



SUREKEY EXAMINATIONS BOARD
PRIMARY SEVEN TARGET SERIES EXAMINATION

2023

INTEGRATED SCIENCE

Time Allowed: 2 hours 15 minutes

PPHPBil's Name: _____

Pupil's signature:

School Name: _____

District Name: _____

Read the following instructions carefully:

1. Do not forget to write your **school** or **district name** on the 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	EXRS NO.
1 – 10				
11 – 20				
21 – 30				
31 – 40				
41 – 43				
44 – 46				
47 – 49				
50 – 52				
53 – 55				
TOTAL				

SECTION A: 40 MARKSQuestions **1** to **40** carry **one mark** each

7

8

1. Name the stage in the life cycle of a butterfly that destroys plants.

.....
.....
.....

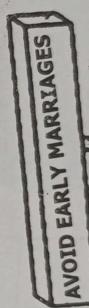
2. How is a sprain different from a strain?

.....
.....
.....

3. What happens to pollen grains when they land on the stigma?

.....
.....
.....

4. Which body organ is attacked by yellow fever?

.....
.....
.....5. Give any **one** way in which honey is useful in industries......
.....
.....The diagram below shows a message in the signpost commonly displayed in school compounds. Study and use it to answer question **6**.

14

15

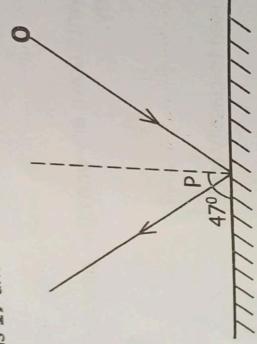
1

6. In which way is the message in the sign post above helpful to school children?

2

7. Why is it not advisable to make a casualty who has taken jik to vomit?
.....
8. Apart from hormones, write down any **one** other substance transported by blood plasma in the body.
.....
9. Give any **one** feature used to classify birds.
.....
10. Mention any **one** group of people that receives Tetanus Toxoid (T.T) vaccine.
.....
11. Why does a pencil put in a transparent glass with water appear bent?
12. State any **one** way in which a spider benefits from its cobweb.
.....
13. Give any **one** feature on a bean plant that makes it a legume.
.....
14. State the danger of keeping flammable liquids like petrol in a residential house.
.....
15. Give the main reason why farmers harvest their crops during dry season.
.....
16. Name the communicable intestinal disease that makes a person to pass out blood stained stool.
.....

The diagram below shows rays of light striking a plane mirror. Use it to answer questions 17 and 18.



17. Name the ray of light marked **O**.
.....
18. What is the size of angle marked **P** on the diagram above?
.....
19. State any **one** habit that an individual can do to promote oral health.
.....
20. Give any **one** way in which trees help to control soil erosion.
.....
21. How is the function of the endosperm different from that of the cotyledon in a maize grain?

21.
- 4

22. Give any **one** organism that reproduces by binary fission.

bacteria

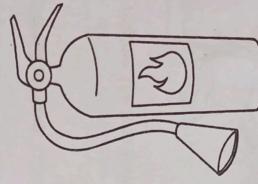
23. State any **one** way in which vectors spread germs to people.

Through bite insects

24. How is wax important in the human ear?

.....
.....
.....

The diagram below shows an equipment commonly found in schools.
Use it to answer questions **25** and **26**.



25. Identify the equipment shown above.

Fire extinguisher

26. Why should the equipment above be kept outside the school buildings?

To put off big fire

.....
.....
.....

27. How is the energy resource got from animals helpful during land preparation?

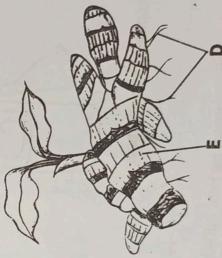
It helps in ploughing

.....
.....
.....

5

Turn Over

D
Read the
1. Do not for
Name o
2. This
S

28. State any **one** way in which humus is important in the soil.
By impregnating soil
29. Which body system is affected by choking?
Respiratory System
30. Why are ventilators put at a higher level than windows?
31. State **one** way of promoting food security at home.
By manuring
32. Give any **one** cause of short circuit at home.
Due to shorting of electric wires
35. State any **one** factor affecting night.
Sunlight
36. Mention any **one** factor affecting day.
Sunlight
37. Why are logs of wood stored in oxygen?
38. Give any **one** example of soil formation.
Soil formation
39. In which way is the tractor used in crop farming?
A. Sickle B. Plough C. Tractor D. Hoe
40. Write down any **one** use of humus.
Humus
- The diagram below shows a rhizome. Use it to answer questions 33 and 34.
- 
33. Name the part marked **D**.
Swelling roots
34. State the function of part marked **E** to the rhizome.
To store food for the plant

35. State any **one** factor that leads to alcoholism.
Family neglect

36. Mention any **one** factor one should consider before starting a livestock farm.
Supply

37. Why are logs of wood for making charcoal burnt under the limited supply of oxygen?
Combustion

38. Give any **one** example of a health concern in the community.
Sanitation

39. In which way is the use of a sickle different from that of a garden trowel in crop farming?
A sickle is used for harvesting while a garden trowel is used for transplanting

40. Write down any **one** example of a water impurity.
Human wastes

Turn Over

1

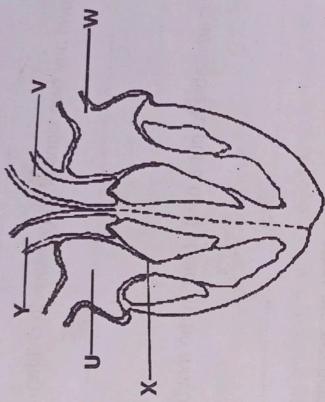
SECTION B: 60 MARKS

44.

Questions 41 to 55 carry four marks each.

41. (a) Give any **two** causes of cannibalism in domestic birds.
- (i) Lack of calcium
(ii) Lack of enough feed
- (b) Apart from cannibalism, give any **one** other bad habit practiced by domestic birds.
- Fly eating
- (c) State any **one** way in which a poultry farmer can control the outbreak of cannibalism in domestic birds.
- By hanging green vegetables
42. (a) Write down any **two** examples of anti-social behaviour.
- (i) Rape
(ii) Harass
- (b) State any **two** causes of anti-social behaviour.
- (i) Bad peer group
(ii) Greed for money
43. (a) Give any **two** examples of biological changes that take place in both plants and animals.
- (i) Growth
(ii) Reproduction
- (b) State any **two** characteristics of physical changes.
- (i) New substance is formed
(ii) Dity die
- 8

44. The diagram below shows the human heart. Study and use it to answer the questions that follow.



(a) Name the parts marked **U** and **V**.

(i) **U**

(ii) **V**

(b) State the function of part marked **X** in the human heart.

.....

(c) How is blood carried by blood vessel marked **Y** different from blood carried by blood vessel marked **W**?

.....

Turn Over

45. (a) State any **one** cause of convulsions in children.

.....

(b) Write down any **two** signs of convulsions in children.

(i)

(ii)

(c) Why is it advisable to put a hard object in the mouth of a convulsing child?

.....

46. (a) Apart from decomposition, which other process helps in the formation of biogas.

.....

(b) Write down any **two** organic materials used in the production of biogas.

(i)

(ii)

(c) State any **one** advantage of using biogas over natural gas.

.....

47. (a) Give any **two** examples of rodents.

(i)

(ii)

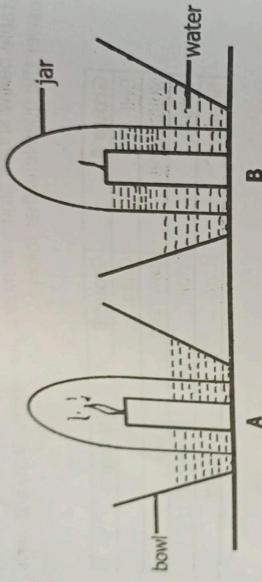
(b) What type of teeth are well developed in rodents?

- (c) How are rodents dangerous to crop farmers?
-
48. The table below shows groups of musical instruments. Study and use it to answer the questions that follow.
-

Group A	Group B	Group C
Bell	Guitar	Horn
Xylophone	Bow harp	Flute
Drum	Violin	Trumpet
Shakers	Lyre	Panpipes

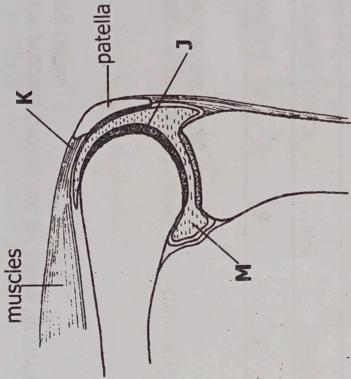
- (a) Name the group of musical instruments to which devices in group **B** belongs.
-
- (b) State the difference between a bell in group **A** and a horn in group **C** in the way they produce sound.
-
- (c) How can the pitch of a guitar in group **B** of the table above be varied?
-
- (d) Identify the group from the table above to which vuvuzela belongs.
-

- (c) W to
.....
49. The diagram below shows a candle flame placed in a jar in a bowl containing water. Study and use it to answer the questions that follow.



51. The diagram shows a candle flame placed in a jar in a bowl containing water. Study and use it to answer the questions that follow.
- (a) Which gas is found in the jar in diagram A?
.....
.....
.....
.....
.....
.....
- (b) Why does the candle flame go off in the jar as shown in the diagram B?
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.....
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.....
- (c) Give a reason why the level of water rises as shown in the diagram B.
.....
.....
.....
.....
.....
- (d) What is the main purpose of carrying out the experiment above?
.....
.....
.....
.....
.....
50. (a) Name the germ that causes syphilis.
.....
.....
.....
.....
.....
- (b) State any two signs and symptoms of syphilis.
(i)
(ii)
- (c) Identify
.....
.....
.....
.....

- (c) Why is it important for both married couples to go for treatment together in case they are infected with syphilis?
.....
.....
51. The diagram below shows a movable joint. Study and use it to answer the questions that follow.



- (a) Name the parts marked **J** and **M**.
- (i) **J**
(ii) **M**
.....
- (b) State the function of part marked **K** at the joint.
.....
- (c) Identify the movable joint shown above.
.....

B.

.....

52. (a) State any **two** signs shown by a cow on heat.

(i) **Loss of appetite**

(ii) **Loss of weight**

(b) Give any **one** advantage of artificial insemination in cattle management.

(c) Name the farm practice carried out by cattle farmers to reduce injuries among cattle.

53. The tables below shows crop farming practices. Study and use them to answer the questions that follow.

Seasons	1	2	3
Crops grown	maize	Millet	Sorghum

Seasons	1	2	3
Crops grown	sorghum	Ground nuts	Cassava

(a) Name the crop farming practices marked **R** and **T**.

(i) **R** **Mixed farming practices**

(ii) **T** **Concentration practice**

(b) Why are ground nuts included in the crop farming practice marked **T**?

To improve soil fertility by adding organic manure into the soil

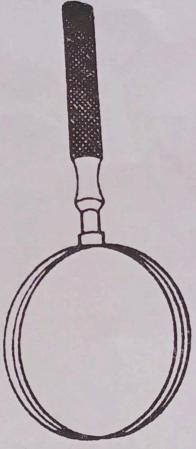
(c) State any **one** in which the crop farming practice marked **R** affects the soil.

It makes the soil fertile

54.

55.

54. (a) Name the digestive juice produced by;
- The stomach *Gastric juice*
 - The pancreas *Pancreatic juice*
- (b) State any **one** thing that happens to food in the mouth.
Breaks down food into smaller particles
- (c) Give any **one** role of the tongue during digestion of food.
To roll food into bolus
55. The diagram below shows an optical device. Study and use it to answer the questions that follow.



- (a) Name the optical device shown above.
The magnifying lens
- (b) How is the optical device above useful to people?
It enables a person to observe details of small parts of objects.
- (c) Which type of lens is used in the optical device above?
Convex lens
- (d) State any **one** characteristic of images formed by the optical device above.
Images of objects appear bigger than their real size.

END