

STEM EXAMINATIONS BOARD

PRE-PRIMARY LEAVING EXAMINATION SET III, 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.

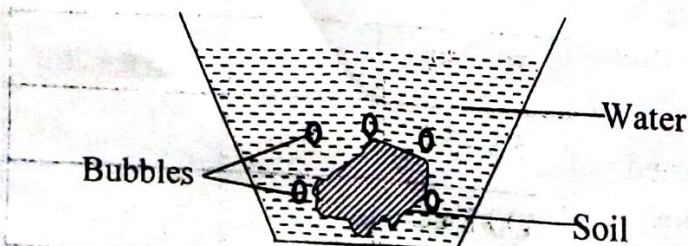
FOR EXAMINERS' USE ONLY		
Qn. No.	Marks	EXR'S NO.
1 - 10		
11 - 20		
21 - 30		
31 - 40		
41 - 43		
44 - 46		
47 - 49		
50 - 52		
53 - 55		
TOTAL		

SECTION A : 40 MARKS

Questions 1 to 40 carry one mark each.

1. Name the group of invertebrates to which a millipede belongs.
2. How does heat from the sun reach millet drying on the ground?
3. State the function of incisor teeth in the mouth.
4. Give any one cause of convulsion among human beings.
5. Why is tobacco referred to as an annual crop?
6. Name any one process which takes place in the mouth during digestion.
7. Give one way guava seeds are adapted to animal dispersal.
8. Which type of soil erosion happens when rain drops fall on to the bare soil with force?
9. Name the liquid part of blood.
10. Give the function of the Hilum to a bean seed.
11. Write down any one string musical instruments.
12. State any one characteristic of tuber crop pests.
13. What happens when clouds of different charges rub against each other?
14. Write down any one benefit of proper posture to the human body.
15. Which germ causes AIDS in human beings?

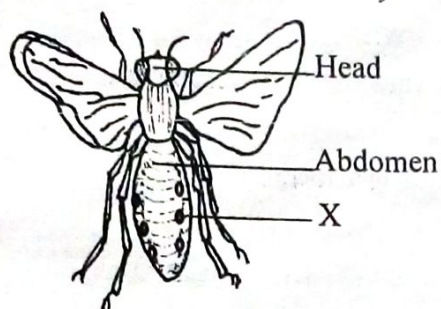
The diagram below shows an experiment carried out by pupils. Study and use it to answer question No. 16.



16. What does the experiment above prove about soil?

17. Give any one disease that affects both Rabbits and poultry.
.....
18. How do carbon dioxide and water vapour get out of the human body?
.....
19. Apart from parallel beam, give one other type of beam of light.
.....

The diagram below shows an insect. *Study and use it to answer question number 20.*



20. Give the use of the structures marked X to an insect.
.....
21. Write one reason why human beings should bathe regularly.

22. State the benefit of constructing goat houses with a slanting floor.
.....
23. Name any one disease that attacks the lungs.
.....

24. Why are the images formed in the human eye real?
.....
25. Which deficiency disease causes bleeding gums in human body?
.....

26. How do tortoises protect themselves against enemies?
.....
27. A block of mass 40g displaces 100c of water. Find its density.
.....

The diagram below shows a simple machine. *Study and use it to answer question 28.*



28. Which class of levers is demonstrated when using the machine shown above?
.....
29. Why are water borne toilets not common in rural areas?
.....
30. Give one condition which favours the growth and multiplication of Bacteria.
.....
31. Give one way of saving wood fuel at home.
.....
32. State the benefit of recycling metallic scraps in the environment.
.....
33. What do farmers benefit from practicing Agro-forestry?
.....
34. Why do mechanics apply grease in the moving parts of machines?
.....
35. Give one way humans use wool.
.....
36. Which type of changes helps in the formation of rainfall?
.....
37. What happens to an electromagnet when the circuit is broken?
.....
38. State the danger of prolonged use of agro-chemicals on soil.
.....
39. Which immunisable disease affects the brain?
.....
40. Give one plant with fibrous root system.
.....

SECTION B: 60 MARKS

(Questions 41 to 55 carry four marks each.)

41. (a) How long is the gestation period of a cow?
.....
- (b) Why do farmers cross breed their cattle?
.....
- (c) Give any two advantages of steaming up in cattle.
(i).....
(ii).....

42. (a) Give two ways tuberculosis spreads among human beings.

(i).....

(ii).....

(b) Write down two signs and symptoms of tuberculosis.

(i).....

(ii).....

43. (a) Name the insect which pollinates flowers at night.

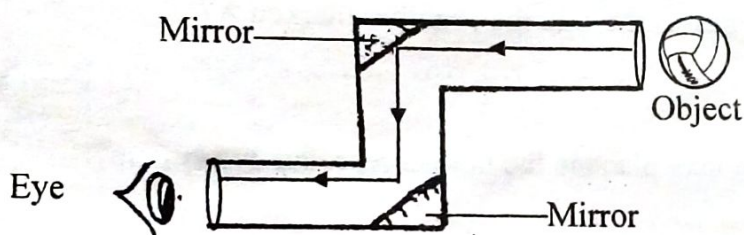
(b) Why are petals of some flowers brightly coloured?

(c) Give two characteristics of flowers pollinated by insects.

(i).....

(ii).....

The diagram below shows an instrument which works on the laws of reflection of light.
Study and use it to answer question 44.



44. (a) Name the instrument shown in the diagram above.

(b) State the principle on which the instrument named in (a) above works on.

(c) Give two uses of the instrument named in (a) above.

(i).....

(ii).....

45. (a) Why is quinine called an essential drug?

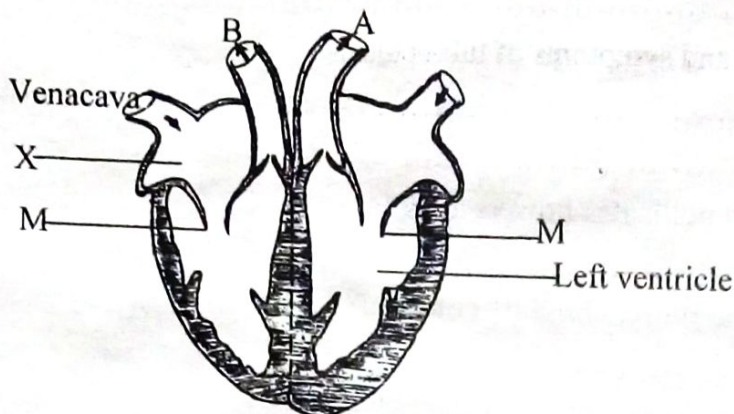
(b) Apart from quinine, give any two examples of essential drugs.

(i).....

(ii).....

(c) Write down one quality of essential drugs.

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

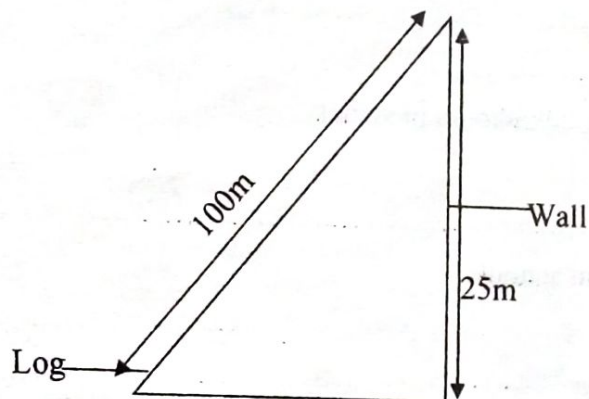


46. (a) Name the blood vessels marked;
- (i) **A**
- (ii) **B**
- (b) Give the function of the structures marked M.
-
- (c) Which type of blood is passes through the chamber marked X?
-
47. (a) Where does fertilization take place in the human reproductive system?
-
- (b) Give the role of the amniotic fluid during pregnancy.
-
- (c) Write down two signs of pregnancy in human beings.
- (i).....
- (ii).....
48. (a) Name two types of stems.
- (i).....
- (ii).....
- (b) Give any two ways humans use plant stems.
- (i).....
- (ii).....
49. (a) How does prolonged breastfeeding help in child spacing?
-
- (b) Apart from child spacing, give three benefits of breast feeding to the mother.
- (i).....
- (ii).....
- (iii).....

50. The table below shows groups of birds, examples and the type of food. Fill in the missing information.

Group (s)	Example (s)	Type of food
Swimming birds	(i).....	Water weeds
(ii).....	Chicken	Worms
Scavenging birds	Crow	(iii).....
(iv).....	Parrot	Insects

51. The illustration below shows a log of wood leaning against the wall. Study and use it to answer the questions that follow.



- (a) Name the type of simple machines illustrated above.
.....
- (b) How do workers ensure application of less effort when using the above machine?
.....
- (c) Calculate the mechanical advantage of the machine shown above. (2 marks)
52. (a) Write down two major organs of the human body found on the head.
(i).....
(ii).....
- (b) Give any two functions of the brain in the human body.
(i).....
(ii).....

53. The table below shows elements of Primary Health Care (Y) and their benefits (Z).

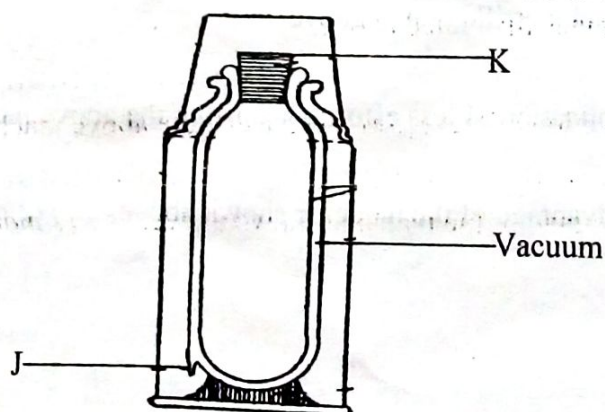
Study it carefully.

	Elements (Y)	Benefits (Z)
(i)	First aid	Controls population
(ii)	Maternal and child health care	Saves lives of casualties
(iii)	Family planning	Controls waterborne diseases
(iv)	Water and sanitation	Reduces infant mortality rate

Select from List Z the correct benefits of the elements and write them in the space below.

- (i) First aid
- (ii) Maternal and child health care
- (iii) Family planning
- (iv) Water and sanitation
54. (a) Give two examples of anti-social behaviours in society.
- (i).....
- (ii).....
- (b) State any two causes of truancy in schools.
- (i).....
- (ii).....

The illustration below shows a thermos flask. Use it to answer question 55.



55. (a) Name the parts marked;
- (i) **J**
- (ii) **K**
- (b) How does the vacuum prevent heat loss or gain in a thermos flask?
-
- (c) Give one reason why thermos flasks are not common in some homes.
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