INTEGRATED SCIENCE (NAIROBI)
Time Allowed: 2 hours 15 minutes



Index No.

EMIS NO.					PERSONAL NO.		

Candidate's 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 answers to both Sections **A** and **B** must be written in spaces provided in full sentences.
5. All answers must be written using a blue or black ballpoint pen or ink but not pencil. All work done in pencil except diagrams will **NOT** be marked.
6. Unnecessary alteration of work will lead to loss of marks.
7. Any handwriting that cannot easily be read, may lead to loss marks.
8. Do **not** fill anything in the boxes indicated

FOR EXAMINERS' USE ONLY		
QN. NO.	MARK	SIGN
1-10		
11-20		
21-30		
31-40		
41-50		
51		
52		
53		
54		
55		
TOTAL		

SECTION A: (40 MARKS)

1. Name the part of a plant which absorbs water and mineral salts from the soil.

2. Which fungus reproduces by means of budding?

3. Name any one type of poultry kept in Uganda.

4. Suggest the first aid you would give to a person with a fracture.

5. Mention any one state of matter that allows heat transfer by convection.

6. Name the garden tool below.



7. How do wasps protect themselves?

8. Which component of blood is destroyed by malaria parasites?

9. How are moths able to pollinate flowers at night?

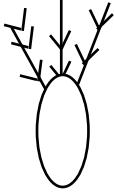
10. Apart from having root nodules, give any other characteristic of legumes

11. Name any one water borne immunisable disease.

12. Suggest one danger of charcoal burning to the environment.

13. Why do objects weigh less in water than in air?

14. How is the seed below dispersed?



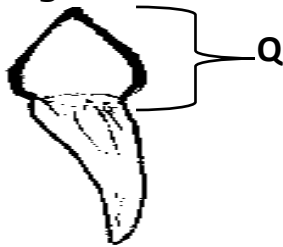
15. State the main function of kidneys in the body.

16. What is the gestation period of a doe?

17. Why would school children sort their clothes before washing?

18. How is water used as a resource?

The diagram below shows a tooth. Use it to answer question 19 and 20.



19. Mention, how else can sound be stored?

20. Why do animals move from Identify the type of tooth shown above?

21. Name one mineral salt that makes part **Q** harder.

22. Why is a rat regarded as a mammal?

23. How can a goat farmer improve the quality of his local breeds of goats on his farm?

24. Why is carbon dioxide used in fire extinguisher?

25. Which fuel is obtained by burning wood under limited supply of oxygen?

26. Why is it not advisable to buy drugs from local shops?

27. How is trachea adapted to its function?

28. Apart from notation one place to another?

29. Give the difference between a jackal and a lion in terms of feeding.

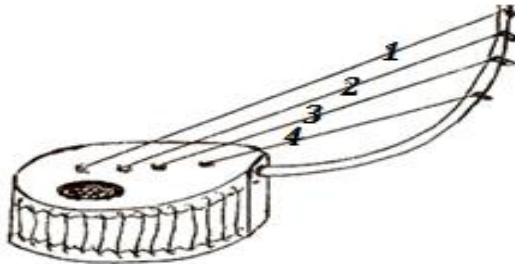
30. State the most sensitive part of a tooth.

31. Why is water obtained by distillation not recommended for drinking?

32. Give the meaning of the term arthropods.

33. How does the germ for tetanus enter the body?

The diagram below shows a musical instrument. Use it to answer questions 34 and 35.



34. To which group of musical instruments does the above instrument belong?

35. How can the pitch of string **2** be increased?

36. State one effect of deforestation on wild animals.

37. Why is harvesting of honey best done in evening?

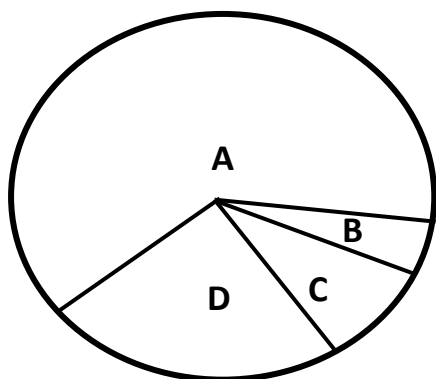
38. How does photosynthesis purify air?

39. In which way does a passion fruit plant benefit from growing near a mango tree?

40. Give any one disease that attacks both rabbits and poultry.

SECTION B (60MARKS)

41. Study the pie-chart below showing the percentage of air in the atmosphere and answer the questions that follow.



a) Name the gases that are represented by letter;

C _____

D _____

b) Give any one process that uses gas **B**.

c) How is gas **A** useful to legumes?

42. a) State the main cause of fainting.

b) Mention any two conditions that may lead to fainting.

i) _____

ii) _____

c) State the danger of crowding around the person who has fainted.

43. a) Give the meaning of the term friction.

b) Which type of friction do birds overcome during flight?

c) State any one advantage of friction to a farmer.

d) Why is friction regarded as a nuisance force?

44. a) Mention any one example of the following groups of animals.

i) Arachnids _____

ii) Molluscs _____

b) Give one importance of molluscs to man.

c) Suggest any one way of conserving invertebrates.

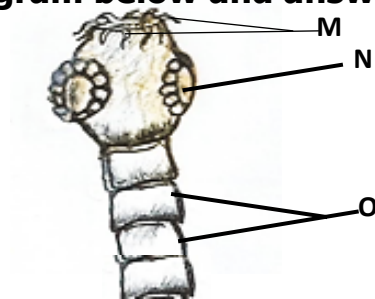
45. a) State any two examples of organic manure.

b) Give any two advantages of natural fertilizers over artificial fertilizers.

i) _____

ii) _____

46. **Study the diagram below and answer the following questions.**



a) To which group of worms does the above worm belong?

b) Name the part marked **M**.

c) How is part marked **N** useful to the worm?

d) State the effect of the above worm in the human body.

47. a) Mention any two groups of non-flowering plants.

i) _____

ii) _____

b) How is a bean plant similar to a pine in terms of reproduction?

c) State any one economic importance of trees.

48. a) How is a windy weather useful to a millet grower after harvesting?

b) Give any one example of a renewable resource.

c) Give one reason why plants should be conserved.

a) State one way recycling is used in the environment.

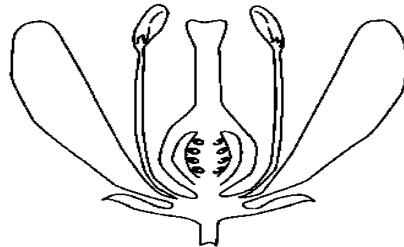
49. a) Why should every home have a latrine?

b) Why is a screen useful on a pit latrine?

c) Why are flush toilets not common in rural areas?

d) Mention any one vector commonly found in a latrine.

50. **Below is a diagram about pollination. Use it to answer the questions that follow.**



a) Name the type of pollination shown in the diagram above.

b) How is a pawpaw plant adapted to cross pollination?

c) Mention any one agent of pollination.

d) Give one use of flowers to a plant.

51. a) State the condition that causes a sunken soft spot on a child's head.

b) Mention any two signs of the above mentioned condition apart from sunken soft spot on the child's head.

i) _____

ii) _____

c) Write any one solute used in making of **ORS**.

52. a) What term is used to refer to crops that are harvested yearly?

b) Mention any two examples of such crops.

i) _____

ii) _____

b) Give any one example of root crops that are propagated using stem cuttings.

53. a) Give the meaning of a First Aid kit.

b) **How are the following equipment useful in administering of First Aid?**

i) Bandage _____

ii) Cotton wool _____

c) State the First Aid you would give to a child who has been burnt by hot milk.

54. a) Identify the permanent method of family planning in men.

b) How does prolonged breast feeding control birth in women?

c) Give any one disadvantage of having many children in a family.

d) Mention one **STD** caused by bacteria.

55. Match the following vectors with the diseases they spread.

A

- i. Culex mosquito
- ii. Anopheles mosquito
- iii. Black fly
- iv. Tsetse fly

B

- river blindness
- elephantiasis
- sleeping sickness
- malaria

i) Culex mosquito _____

ii) Anopheles mosquito _____

iii) Black fly _____

iv) Tsetse fly _____

END