



HORMISDALLEN SCHOOLS' EXAMINATIONS BOARD

PRE-PLE SET I INTEGRATED SCIENCE 2025

Time Allowed: 2 hours 15 minutes

Random Number					Personal No.		

Candidate's Name: _____

Candidate's signature: _____

Branch: _____

Stream: _____

Read the following instructions carefully.

1. This paper is made up of two Sections: A and B.
2. Answers to both sections must be written in the spaces provided in full sentences.
3. Section A has 40 questions (40 marks)
4. Section B has 15 questions (60 marks)
5. Attempt all questions. All answers to both sections A and B must be written in the spaces provided.
6. All answers must be written in blue or black ballpoint pen or ink but not in pencil. All work done in pencil, except diagrams, will **NOT** be marked.
7. Crossing out of answers will lead to loss of marks.
8. Any handwriting that cannot be easily read may lead to loss of marks.

FOR EXAMINERS USE ONLY		
PAGE No.	MARK	INITIALS
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1..... HOSEB PRE-PLE SET I 2025 SCIENCE

EXAMINERS' INITIALS:

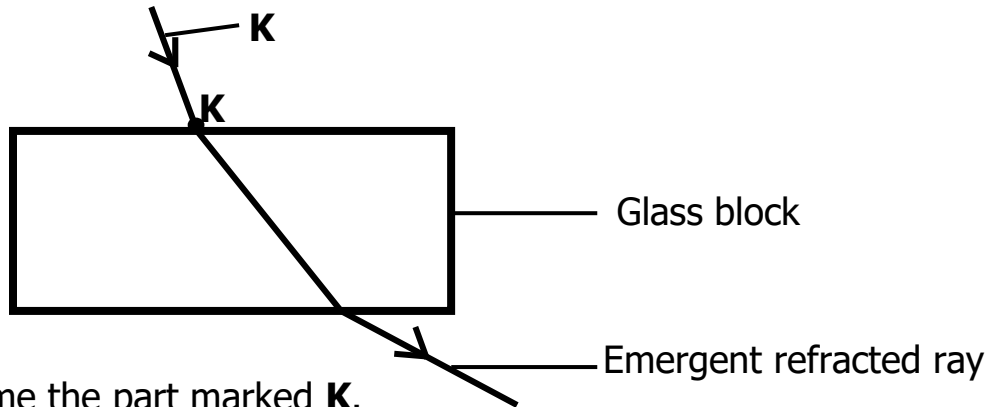
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SECTION A (40 MARKS)

1. Name the vector that spreads malaria to human beings.

2. Give any **one** reason why people are advised to brush teeth after eating food.

The diagram below shows a light ray hitting a glass block. Study it and answer questions 3 and 4.



3. Name the part marked **K**.

4. Why does the ray bend at point **A** as it enters the glass block?

5. What piece of advice can you give to people who are going out on a sunny day to prevent dangers of the sun's heat?

6. Why is it likely for drowning to occur near a swimming pool?

7. State any **one** food stuff rich in carbohydrates.

8. Name the type of soil erosion where the top soil is removed uniformly.

9. In which **one** way does the skeletal system support the circulatory system?

10. Identify the organ of the respiratory system that is made up of rings of cartilage.



11. Why do road constructors put small stones on the road surface?

12. Name the type of bees produced from unfertilized eggs.

13. Give a reason why condensation is important in the rain cycle.

14. Write down the natural change that occurs in mountainous area whose effects can be controlled by relocating people.

The diagram below shows a beak of a bird. Use it to answer questions 15 and 16.



15. Name any **one** bird with such kind of beak.

16. How is the beak above adapted to its function to the bird?

17. Identify the weather instrument used to measure air pressure at a weather station.

18. Why are people discouraged from sharing sharp piercing objects?

19. State any **one** cause of seed dormancy where necessary conditions for germination are present.

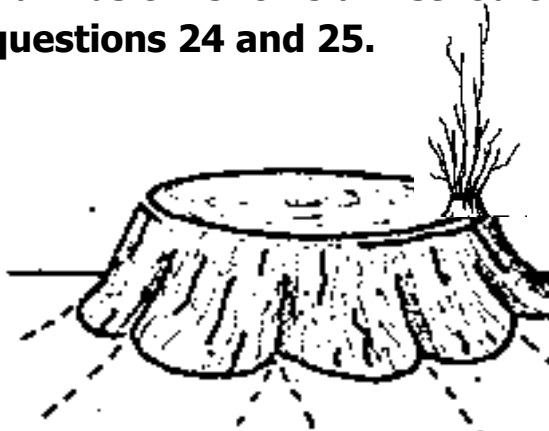
20. Name the human body organ that helps in formation of urine.

21. State any **one** way magnets are important to cobblers.

22. Why do crop farmers cut off leaves from a banana sucker before planting it?

23. Apart from boiling, name any **one** other way of making water safe for drinking.

The diagram below shows a method of harvesting trees. Use it to answer questions 24 and 25.



24. Name the method of harvesting trees drawn above.

25. State any **one** advantage of using the method of harvesting trees above.

26. How are handles of iron boxes made to prevent heat from passing through them?

27. Which reproductive characteristic makes duck billed platypus to be similar to birds?

28. What feature enables the ileum to absorb digested food?

29. State the role played by bacteria in making yoghurt.

The diagram below shows a type of teeth. Use it to answer questions 31 and 32.



30. Name the type of teeth drawn above.

31. How is the type of teeth named in "**30**" important during digestion?

32. Name the component of blood that is destroyed by malaria parasites.

33. State any **one** way of conserving non-renewable energy resources in the environment.

34. What happens when naked wires carrying current meet?

35. Give any **one** physical change that occurs in boys during puberty.

36. Why are lactating mothers considered vulnerable?

37. Identify the step in cleaning clothes that helps to soften dirt.

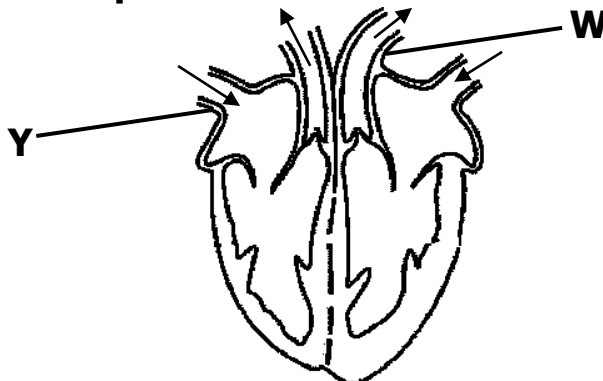
38. Give a reason why builders install air terminals on top of buildings.

39. Name the type of cattle kept for milk production.

40. State any one effect of drug dependence to an individual.

SECTION B (60 MARKS)

41. **The diagram below shows the human heart. Study it and answer questions that follow**



- a) Name the blood vessels marked **W** and **Y**.
- (i) **W** _____
- (ii) **Y** _____

- b) Use letter **K** and label septum on the diagram above.
- c) State any **one** way of caring for the heart.

42. a) State the type of skeleton possessed by the following organisms.

- (i) Water snail _____
- (ii) Mosquito _____

b) Mention any **one** bacterial disease that can affect the human skeleton.

c) Give any **one** way of controlling diseases that can affect the human skeleton.

43. a) State the importance of the following elements in promoting PHC

- (i) First Aid _____
- (ii) Water and sanitation _____

b) How are VHTs important in promoting PHC?

c) Mention any **one** principle of PHC.

44. a) Explain how does strong heating lead to demagnetization. **(2marks)**

b) Apart from strong heating, name any **one** other way magnets can be demagnetized.

c) State any **one** way of preventing magnets from being demagnetized.

45. a) Name the type of teeth absent in the milk set of teeth.

b) How is the enamel important to the tooth?

c) Give any **two** ways of caring for the teeth.

- (i) _____
- (ii) _____



46. a) How are the following drugs abused?

(i) tobacco _____

(ii) alcohol _____

b) State the difference between drug abuse and drug misuse.

c) Give any **one** way patients misuse drugs.

47. a) You are given with the following; **burning charcoal stove, kettle with water** and a **cold plate**. Using the given items above, discuss the process of the rain cycle.

(2marks)

b) State any one danger of rainfall in the environment.

c) What does the burning charcoal stove represent during the rain cycle?

48. **Below is a diagram showing a person doing a good health practice. Study it and answer questions that follow.**



a) Identify the health practice drawn above.

b) State any **two** ways the health practice above is important to people.

(i) _____

(ii) _____

c) State any **one** danger if one does not practice the health practice regularly.



49. a) Mention any **two** products got from sheep.

(i) _____

(ii) _____

b) Give any **one** reason of docking in sheep management.

c) Identify any **one** parasite that can affect sheep.

50. **Match the items in list A to those in list B.**

List A

BCG vaccine

PCV

DPT vaccine

Measles

List B

pneumonia

tetanus

measles

tuberculosis

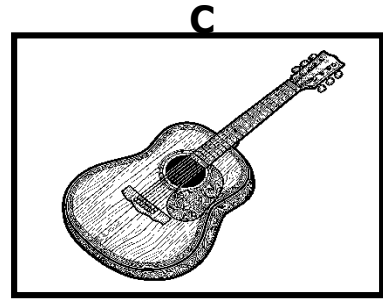
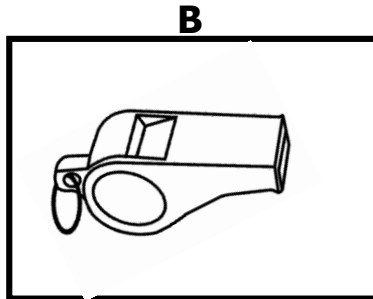
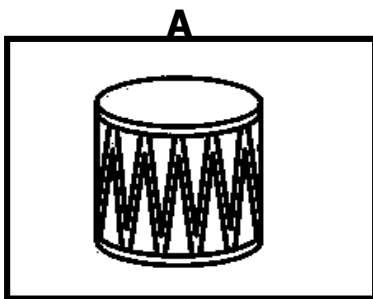
(i) BCG vaccine _____

(ii) PCV _____

(iii) DPT vaccine _____

(iv) Measles vaccine _____

51. **Below are different musical instruments. Study them and answer questions that follow.**



a) Name the group of musical instrument to which instrument **B** and **C** belong.

(i) **B** _____

(ii) **C** _____

b) How can the pitch of musical instrument in **A** be increased?

c) State any **one** factor that can affect pitch of sound.



52. a) Apart from propagation by stem cuttings, give any **one** other method of artificial vegetative propagation.

b) Give any **two** plants that can be propagated by means of stem cuttings.

(i) _____

(ii) _____

c) State any **one** quality of a viable stem cutting.

53. a) Mention any **two** organs that make up the excretory system.

(i) _____

(ii) _____

b) How is the cortex an important part of the kidney?

c) Identify any **one** important process that occurs inside the kidney.

54. a) What is meant by the term silting?

b) Give any **two** causes of silting.

(i) _____

(ii) _____

c) State any **one** way of controlling silting.

55. a) Jerome used a single fixed pulley to raise the load of 75kgf. Calculate the effort force that was required to overcome the load force. **(2marks)**

b) Besides raising loads, give **one** other way pulleys are important to people.

c) Mention any **one** force that can lower the efficiency of pulleys.

END

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