



# FLOURISH OF EXCELLENCE EXAMINATIONS BOARD

## P LE UNIQUE SERIES 2 OF 8

2024

### INTEGRATED SCIENCE

*Time Allowed: 2 hours 15 minutes*

Index 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. The paper has **15** printed pages.
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.

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

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

1. Name the disease vector that breeds in fast flowing water.

.....

2. Give any **one** reason why a person making charcoal covers the logs of wood with grass.

.....

.....

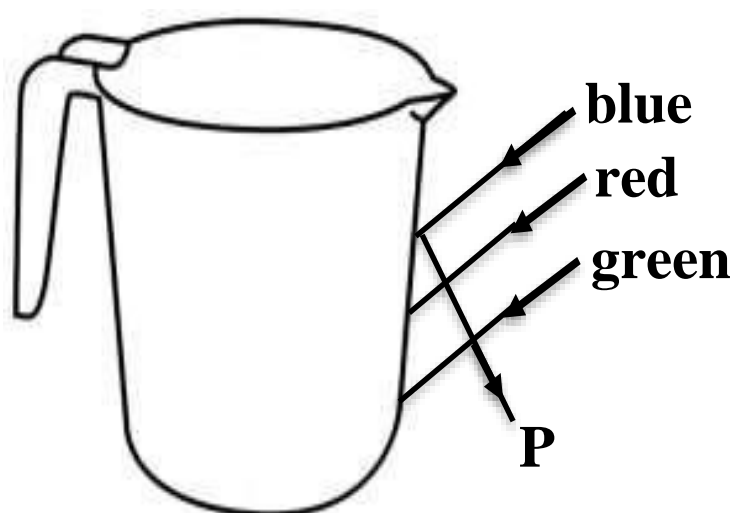
3. Which part of a mushroom absorbs nutrients from decaying matter?

.....

4. Give any **one** example of a chemical change in the environment.

.....

The diagram below shows light rays of different colours striking a plastic jug. Study and use it to answer the questions **5** and **6**.



5. Identify the colour of the jug.

.....

6. Give a reason for the response you have written in (5) above.

.....

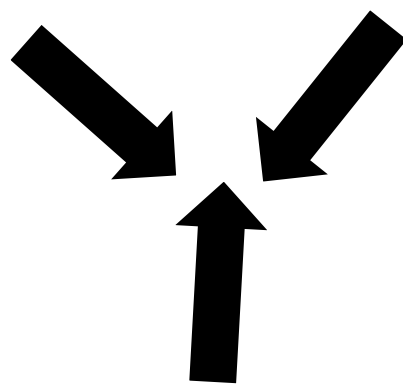
.....

7. Why are monotremes regarded as the most primitive mammals?  
.....  
.....
8. Name the part of human digestive system which increases the surface area for food absorption.  
.....
9. State a reason why a casualty with fever should be given plenty of drinks.  
.....
10. State the importance of sun in the water cycle.  
.....
11. How are red blood cells useful in the process of blood circulation?  
.....  
.....
12. Give any **one** effect of heat on matter.  
.....
13. Give a reason why the house of goats should be built with wooden floor.  
.....
14. How best can PIASCY message safeguard adolescent girls from teenage pregnancy?  
.....
15. Name the alloy used to fit holes in the tooth.  
.....

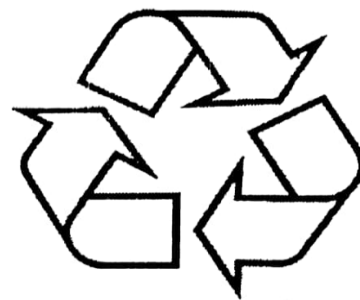


16. Which substance in tobacco smoke leads to addiction?  
.....
17. Write down any **one** service provided to pregnant mothers during antenatal care.  
.....


The diagrams below shows symbols commonly used in management of waste in an area. Use them to answer questions **18** and **19**.



Symbol **A**



Symbol **B**

18. State the importance of the above symbols in waste management of an area.  
.....  
.....
19. Which of the above symbols minimizes the production of harmful products.  
.....
20. How is selective reabsorption important in the human body?  
.....
- 
21. State any **one** way filtration method is important at home.  
.....

22. In which **one** way does the body works?  
.....
23. Give a reason why a television screen may crack when a sweater is brought near it.  
.....
24. Give a reason why the belly of a pregnant mother expands during pregnancy.  
.....  
.....
25. State the reason why soap is used during washing of clothes.  
.....
26. Mention any **one** method used to prepare food.  
.....
27. Name the type of incubation where a broody hen provide necessary conditions to eggs in order to hatch into chicks.  
.....
28. What is germination?  
.....  
.....
29. How is a tourniquet useful when giving first aid?  
.....
30. State **one** way of protecting rabbits from wild animals.  
.....
31. Why are carbohydrates used during respiration?  
.....
32. Which characteristic makes sand soil best for building houses?  
.....
33. State how isolation of infected animals prevent viral diseases in cattle?  
.....



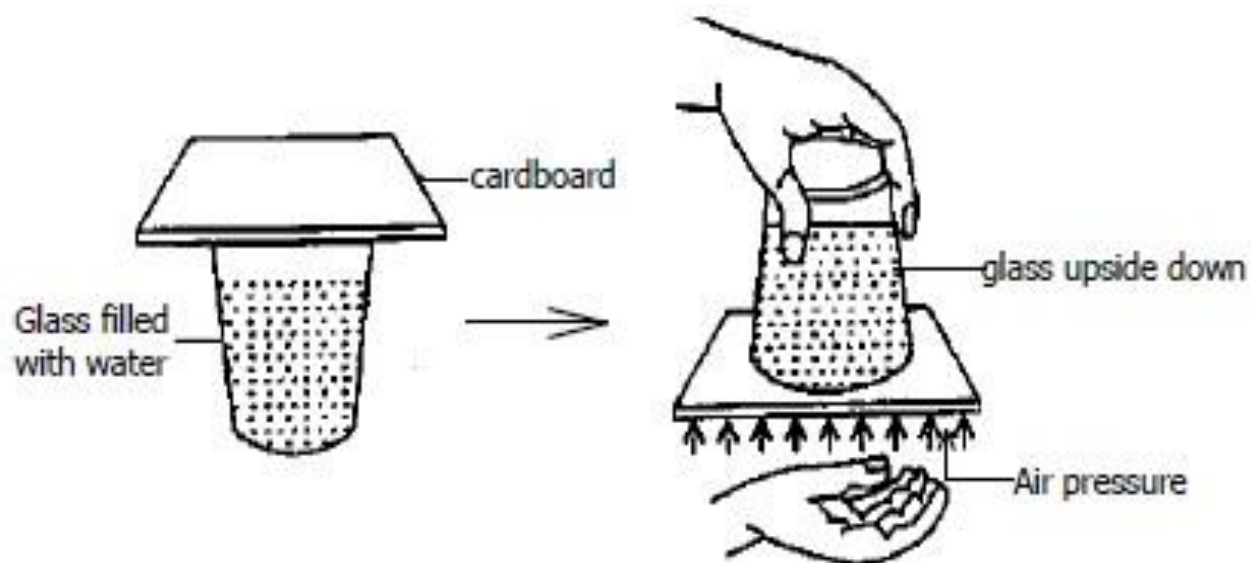
34. In which way can one vary the pitch of sound produced by a whistle?

.....

35. Write down **one** plant that has simple leaves.

.....

The experiment below shows a property of air. Study it carefully and use it to answer the questions **36** and **37**.



36. Why doesn't water pour out of the glass?

.....

.....

37. State any **one** application of the above property of air in our daily life.

.....

38. State any **one** way adding of soil on a heap of sweet potatoes increases crop yields.

.....

39. Apart from protection, give any **one** other way in which claws are useful to birds.

.....

40. State how proper ventilation in a poultry house prevent poultry vices.

.....



## SECTION B: 60 MARKS

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

41. a) Name the immunisable disease that enters our bodies through fresh cuts and wounds.

.....

- b) State **one** way of preventing the spread of disease named above.

.....

- c) Give a reason why the following vulnerable groups of people are given tetanus toxoid between the age of **15** and **49** years.

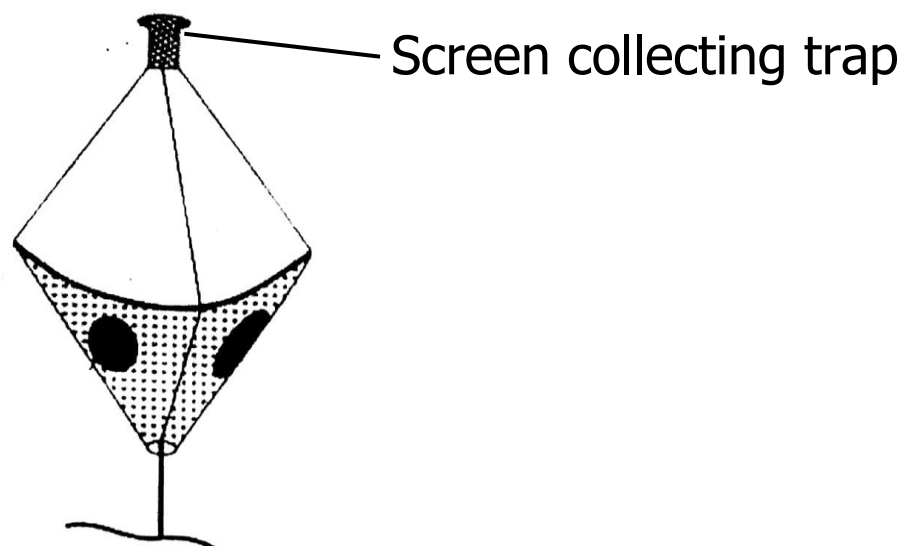
- (i) Pregnant mothers.

.....

- (ii) Teenage girls.

.....

42. The diagram below shows a structure used to control cattle pests. Study and use it to answer the questions that follow.



- a) Identify the cattle pests control using the above structure.

.....

- b) Which cattle disease is spread by the cattle pest controlled using the above structure?

.....

- c) Identify the cattle disease that makes animals to move in circles.

.....

- d) Mention any **one** practice that harm cattle in transit.

.....

43. a) What are health parades?  
.....  
.....
- b) State any **one** way conducting health parades promote health at school.  
.....
- c) State any **two** ways conducting health parades is important at school.  
i) .....  
ii) .....



44. You are provided with the following materials to show how breathing occurs in humans. Use them to answer questions that follow.  
Glass tubes, polythene bags, balloons, cello tape and plastic bottle.
- a). Name the material that you would use to represent lungs.  
.....
- b) State the purpose of cello tape when carrying out the experiment.  
.....
- b) What would happen to the following materials when breathing out:  
i). Balloons.  
.....  
ii). Polythene bags.  
.....



45. The table below shows parts of a flush toilet with their functions in the wrong order.

Part	Function of part
Toilet seat	Stores faeces and urine
Bowl	Stores water for flushing the toilet
Cistern tank	For the user to sit on when defecating
Septic tank	For depositing faeces and urine

Match the parts to their function by re-writing the correct order.

- (a) Toilet seat  
.....
- (b) Bowl  
.....
- (c) Cistern tank  
.....
- (d) Septic tank  
.....

46. You are provided with the following materials to obtain local salt. Use them to answer questions that follow.

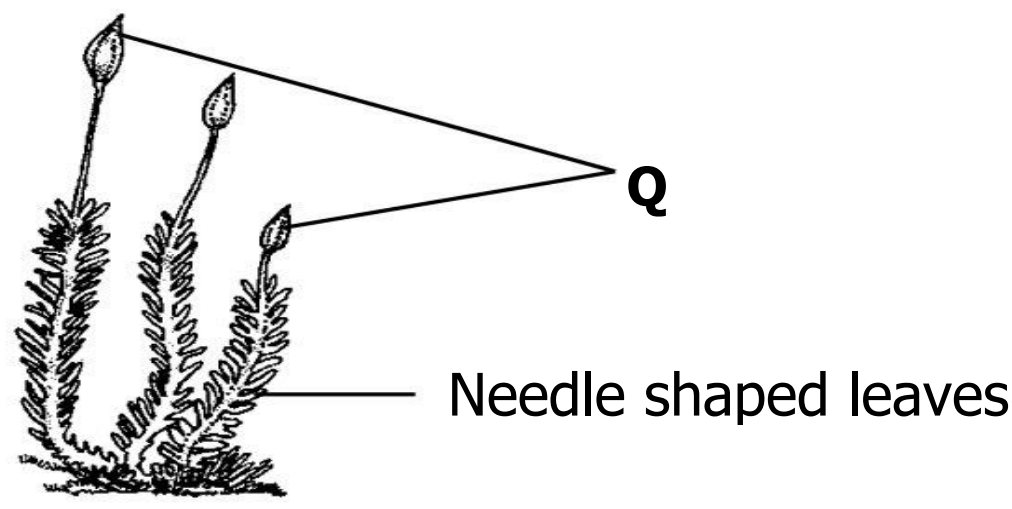
**Dry banana peelings, flat metal, clean container, banana leaves with holes.**

Describe four steps you would follow to get the local salt solution.

- (i) .....
- (ii) .....
- (iii) .....
- (iv) .....



47. The diagram below shows a non- flowering plant. Study it carefully and use it to answer questions that follow.



- a). Name the non-flowering plant shown above.  
.....
- b). How is the function of part **Q** different from that of testes in the male reproductive system?  
.....  
.....
- c). Name any **one** other plant which reproduce in the same way as one shown in the diagram above.  
.....
- d) State any **one** similarity between liverworts and a cabbage plant.  
.....

- 48.
- a) Identify the group of mammals which have well developed incisor teeth.  
.....
  - b) State any **one** characteristics of rodents.  
.....
  - c) Why is a dog able to run after his prey without being noticed?  
.....
  - d) Name the chiroptera whose limb is modified into flippers.  
.....



49.     a)   Give a reason why a queen excluder is made of tiny holes?  
.....
- b)   State any **one** condition that can lead to swarming in honey bees.  
.....
- c)   How are worker bees able to carry pollen from flowers?  
.....
- d)   Identify any **one** method used during honey extraction.  
.....

50.     The diagram below shows an item used by sportsman, study and use it to answer questions that follow.



- a). Name the part marked **K** found on the soles of the sport boot.  
.....
- b). How is the above part important to sportsman during playing?  
.....
- c). State any **one** way friction is useful to a blacksmith.  
.....
- d). Whenever Paul opens his door, the door hinges make noise. What piece of advice would you give Paul in order to reduce noise in his door hinges?  
.....

51. The list below shows organisms in the environment. Study and use it to answer the questions that follow.

**Squirrel, bacteria, locust, a bean plant**

a). Construct a food chain using the list of given organisms above.

.....

b). Name the organism in the list above that represents secondary consumer.

.....

c). What is the role of bacteria on the list above?

.....

d). State what would happen to the locusts if a bean plant was removed from the list.

.....

52. a) Name the part of the human ear which has sensory hairs.

.....

b) Give a reason why people are advised to use warm water when cleaning the ears.

.....

c) In which way is rubella dangerous to unborn baby.

.....

d) State any **one** way of caring for the human ear.

.....



53. Below is an illustration showing bone form of antisocial behaviour in the community. Study and answer questions that follow.



- a). Name the above form of antisocial behaviour.  
.....
- b). How is the above form of antisocial behaviour dangers to the health of an individual?  
.....
- c). Name **one** other form of antisocial behaviour apart from the above.  
.....
- d). State **one** cause of the above among school going children.  
.....



54. a) Name the source of energy for each of the following energy resources.
- (i) Hydroelectricity.  
.....
  - (ii) Thermal energy  
.....
- b) State any **one** advantage of using hydroelectricity over thermal energy.  
.....

c) Give any **one** reason why solar energy is used by few people.  
in the community

.....

55. The diagram below shows a farm practice done in sheep keeping.  
Study and use it to answer the questions that follow.



a) Identify the farm practice shown in the diagram above.

.....

b) In which season is the above farm practice done?

.....

c) Why is the farm practice done in the season you have given  
in (b) above?

.....

d) Mention the product obtained from the farm practice shown  
in the diagram above.

.....



