

# LIRA CITY ACADEMIC BOARD

## PLE-MOCK ASSESSMENT 2024



### INTEGRATED SCIENCE PAPER

*Time Allowed: 2 hours 15 minutes*



Candidate's Name: \_\_\_\_\_

Index No : 

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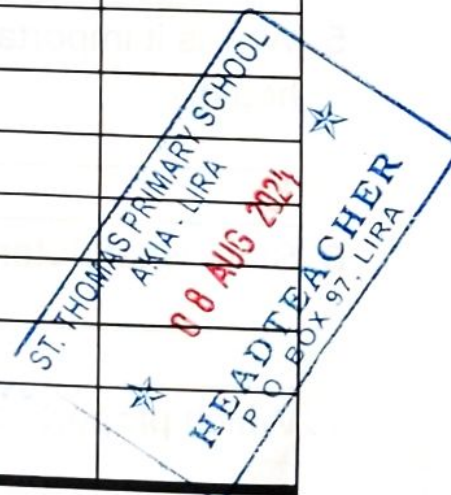
School: \_\_\_\_\_

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO  
READ THE FOLLOWING INSTRUCTIONS CAREFULLY

1. The paper is made up of **two** sections: **A & B**.
2. Section **A** has **40** questions (**40 marks**)
3. Section **B** has **15** questions (**60 marks**)
4. Answer **ALL** questions in both sections **A & B**
5. All answers must be written in the spaces provided in **BLUE** or **BLACK** ink. Only diagrams should be drawn in pencil.
6. **Unnecessary crossing** of work will lead to **loss of marks**.
7. **Poor handwriting**, which cannot be easily read may lead to **loss of marks**.
8. Do not fill anything in the boxes shown

#### FOR EXAMINERS' USE ONLY

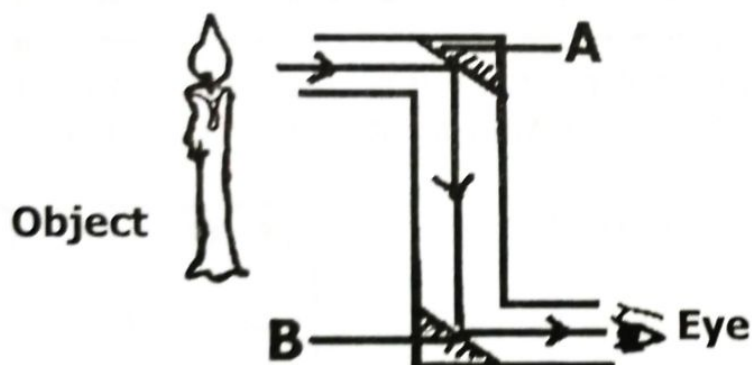
| QN. NO. | MARKS | EXAMINER'S INITIALS |
|---------|-------|---------------------|
| 1 - 10  |       |                     |
| 11 - 20 |       |                     |
| 21 - 30 |       |                     |
| 31 - 40 |       |                     |
| 41 - 43 |       |                     |
| 44 - 46 |       |                     |
| 47 - 49 |       |                     |
| 50 - 52 |       |                     |
| 53 - 55 |       |                     |
| TOTAL   |       |                     |



## SECTION A

1. How is oxygen useful in the process of germination?  
\_\_\_\_\_  
\_\_\_\_\_
2. Which component of soil is used by plants to make starch?  
\_\_\_\_\_  
\_\_\_\_\_
3. Give **one** way a farmer can improve nitrogen content in the soil without using artificial fertilizers.  
\_\_\_\_\_  
\_\_\_\_\_

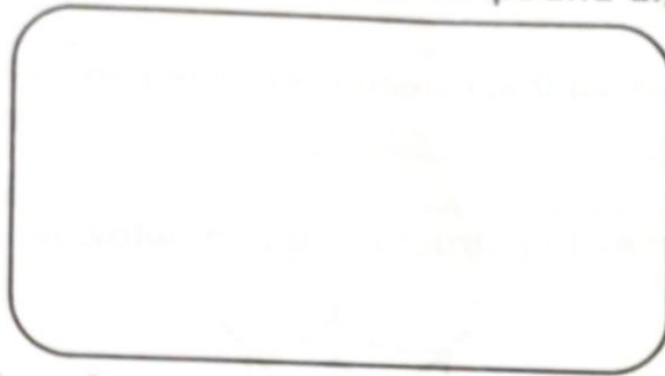
The diagram below is of an optical instrument .Use it to answer question:



4. At what angles are mirrors **A** and **B** placed?  
\_\_\_\_\_  
\_\_\_\_\_
5. Why is it important for the government to collect information on human health?  
\_\_\_\_\_  
\_\_\_\_\_
6. State what determines the size of an image in a pinhole camera.  
\_\_\_\_\_  
\_\_\_\_\_
7. Which property of a magnet enables a compass to operate?  
\_\_\_\_\_  
\_\_\_\_\_

8. State **one** way by which you can increase the mechanical advantage of a wedge.

9. In the space provided below draw a compound digitate leaf.



10. Give **one** function of a joint in a human body.



11. How is a crush important on an animal farm?

12. What do birds use to detect sound waves in air?

13. Give **one** advantage of a single movable pulley over a single fixed pulley.

14. In what state of matter is ice at  $101^{\circ}\text{C}$ ?

15. How is the human heart adopted to its function?

16. Name the class of food digested in the mouth?



17. Why do clothes take long to dry on a cloudy day after washing and hanging?

\_\_\_\_\_

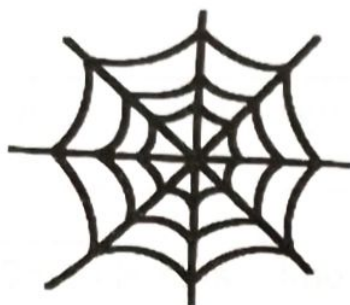
18. State the method of heat transfer in gas.

\_\_\_\_\_

19. Name any **one** vector that spreads germs to people.

\_\_\_\_\_

20. Which animal uses the structure drawn below as its habitat?



21. How is the reproduction of yeast different from that of fungi?

\_\_\_\_\_

22. Why is tepid sponging important in giving first aid?

\_\_\_\_\_

23. Write **COVID-19** in full.

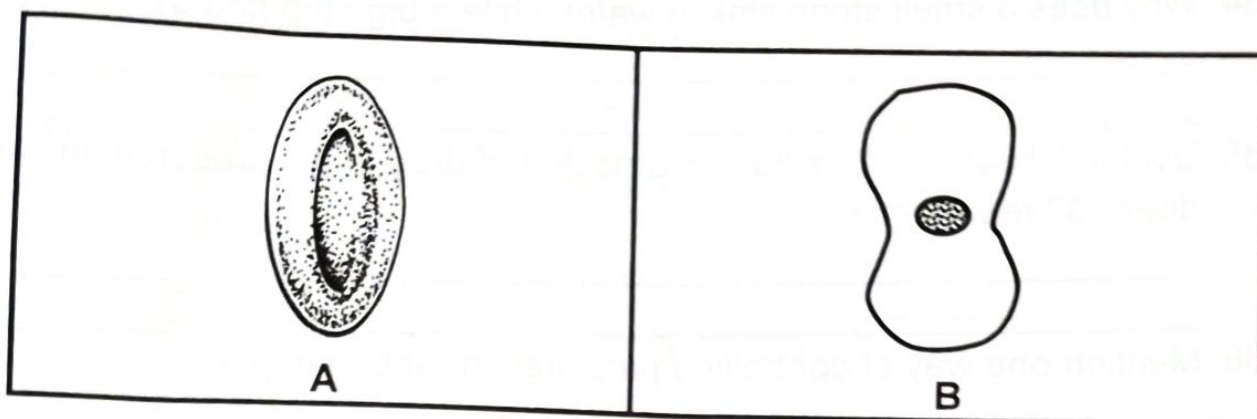
\_\_\_\_\_

24. How does lack of vitamin D in a child's diet affect the skeletal system?

\_\_\_\_\_

25. Why do people who smoke tobacco find it difficult to quit the habit?

\_\_\_\_\_



26. Which of the above blood cells is attacked by malaria parasite?
27. How does frequency affect the pitch of sound?
28. Name the type of change that takes place when a chameleon changes its colour.
29. Mention **one** common effect of over grazing or burning grass around valley dams.
30. State what will happen to the weight of the stone when it is immersed in water.
31. What is **soil erosion**? ☐
32. Why is **BCG** vaccine given to babies immediately after birth?
33. Give **one** way a farmer can prevent unwanted swarming of bees on the farm.

34. Why does a small stone sink in water while a big ship floats?

\_\_\_\_\_

35. Doctor Job wrote "2" x "3" on a packet of drug in his prescription, what does "3" represent?

\_\_\_\_\_

36. Mention **one** way of controlling parasites in rabbit keeping.

\_\_\_\_\_

37. Why should the legs of a person who has fainted be raised higher than the head when giving him\her first aid?

\_\_\_\_\_

38. How is proper ventilation of houses an important aspect in promoting good health?

\_\_\_\_\_

39. Mention any **one** way in which plants benefit from wind as an energy resource.

\_\_\_\_\_

40. In which way is the function of food in the human body similar to that of petrol in a motorbike?

\_\_\_\_\_

\_\_\_\_\_

### SECTION B



41. a) Name the end product of the following food values after digestion;

i) **Proteins**

\_\_\_\_\_

ii) **Fats and oil**

\_\_\_\_\_

b) State **one** use of proteins in wounds.

\_\_\_\_\_



c) Why does a starved person become weak?

42. a) Name the part of the kidney where each of the following takes place;

i) Filtration of blood

ii) Selective re-absorption of filtered substance

iii) Storage of waste removed from blood.

b) Give a reason why people urinate more frequent during cold weather.

43. a) Identify **two** examples of harmful insects.

i) \_\_\_\_\_

ii) \_\_\_\_\_

b) How are the following insects useful to people?

i) **Termites**

\_\_\_\_\_

ii) **Moth**



44. a) What is **puberty**?

\_\_\_\_\_

b) How is a foetus different from an embryo?

\_\_\_\_\_

c) State any **two** emotional changes that take place during growth and development period in human beings.

i). \_\_\_\_\_

ii). \_\_\_\_\_

45. The diagram below shows a safety equipment .Use it to answer the questions that follow.



- Which component of air is commonly used in the above equipment?  
\_\_\_\_\_
- How is the above equipment used to keep safety at school?  
\_\_\_\_\_  
\_\_\_\_\_
- Give **one** way of keeping the above equipment effective.  
\_\_\_\_\_  
\_\_\_\_\_
- Why should students be taught how to use the above equipment?  
\_\_\_\_\_  
\_\_\_\_\_

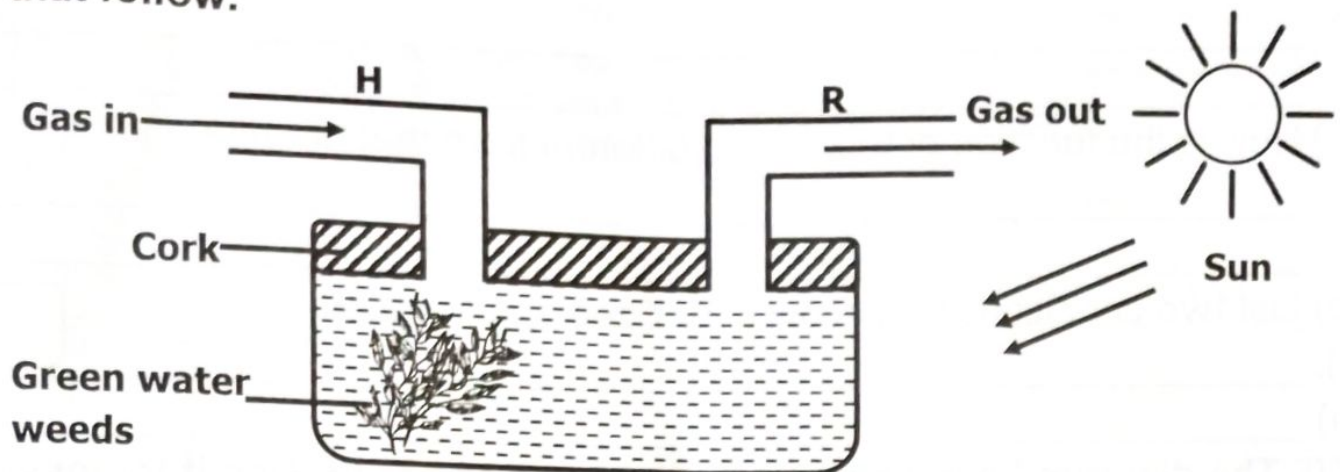
46. The table below shows how Mr. Adwany uses his garden.

| Seasons  | First season | Second season |
|----------|--------------|---------------|
| Year one | Soya beans   | Ground nuts   |
| Year two | Peas         | Beans         |

- What crop growing practice is being carried out by Mr. Adwany?  
\_\_\_\_\_
- State **two** dangers of the crop growing practice above.
  - \_\_\_\_\_
  - \_\_\_\_\_
- Why is watering done to crops during the dry season?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



47. Study the experiment below carefully and answer the questions that follow.



a) What process does the above experiment show?

b) Which gas enters through tube **H**?

c) Which gas is given off through tube **R**?

d) How is the above process in the plants essential to animals?

48. Tom stood in front of a looking mirror, his image was formed 12 metres away behind the looking mirror.

a) How far was Tom from the looking mirror?

b) Give a reason for your answer in **(a)** above.

c) Name **one** instrument that uses plane mirrors.

d) Give **one** way people make use of reflection of light.

49. a) Which part of an egg develops into a chick during incubation?

\_\_\_\_\_

b) How is the function of the air sac different from that of an egg shell?

\_\_\_\_\_

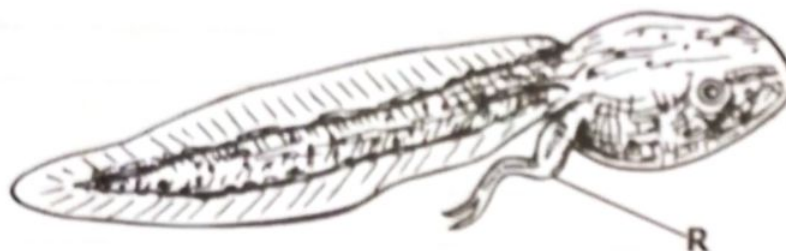
c) List **two** conditions that allow a fertilized egg to hatch.

i). \_\_\_\_\_

ii). \_\_\_\_\_



50. The diagram below shows a young one of a frog. Use it to answer questions that follow.



a) Name the part marked R.

\_\_\_\_\_

b) Why does the above animal die when removed from water?

\_\_\_\_\_

c) How are amphibians able to control mosquito borne diseases?

\_\_\_\_\_

d) Apart from frogs, give **one** other example of amphibians.

\_\_\_\_\_

51. Name the waste products excreted by the following organs.

i). **Liver**

\_\_\_\_\_

ii). **Skin**

\_\_\_\_\_

b) Identify **one** life style that endangers the effectiveness of the liver.

\_\_\_\_\_

\_\_\_\_\_

c) How does immunization of infants with BCG keep the lungs healthy.

52. Match the following infectious diseases to their signs.

| Infectious disease | Common sign                      |
|--------------------|----------------------------------|
| i) Dysentery       | Bloody urine.                    |
| ii) Cholera        | Madness in adult if not treated. |
| iii) Bilharziasis  | Bloody diarrhoea.                |
| iv) Syphilis       | Diarrhoea with vomiting.         |

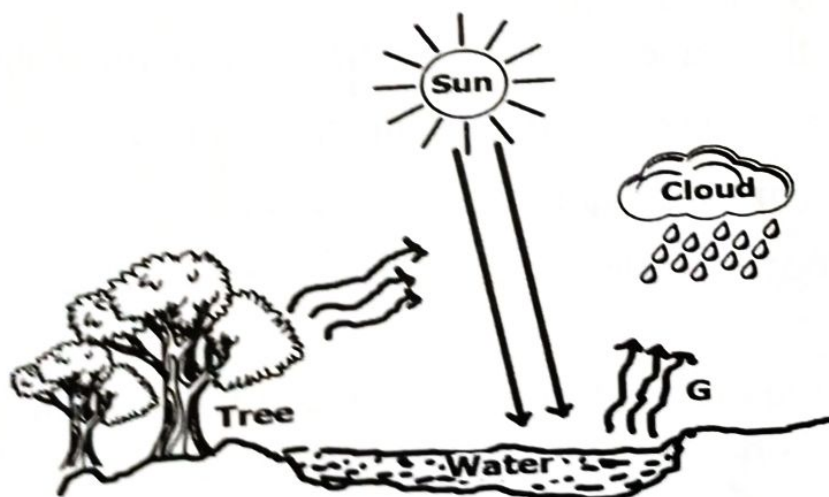
i). Dysentery \_\_\_\_\_

ii). Cholera \_\_\_\_\_

iii). Bilharziasis \_\_\_\_\_

iv). Syphilis \_\_\_\_\_

53. The diagram below shows the rain cycle. Use it to answer the questions that follow.



a) State the importance of trees during the rain cycle.

b) Why is the process marked G useful in rain cycle?



c) In which **two** ways do people sustain rain in the environment?

i) \_\_\_\_\_

ii) \_\_\_\_\_

54. a) Give **one** advantage of hand milking of cows.

\_\_\_\_\_

b) Why should a milk man perform the following activities during milking?

i) Washing teats and udder with warm water.

\_\_\_\_\_

ii) Smearing the teats with Vaseline.

\_\_\_\_\_

c) State **one** way of preserving milk.

\_\_\_\_\_

55. **Below is a wrong order of steps followed to administer first aid to a person who has fainted.**

i) Chase away the standers to provide fresh air to the victim.

ii) Lie the victim on his or her back in an open place.

iii) Raise the victim's leg higher than the head.

iv) Remove or loosen the tight clothes from the victim's body.

**Rearrange the steps above to make a correct order of administering first aid for fainting.**

i) \_\_\_\_\_

ii) \_\_\_\_\_

iii) \_\_\_\_\_

iv) \_\_\_\_\_

**\*END\***

