KOLFRAM EDUCATIONAL SERVICES KAMPALA

THE KOLFRAM EXAMINATIONS BOARD

PAST PLE EXAMINATION 2022

PRIMARY SEVEN

INTEGRATED SCIENCE

Time allowed: **2** hours **15** minutes

Candidate's name: _____

Candidate's Signature: _____

District ID Number

DO NOT OPEN THIS BOOKLET UNLESS YOU ARE TOLD TO DO SO

Read and follow these 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. The paper has **8** printed pages.
3. Answer all questions. All the working for both sections A and B must be shown in the spaces provided.
4. All working must be done using a blue or black ball point pen or ink. Any work done in pencil other than on graphs and diagrams will not be marked.
5. No calculators are allowed in the examination room.
6. Unnecessary changes in your work and handwriting that cannot be read easily may lead to loss of marks.
7. Do not fill anything in the table indicated: "FOR EXAMINERS' USE ONLY" and boxes inside the question paper.

FOR EXAMINERS USE ONLY		
QN. NUMBER	MARKS	EXAMINER'S INITIAL
1 -10		
11 - 20		
21 - 30		
31 - 40		
41 - 43		
44 - 46		
47 - 49		
50 - 53		
54- 55		
TOTAL		

THE KOLFRAM EXAMINATIONS BOARD

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COMMENT TO THE CANDIDATE

SECTION A: 40 MARKS

Questions 1 to 40 carry one mark each.

1. Name the part of a flowering plant which grows into a side branch.

   _____

2. State any **one** factor to be considered when selecting a site for keeping honey bees.

   _____

   _____

3. Give any **one** use of proteins in the human body.

   _____

   _____

4. Give any **one** way in which evaporation is important in the environment.

   _____

   _____

5. Why is it advisable to chew food properly before swallowing it?

   _____

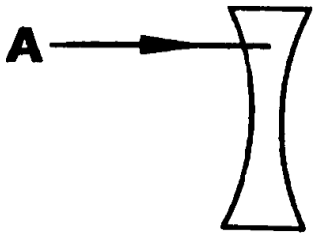
   _____

6. State any **one** way in which Athlete's foot can be controlled among school children.

   _____

   _____

The diagram below shows a light ray A onto a lens. Use it to answer questions 7 and 8.



7. Name the type of lens in the diagram above.

   _____

   _____

8. Complete the path of ray A as it passes through the lens.

   _____

9. Give any one role a School Health Club can play in the control of malaria in a community.

   _____

   _____

10. Name the part of a human tooth that contains blood capillaries and nerve endings.

    _____

    _____

11. State the reason why the volume of water in a container rises when a stone is lowered into it.

    _____

    _____

12. How does cigarette smoking affect the human lungs?

_____

_____

13. State any one element of Primary Health Care (PHC) which is important in the prevention of COVID-19.

_____

_____

14. Why are tomatoes grouped as annual crops?

_____

15. State any **one** way of conserving fossil fuels.

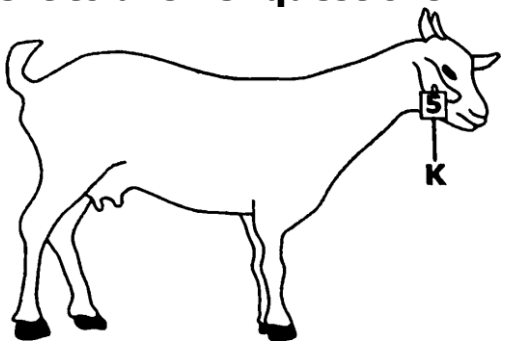
_____

16. Name the vector which spreads river blindness to people.

_____

_____

The diagram below shows one of the management practices in goat rearing. Use it to answer questions 17 and 18.



17. Name the management practice shown with letter K.

_____

18. How is the above practice important to a goat farmer?

_____

19. Which type of weather favours proper harvesting of beans?

_____

_____

20. Give any **one** way in which you can reduce chances of accidents when crossing a road.

_____

_____

21. Name any **one** human body organ protected by the rib cage.

_____

_____

22. Give any **one** condition that may make an electric bulb fail to produce light in a complete circuit.

_____

_____

23. State any **one** way in which an adolescent can control bad odour that results from body changes.

_____

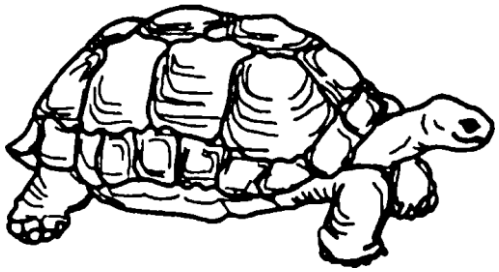
_____

24. Mention any **one** way in which you can prevent some clothes from staining others during washing.

_____

_____

Use the diagram of the animal below to answer questions 25 and 26.



25. Identify the class of vertebrates to which the above animal belongs.

_____

26. How does the above animal protect itself?

_____

_____

27. State any **one** way in which the spread of tuberculosis can be controlled.

_____

28. Mention any **one** way in which food may get contaminated after it has been prepared.

_____

_____

29. Why does sound travel fastest in solids compared to other states of matter?

_____

_____

30. Apart from proper insulation, state any **one** other way of protecting children against electric shock at home.

_____

_____

31. Give any **one** way in which regular physical exercises help to maintain the muscular-skeletal system healthy.

_____

_____

32. Give **one** way in which moulds are similar to ferns.

_____

33. State **one** reason why ash is usually applied around the pit hole of a latrine.

_____

34. Name **one** excretory product removed by the lungs.

_____

_____

35. Write down any **one** activity that members in a School Science Club can do to conserve the environment.

_____

36. State any **one** way in which echoes can be reduced in a large hall.

_____

_____

37. State **one** way in which water is important during seed germination.

_____

38. How does tapeworm infestation lead to malnutrition in humans?

_____

39. Give any **one** way in which drug poisoning can be prevented among children at home.

_____

_____

40. Give any **one** effect of cloud cover in an area.

_____

SECTION B: 60 MARKS

Questions 41 to 55 carry four marks each.

41. State the type of change that takes place when;

(a) A knife rusts._____

(b) Water freezes._____

(c) A fruit ripens._____

(d) Salt dissolves in water_____

42. (a) Give the meaning of the following terms:

(i) Sanitation.

_____

_____

(ii) Personal hygiene

_____

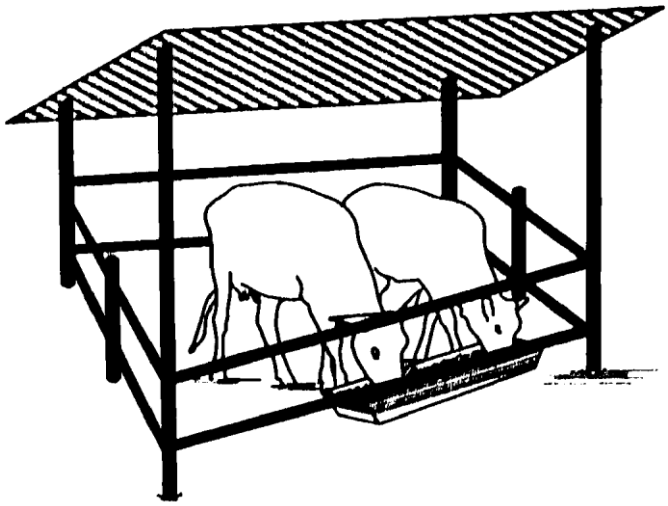
_____

(b) Identify any **two** activities children can do at school to promote good sanitation.

_____

_____

43. **The diagram below shows a cattle grazing system. Study and use it to answer the questions that follow.**



(a) Name the cattle grazing system shown above.

_____

_____

(b) What type of natural manure can be got from the above system?

_____

_____

(c) Apart from easy collection of manure, state any **two** advantages of the above cattle grazing system.

_____

_____

44. (a) To which class of levers does a see-saw belong?

_____

_____

(b) Two pupils, Okello and Jjuuko sat on a see-saw. Okello who weighs 40 kg sat 2.5 metres away from the pivot on one side of the see-saw. Jjuuko sat 4 meters away from the pivot on the other side. Find the mass of Jjuuko if the see-saw was balanced. (03 marks)

45. (a) Name the largest vein in the human body.

_____

(b) Name the type of blood that is transported by the pulmonary artery.

_____

(c) State **one** characteristic of arteries that enables them to carry blood at high pressure.

_____

_____

(d) Give **one** way in which the structure of capillaries enables them to exchange body materials.

_____

_____

46. (a) Name the group of worms to which the following belong;

(i) Liver flukes.

_____

(ii) Hookworms

_____

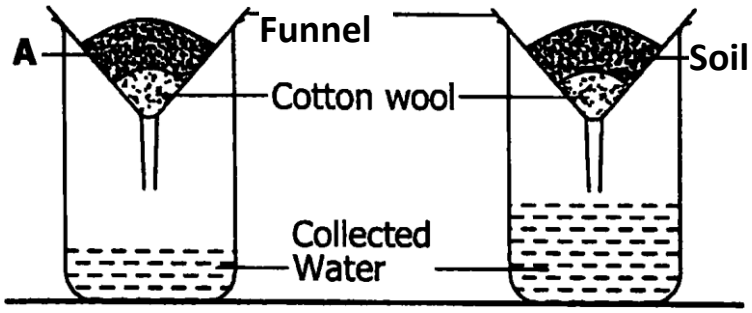
_____

(b) Apart from improving soil aeration, identify any other two ways in which earthworms are important in the soil.

_____

_____

47. The diagram below shows an experiment carried out on two equal amounts of soil samples A and B. Equal amount of water was poured on the soil samples. The water that passed through the soil samples after ten minutes was collected in containers of the same size as shown. Study and use it to answer the questions that follow.



Soil sample **Soil sample B**

(a) What property of soil was being studied in the experiment?

_____

(b) State the function of the cotton wool in the experiment above.

_____

_____

(c) Given that the **two** soil samples were from sand and clay, which of the two samples was clay?

_____

_____

(d) Give any **one** reason for your answer in (c) above.

_____

48. (a) State any **two** effects of chewing miraa (khat) to the human body.

_____

_____

(b) Mention any **two** things a teenager can do to avoid the habit of chewing miraa (khat).

_____

_____

49. The table below shows crop growing practices in part A and their importance in part B.

A: Crop growing practice	B: Importance
Staking	- Prevents overcrowding of plants
Mulching	- Removes unwanted plants
Thinning	- Prevents fruits from rotting
Weeding	- Conserves soil moisture

Match correctly the crop growing practices with their importance in the spaces provided below.

(i) Staking

_____

_____

(ii) Mulching

_____

_____

(iii) Thinning

_____

_____

(iv) Weeding

_____

_____

50. Name the method of seed dispersal in;

(i) Black jack. _____

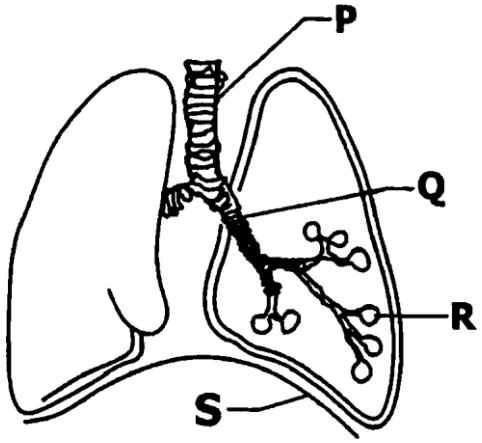
(ii) Coconut: _____

(b) Give any **two** ways in which seed dispersal is important to plants.

_____

_____

51. **The diagram below is of a human respiratory system. Study the diagram and use it to answer the questions that follow.**



(a) Name the part marked Q.

_____

(b) Which substance is part P made of?

_____

(c) Give the function of the part marked R.

_____

_____

(d)What happens to part S during the process of breathing in?

52. (a) Name the **two** states of matter through which heat travels by convection.

_____

_____

(b) State any **two** ways in which heat transfer by convection is helpful in our daily life.

_____

_____

53. (a) Give the meaning of the following terms:

(i) Agroforestry.

_____

_____

(ii) Mixed cropping

_____

_____

(b) State any **two** characteristics of a tree suitable for agroforestry.

_____

_____

54. You are provided with the following materials:

Salt, sugar, teaspoon, boiled water and clean containers. After washing your hands, write **four** other steps you will take to prepare salt sugar solution for treating dehydration at home.

_____

_____

_____

_____

_____

55. (a) Write down any **two** things that can be added to chicken feeds in order to increase the amount of calcium.

_____

_____

(b) State any **two** practices a poultry farmer can do to layers to increase on egg production.

_____

_____