

STEM EXAMINATIONS BOARD
PRE-PRIMARY LEAVING EXAMINATION SET I, 2022
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. The paper has 8 printed pages altogether.
3. Answer all questions. All answers to both Sections A and B must be written 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 other than graphs and diagrams will not be marked.
5. Unnecessary changes in your work and handwriting that cannot easily be read 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.

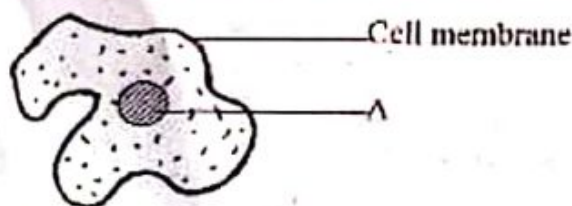
FOR EXAMINERS' USE ONLY		
Qn. No.	Marks	EXR'S NO.
1- 10		
11 - 20		
21 - 30		
31 - 40		
41 - 43		
44 - 46		
47 - 49		
50 - 52		
53 - 55		
TOTAL		

SECTION A : 40 MARKS

Questions 1 to 40 carry one mark each.

1. Name any one petroleum product in the environment.
.....
2. How do tsetse flies spread diseases among human beings?
.....
3. Name the energy change which occurs when a rolling ball comes to rest.
.....
4. Give one way of caring for the human body organs.
.....
5. Which fungal disease in human beings is prevented by wearing clean and dry stockings?
.....
6. Why do long strings of a guitar produce low pitched sound?
.....
7. Give one way human beings keep their bodies warm during cold weather.
.....
8. Which system do most poultry farmers in rural areas use to keep poultry?
.....
9. Why do humans use soft materials to remove wax from their cars?
.....
10. Give one way plants depend on other plants in the environment?
.....
11. How does covering prevent food from going bad?
.....
12. Write down one example of arachnids.
.....
13. Give one effect of accidents to the human body.
.....
14. State any one substance which allows electric current to pass through.
.....

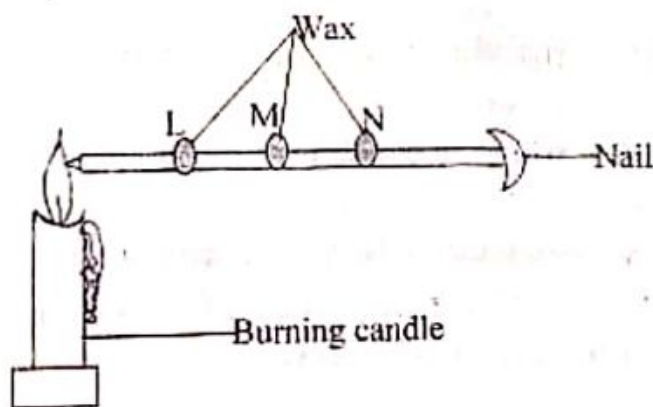
The diagram below shows a blood cell. Study and use it to answer questions 15 and 16.



15. Name the part marked A on the diagram above.
.....

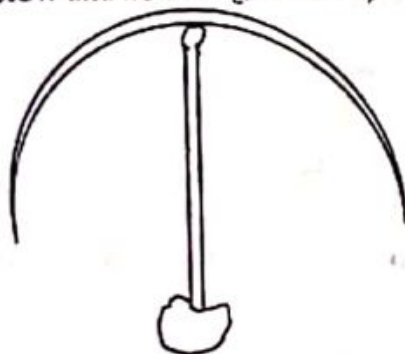
16. What is the role of the blood cell shown in the diagram above?
.....
17. How do toads reproduce?
.....
18. Apart from centigrade scale, give one other scale used for measuring temperature.
.....
19. Why do we tie the tourniquet on the upper part of the bitten part?
.....
20. Write down one benefit of agroforestry in the environment.
.....
21. Give one type of bees in a hive.
.....
22. Write down any one use of plants in the environment.
.....

The illustration below shows an experiment carried out in a class. *Study and use it to answer questions 23 and 24.*



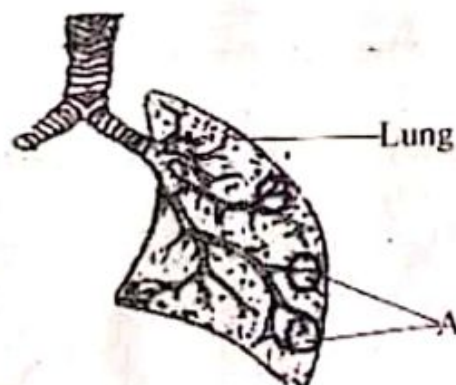
23. How does heat from the candle reach wax N in the diagram above?
.....
24. What happens to the temperature of the nail when heated as shown in the diagram above?
.....
25. Give one way of controlling common sicknesses in homes.
.....

The diagram below shows a magnet. *Study and use it to answer question 26.*



26. Name the magnet shown in the diagram above.
.....
27. Which type of germination occurs in millet seeds?
.....
28. Write down one type of disability among human beings.
.....
29. Give one reason why urine should not be held for a long time in the urinary bladder.
.....
30. How are energy resources useful in the environment?
.....
31. Give one advantage of using second class levers.
.....
32. How is algae similar to bean plants?
.....
33. Which type of pulley is used to raise flags on flag posts at school?
.....
34. What is the danger of taking less drugs as described by health worker
.....
35. Why does the rainbow usually occur in the morning and evening?
.....
36. Give one importance of fruit and seed dispersal in the environment.
.....
37. State the benefit of smoking an ordinary latrine at home.
.....
38. How does immunisation improve human body immunity?
.....

The diagram below shows the human lung. *Study and use it to answer questions 39 and 40.*



39. Give one waste product removed from the body by the human body organ in the diagram above.
.....

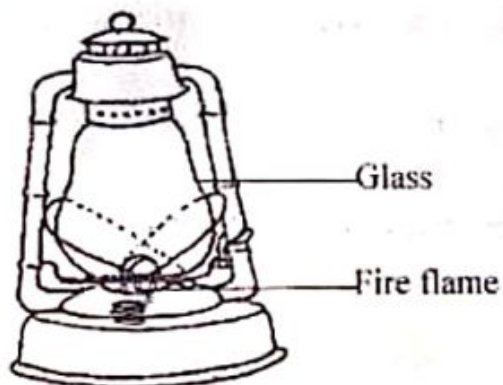
40. How is substances carried by blood enter and leave the part marked A in the diagram above?

SECTION B: 60 MARKS

(Questions 41 to 55 carry four marks each.)

41. (a) Write down a group of mammals where baboons belong?
.....
(b) How does a weaver bird benefit from its streamlined body?
.....
(c) Give two similarities between a weaver bird and a baboon.
(i).....
(ii).....
42. (a) Why do sexually mature male adolescents experience wet dreams?
.....
(b) At what stage during adolescence do human beings show sexual maturity?
.....
(c) Give two signs of sexual maturity among female human beings.
(i).....
(ii).....

The diagram below shows a working lantern lamp. Study and use it to answer question 43.



43. (a) Name the fuel used in the above lantern lamp.
.....
(b) What is the use of the glass to a working lantern lamp?
.....
(c) Give two kinds of energy produced by the working lantern lamp.
(i).....
(ii).....

44. (a) Write down two reasons why all members of the community should participate in Primary Health Care (P.H.C) activities.

(i)

(ii)

- (b) Give two principles of Primary Health care.

(i)

(ii)

The diagram below shows an object commonly seen in crop gardens. Study and use it to answer questions that follow.



45. (a) Name the object shown in the diagram above.

- (b) How does the object named in (a) above control crop pests?

- (c) Apart from the object above, give two other ways of controlling field pests.

(i)

(ii)

46. (a) What happens when pollen grains are deposited on the stigma?

- (b) State the immediate result of the union of an ovule and pollen grain.

- (c) Give two characteristics of flowers adapted to self pollination.

(i)

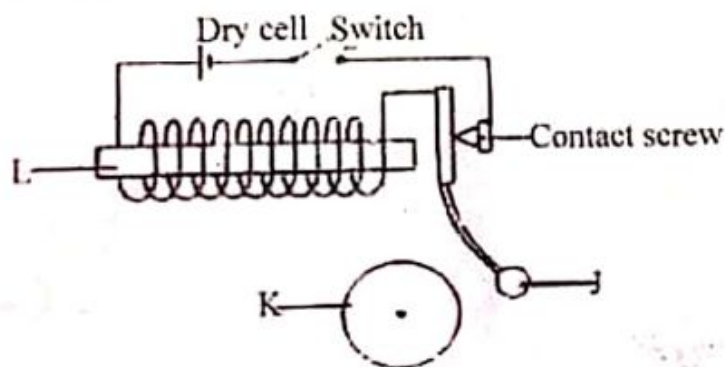
(ii)

47. Match parts of the human ear with their uses in the table below.

	Part (s)	Use (s)
(i)	Eye lashes	Refracts light rays to focus the image
(ii)	Pupil	Trap dust and germs
(iii)	Convex lens	Transmits impulses to the brain
(iv)	Optic nerve	Allows light into the eye

- (i) Eye lashes
- (ii) Pupil
- (iii) Convex lens
- (iv) Optic nerve
48. (a) Name the condition caused by lack of the melanin in the human skin.
.....
- (b) How is sebum useful to the human skin?
.....
- (c) Give two parts which make up the epidermis layer of the human skin.
(i).....
(ii).....
49. (a) Name the tool used to remove wool from sheep.
.....
- (b) Why is shearing usually carried out during a dry season?
.....
- (c) Apart from wool, give two other products got from sheep.
(i).....
(ii).....

The diagram below shows an electric bell. Study and use it to answer question 50.



50. (a) Name the parts marked;
(i) J
- (ii) L
- (b) Give the role of part marked K in the working of an electric bell.
.....
- (c) State the energy change which takes place at K when the switch is closed.
.....
51. (a) Name the oral Rehydration solution (ORS) locally made at home.
.....
- (b) Give the role of the following substances in ORS;
(i) Sugar
- (ii) Water
- (iii) Salt

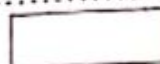
52. (a) Why are the roots of onion plants regarded as adventitious?

(b) Which part of the root system protects the tip of a growing root against damage?

(c) Give two types of root systems in plants.

(i).....

(ii).....



53. (a) What happens to food in the mouth during digestion?

(b) Which glands produce saliva in the mouth?

(c) Give the role of the following during digestion:

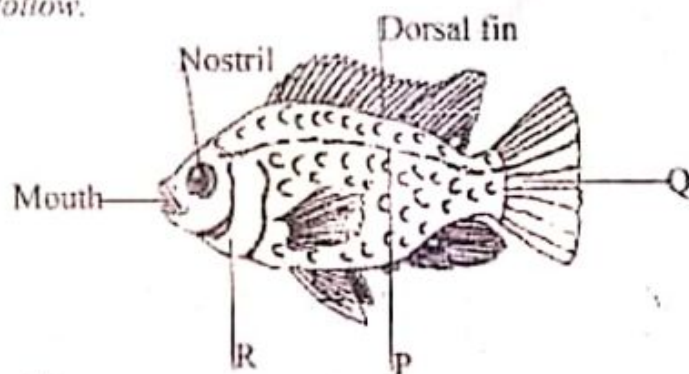
(i) Teeth

(ii) Tongue

54. The table below shows components of the soil and their uses. *Fill in the missing information.*

Component (s)	Use (s)
(i).....	Supplies plant nutrients
Earthworms	(ii).....
(iii).....	Enable seeds to germinate
Bacteria	(iv).....

The diagram below shows parts of a fish. *Study and use it to answer questions that follow.*



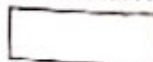
55. (a) Name the parts marked;

(i) P

(ii) R

(b) State the use of part marked Q to a fish.

(c) Give one use of nostrils to a fish.



END

P.7 SCIENCE MARKING GUIDE PRE-PLC SET I, 2022

<p>1. Petrol /diesel /oil /kerosene /lar.</p> <p>2. By biting.</p> <p>3. Kinetic energy changes to potential energy.</p> <p>4. Performing regular physical exercises /feeding on a balanced diet /regular bathing /avoid drinking too much alcohol /having regular medical check up.</p> <p>5. Athletic's foot.</p> <p>6. They have a large vibrating space.</p> <p>7. Wearing thick clothes /warning themselves on fire /keeping indoors.</p> <p>8. Free range system.</p> <p>9. To prevent the damaging of the eardrum.</p> <p>10. Some plants use others as their habitats / provide support to other plants /tall trees provide shade to short plants /decomposed plant /leaves provide manure to other plants / get oxygen for respiration from other plants.</p> <p>11. It prevents flies from depositing germs on the food.</p> <p>12. Ticks /scorpions /spiders /mites.</p> <p>13. Lead to death /loss of some body parts / fractures.</p> <p>14. Wet wood /water /silver /carbon /copper / nickel.</p> <p>15. Nucleus.</p> <p>16. It protects the human body against infections.</p> <p>17. By laying eggs.</p> <p>18. Fahrenheit scale.</p>	<p>19. To prevent poison from flowing to the heart.</p> <p>20. It provides double income to the farmer / crops get shade from tall trees /animals get food from crops and trees /animals provide manure to crops and trees / animals get shade from trees.</p> <p>21. Queen bee /drone bee /worker bee.</p> <p>22. Source of food /herbal medicine / building materials /firewood /timber / charcoal /help in the formation of rainfall /provides shade /provides oxygen to animals and human beings.</p> <p>23. By conduction.</p> <p>24. It increases.</p> <p>25. Feeding on a balanced diet /avoid sharing a living house with animals / proper disposal of rubbish /performing regular physical exercises /proper disposal of human excreta.</p> <p>26. Compass needle magnet.</p> <p>27. Hypogeal germination.</p> <p>28. Mental disability /physical disability.</p> <p>29. To prevent diseases and disorders of the kidneys.</p> <p>30. They enable man to produce energy / enable man to do work.</p> <p>31. Less effort is used to overcome the load.</p> <p>32. Both make their own food.</p>	<p>33. Single movable pulley.</p> <p>34. It makes germs more resistant and the sickness becomes worse.</p> <p>35. The sun is at an angle to the refracting surface.</p> <p>36. Reduces overcrowding of plants in one place /enables plants to colonise new areas / increases chances of survival for plant species.</p> <p>37. Reduces bad smell /kills flies.</p> <p>38. It causes the body to produce antibodies against infections.</p> <p>39. Water vapour /carbon dioxide.</p> <p>40. By diffusion.</p> <p>41. (a) Primates.</p> <p>(b) It enables a weaver bird to overcome resistance in air during flight.</p> <p>(c) Both have backbone /are warm blooded /live in the bush.</p> <p>42. (a) The testes produce sperms /production of sperms by the testes.</p> <p>(b) Puberty.</p> <p>(c) Production of ova /by ovaries / menstruation periods begin /development of ovaries.</p> <p>43. (a) Paraffin /kerosene.</p> <p>(b) It prevents fire flame from being blown by wind.</p> <p>(c) Heat energy /light energy.</p>
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P.7 SCIENCE MARKING GUIDE PRE-PLC SET 1, 2022

1. Petrol /diesel /oil /kerosene /tar.	19. To prevent poison from flowing to the heart.	33. Single movable pulley.
2. By biting.	20. It provides double income to the farmer / crops get shade from tall trees /animals get food from crops and trees /animals provide manure to crops and trees / animals get shade from trees.	34. It makes germs more resistant and the sickness becomes worse.
3. Kinetic energy changes to potential energy.	21. Queen bee /drone bee /worker bee.	35. The sun is at an angle to the refracting surface.
4. Performing regular physical exercises /feeding on a balanced diet /regular bathing /avoid drinking too much alcohol /having regular medical check up.	22. Source of food /herbal medicine / building materials /firewood /timber / charcoal /help in the formation of rainfall /provides shade /provides oxygen to animals and human beings.	36. Reduces overcrowding of plants in one place /enables plants to colonise new areas / increases chances of survival for plant species.
5. Athlete's foot.	23. By conduction.	37. Reduces bad smell /kills flies.
6. They have a large vibrating space.	24. It increases.	38. It causes the body to produce antibodies against infections.
7. Wearing thick clothes /warming themselves on fire /keeping indoors.	25. Feeding on a balanced diet /avoid sharing a living house with animals / proper disposal of rubbish /performing regular physical exercises /proper disposal of human excreta.	39. Water vapour /carbon dioxide.
8. Free range system.	26. Compass needle magnet.	40. By diffusion.
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