



PURSUIT EXAMINATIONS BOARD

PRIMARY LEAVING **MAGIC SET I** EXAMINATIONS

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 working for both sections **A** and **B** must be shown 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 be read easily may lead to **loss** of marks.
6. **Do not** fill anything in the table indicated:
For "Examiners use only" and boxes inside the question paper.



Pursuit of excellence

FOR EXERMINERS' 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

Questions **1** to **40** carry **one** mark each.

1. Name any disease that is spread by cockroaches to humans.

.....

2. Give any one characteristic of stem tuber crops.

.....

3. Name the body system that holds the other parts of the body together.

.....

The diagram below shows a farmer performing certain farming practice. Study and use it to answer the questions **4** and **5**.



4. State the reason why the above farming practice is mostly done in the evening hours.

.....

5. Name the garden tool used for carrying out the above farming practice.

.....

6. Give any one activity done to promote good health habits.

.....

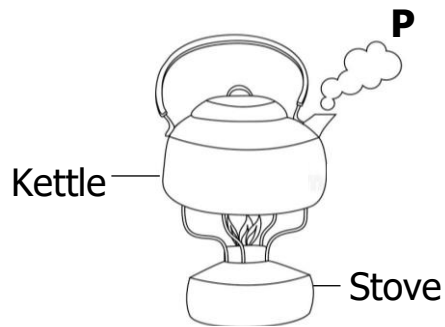
7. How is bacteria important in the process of soil formation?

.....

8. Name the method of seed dispersal common in plants whose seeds are stored in pods.

.....

Study the diagram below carefully and use it to answer the questions **9** and **10**.



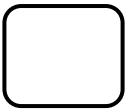
9. What physical process leads to the formation of the substance marked with letter **P**?

.....

10. At what temperature does pure water start to boil in a place with normal attitude?

.....

11. Name the group of non-flowering plants that reproduce by use of seeds.



.....

12. What term is used to describe the layers whose egg production rate has lowered?

.....

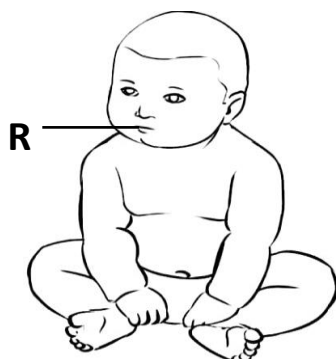
13. Give any one reason why a flower is referred to as the reproductive part of flowering plant.

.....

14. State any one importance of including dietary fibres in one's diet.

.....

The diagram below is of a baby. Study and use it to answer the questions **15** and **16**.



15. Name any one Immunisable disease whose vaccine is administered in the part marked **R**

.....

16. State the reason why the above drawn baby is grouped under vulnerable groups of people.

.....

17. Give any one common characteristic of all arthropods.

.....

18. In which way are the cranial bones able to disable movement?

.....

19. To which group of birds does a weka belong?

.....

20. Name the change that causes regeneration of lost limbs in arthropods.

.....

21. Give any one condition necessary for bacteria to multiply.



.....

22. Name the part of a plant where pollination takes place.

.....

23. Which force causes moving objects to lose energy and slow down?

.....

24. Name the endoparasite that feeds on the digested food of a host.

.....

25. State any one way in which heat transfer by convection in liquids is applied in real life situation.

.....

26. Give the characteristics of muscles that causes the human arm to bend and straighten.

.....

27. Name the part of the lens camera that acts the same way as the retina of the human eye.

.....

28. In which human body organ does the formation of urine take place?

.....

29. Name the causative agent of heart water in cattle.

.....

30. In the space provided below, draw the type of lens used for correcting shortsightedness.



31. Which type of blood is transported by the pulmonary vein.

.....

32. Name the pigment that determines the skin colour and protects it from strong radiations of the sun.

.....

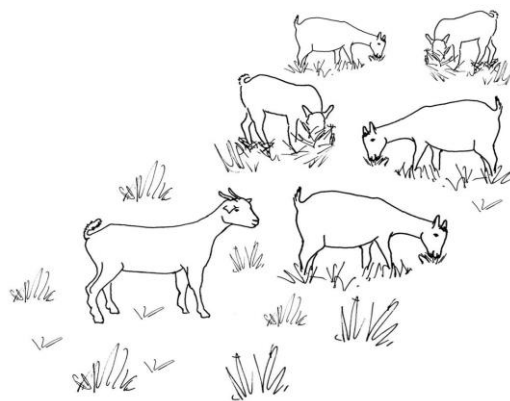
33. Mention the feeding levels of food chain that obtains food directly from the plants.

.....

34. Name any one enzyme found in pancreatic juice.

.....

The diagram below shows a system of grazing goats. Study and use it to answer the questions **35** and **36**.



35. Name the system of grazing goats shown in the above diagram.

.....

36. State any one disadvantage of grazing goats using the shown system in **(35)** above.

.....

37. Name the fossil fuel that is formed by the process of carbonisation.

.....

38. Which type of plant propagation requires the use of scion and the root stock of separate plants inform of a wood structure?

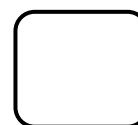
.....

39. Name the method of finding the volume of an object that requires the use of an overflow can.

.....

40. What is formed by dispersion of light when sunlight passes through droplets of rain?

.....



SECTION B: 60 MARKS

Questions **41** to **55** carry four marks each.

41. (a) Match each group of vertebrates in list **A** with the correct examples in list **B**.

LIST A

Mammal

Reptile

Amphibian

LIST B

Frog

Tortoise

Bat

- (i) Mammal
(ii) Reptile
(iii) Amphibian

- (b) Give any other one group of vertebrates missing in the list **41** (a) above.
.....

42. (a) Name the method of heat transfer that does not require matter.
.....

- (b) State the reason why electric wires are loosely fixed on electric poles during installation.
.....

- (c) Name the state of matter in which heat travels by conduction.
.....

- (d) State the reason why heat travels in fluids by convection?
.....

43. (a) What term refers to the process of making a magnetic material acquire magnetism?

.....

- (b) State any two factors that affect the strength of magnets made through electrical method.

(i)

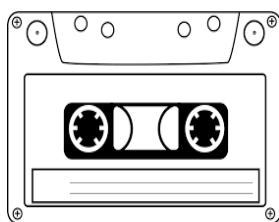
(ii)

- (c) Give any one way in which magnets are used in daily life.

.....



44. The diagram below is of a device used to store sound. Study and use it to answer the questions that follow.



- (a) Name the device drawn above.

.....

- (b) Give the use of the device drawn in **44** (a) above.

.....

- (c) State any two ways of reproducing stored sound.

(i)

(ii)

45. (a) Give the meaning of personal hygiene?

.....
.....

(b) Which health activity is done to the body using a toothpaste?

.....

(c) State two importance of performing personal hygiene.

(i)

(ii)

46. The diagram below shows a type of brooding in poultry. Study and use it to answer the questions that follow.



(a) Name the type of brooding shown in the above diagram.

.....

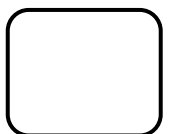
(b) Give any two advantages of the above type of brooding shown in **46** (a) above.

(i)

(ii).....

(c) Give any one reason why people rear poultry.

.....



47. (a) Name the muscular and skeletal disorder that results from a torn tendon.
.....
- (b) Give any two signs and symptoms of sprains.
(i)
(ii)
- (c) State any one First Aid given to a victim of sprain.
.....
48. (a) What do we call the components of the environment that people use to satisfy their needs?
.....
- (b) Give any one example of the following;
(i) Living resource of the environment
.....
(ii) Non-living resource of the environment
.....
- (c) State any one way of conserving non-renewable resources in the environment.
.....

49. (a) Name the vector that spreads plasmodium germ to people.

.....

(b) How does the vector named in **49** (a) above able to spread germs to people?

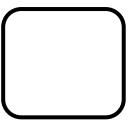
.....

(c) State any two ways of preventing diseases spread by vectors to people.

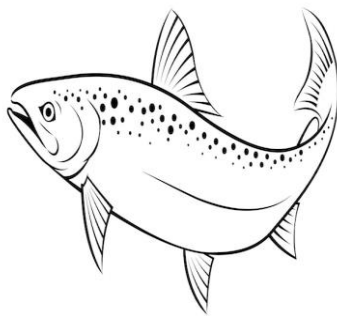
(i)

(ii)

50. The diagrams below show two living things. Study and use them carefully to answer the questions that follow.



FISH



BEAN



(a) Name the group of living things each drawn organism belongs.

(i) Fish

(ii) Bean

(b) State the way the drawn living things in (**50**) above are related in their mode of reproduction.

.....

(c) State any one characteristic of living things.

.....

51. (a) Name the organ that is responsible for the secretion of the following digestive juices.
- (i) Bile juice
- (ii) Gastric juice
- (b) Mention any one enzyme found in the gastric juice.
-
- (c) Name the part of the digestive system where undigested food is stored for some time.
-
52. The table below shows group of birds. Study and use it carefully to answer the questions that follow.

A	B	C
Eagle	Hen	Weaver bird
Owl	Guinea fowl	Swallow

- (a) Name the group of birds that belong to the list marked with letter;
- (i) **B**
- (ii) **C**
- (b) State any one way in which the birds in group **A** are adapted to their mode of feeding.
-
- (c) To which group of birds would one put a falcon in the shown table (**55**) above?
-



53. (a) Name any one example of diarrhoeal disease that spreads in humans.

.....

(b) Give any one way in which diarrhoeal diseases can spread in homes and communities.

.....

(c) Name any one vector that is involved in the transmission of diarrhoeal diseases to humans.

.....

(b) State any one way of preventing the spread of diarrhoeal diseases in homes and communities.

.....

54. (a) Name the group of simple machines a panga belongs.

.....

(b) Give any two ways in which simple machines simplify work.

(i)

(ii)

(c) What term is used to describe the turning effect of a force about a point?

.....

55. Musa, a P.7 candidate carried out an experiment about floating and sinking objects. He decided to use a stone of mass **40g** and a feather of mass **0.5g** and immersed them into measuring cylinder containing water at different intervals. He observed that the stone sunk and displaced water of **10CC** and the feather did not sink.

(a) State the reason why;

(i) The stone was able to sink in water.

.....

(ii) The feather was able to float on water.

.....

(b) Calculate the density of the stone.

(02 marks)

