

STEM EXAMINATIONS BOARD
PRE-REGISTRATION ASSESSMENT, 2024
PRIMARY SEVEN
INTEGRATED SCIENCE

Time Allowed: 2 hours 15 minutes

	Random No.	Personal No.
Index No.	<div style="display: flex; justify-content: space-between;"><div style="border: 1px solid black; width: 20px; height: 20px;"></div><div style="border: 1px solid black; width: 20px; height: 20px;"></div><div style="border: 1px solid black; width: 20px; height: 20px;"></div><div style="border: 1px solid black; width: 20px; height: 20px;"></div><div style="border: 1px solid black; width: 20px; height: 20px;"></div><div style="border: 1px solid black; width: 20px; height: 20px;"></div></div>	<div style="display: flex; justify-content: space-between;"><div style="border: 1px solid black; width: 20px; height: 20px;"></div><div style="border: 1px solid black; width: 20px; height: 20px;"></div><div style="border: 1px solid black; width: 20px; height: 20px;"></div></div>

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.

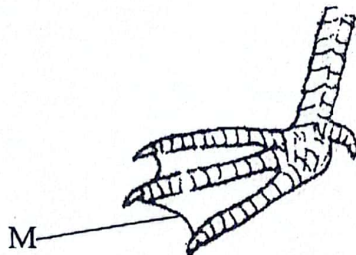
FOR EXAMINERS' USE ONLY		
Qn. No.	Marks	EXR'S NO.
1- 10		
11 - 20		
21 - 30		
31 - 40		
41 - 43		
44 - 46		
47 - 49		
50 - 52		
53 - 55		
TOTAL		

SECTION A : 40 MARKS

Questions 1 to 40 carry one mark each.

1. Name the food nutrient which improves human body immunity.
.....
2. Give any one way insects are useful in the environment.
.....
3. Why are curtains able to reduce echoes in disco halls?
.....
4. How does eating of green vegetables increase the volume of blood in the human body?
.....
5. Write down any one benefit of artificial insemination in cattle management.
.....
6. Why do small scale farmers commonly use natural fertilizers in their gardens?
.....
7. Which immunisable disease affects the brain?
.....
8. How do adolescent girls manage menstruation periods?
.....

The diagram below shows the foot of a bird. Study and use it to answer questions 9 and 10.



9. Name the group of birds with the foot shown in the diagram above.
.....
10. What is the use of the structures marked M to the birds named above?
.....
11. Which digestive juice is produced in the mouth?
.....
12. Why do babies infested with hook worms become anaemic?
.....
13. Give a reason why farmers debeak their layer chickens.
.....
14. Name the magnetic ore which naturally exists on earth.
.....

Given the body conditions below ;

impotence, dislocation, constipation, choking.

25. Which of the above conditions affects the human respiratory system?

26. Give any one reason why planted seeds may fail to germinate.

27. Which element of a clean home helps in proper rubbish management?

28. Why does flour particles remain suspended in water when mixed together?

29. How does crop rotation control crop pests?

Study the diagram below and use it to answer questions 30 and 31.



30. Name the object marked X on the diagram above.

31. What is the use of the object marked X on the diagram above?

32. Why are objects made from clay baked before use?

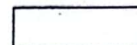
33. Give any one health danger of drug abuse to the human body.

34. Write down any one cause of swarming in bees.

35. Why should all members of the community participate in community sanitation?

36. Which set of teeth is found in adult human beings?

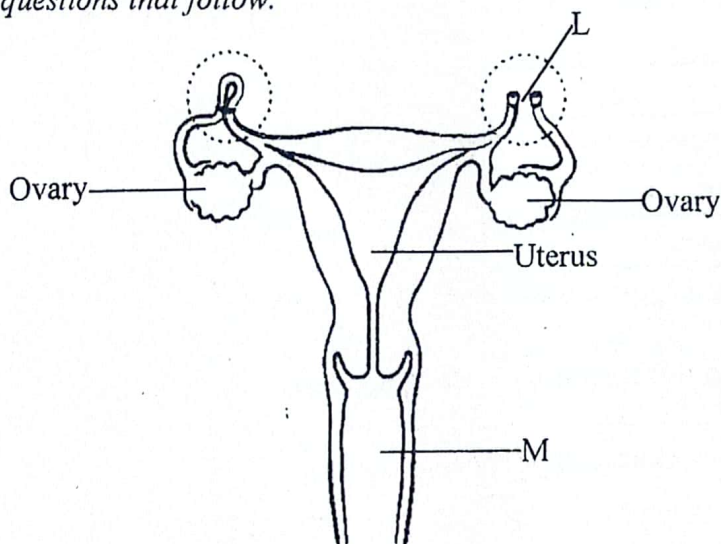
37. Give any one way impurities affect the quality of water in the environment.
.....
38. How do germs cause rotting in the environment?
.....
39. Which part of the human ear equalizes pressure on both sides of the eardrum?
.....
40. State the recommended first aid for electric shock.
.....



SECTION B: 60 MARKS

(Questions 41 to 55 carry four marks each.)

The diagram below shows a method of family planning. *Study and use it to answer questions that follow.*



41. (a) Name the part marked **M** in the diagram above.
.....
- (b) Which method of family planning is shown in the diagram above?
.....
- (c) How does the cutting and sealing of part **L** control pregnancy?
.....
- (d) Apart from the method shown above, name one other method of family planning.
.....
42. (a) Name any two types of cattle feeds.
(i).....
(ii).....
- (b) Write down any two reasons why cattle need proper feeding.
(i).....
(ii).....

43. (a) What is soil exhaustion?

(b) How does soil erosion cause soil exhaustion?

(c) Apart from soil erosion, give any two factors which lead to soil exhaustion.

(i).....

(ii).....

44. (a) Name two salts lost from the body during diarrhoea.

(i).....

(ii).....

(b) How does diarrhoea lead to dehydration?

(c) Give any one sign of dehydration among human beings.

Below is a list of plants in the environment . *Study and use it to answer questions that follow.*

A	B
Mosses	Cypress
Liverworts	Fir
Ferns	Pines

45. (a) What general name is given to all the plants listed above?

(b) How do plants in A differ from those in B in terms of reproduction?

(c) Give any two plants which can be added to list B.

(i).....

(ii).....

46. (a) Write down any two foreign bodies which get into the body through natural body openings.

(i).....

(ii).....

(b) State the recommended first aid for each of the following;

(i) Choking.

(ii) Insect in the ear.

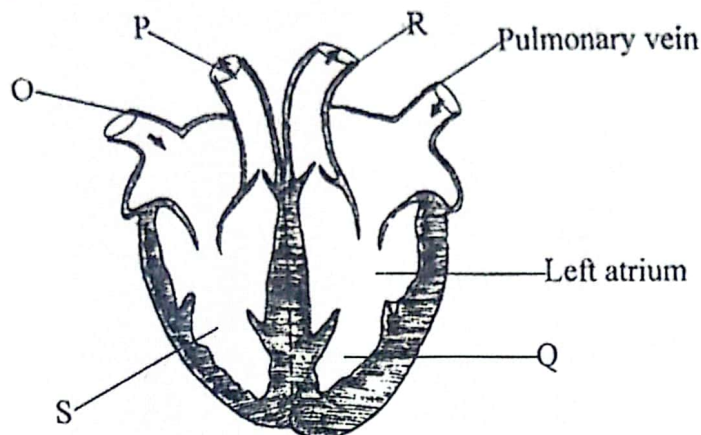
47. (a) State the energy change which takes place when a stationary ball is kicked by the footballer.

(b) Why do the passengers jack forward when the driver suddenly applies brakes to a speeding bus?

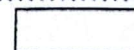
(c) Write down any two forms of energy.

- (i).....
(ii).....

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

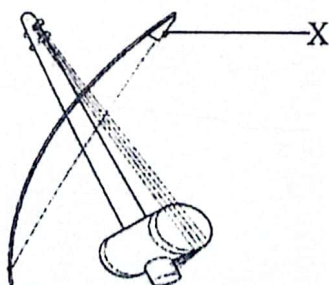


48. (a) Name the blood vessels marked;
(i) **O**
(ii) **R**
(b) How is vessel **P** similar to vessel **R** in terms of function?
.....
(c) Why is chamber **Q** more muscular than chamber **S**?
.....
49. (a) What is culling in rabbit keeping?
.....
(b) Why do rabbit farmers carry out culling on their farms?
.....
(c) Apart from culling, give any two ways of controlling diseases among rabbits.
(i).....
(ii).....



50. (a) Write down any two useful fungi.
(i).....
(ii).....
(b) Give any two ways fungi are useful in the environment.
(i).....
(ii).....

The diagram below shows a musical instrument. *Study and use it to answer questions that follow.*



51. (a) Name the musical instrument shown in the diagram above.

 (b) What is the importance of the part marked X in the use of the above instrument?

 (c) Give any two musical instruments which belong to the same group with the one shown above.
 (i).....
 (ii).....

Property of air: Air exerts pressure.

52. (a) Give any two uses of the property of air shown above.
 (i).....
 (ii).....
 (b) Apart from the above property, write down any two properties of air.
 (i).....
 (ii).....

53. Match practices carried out on a sheep farm with their benefits.

	Practice (s)	Benefit (s)
(i)	Docking	Controls internal parasites in sheep
(ii)	Deworming	Prevents foot rot in sheep
(iii)	Hoof trimming	Controls external parasites in sheep
(iv)	Spraying	Makes mating easy

- (i) Docking
 (ii) Deworming
 (iii) Hoof trimming
 (iv) Spraying

54. (a) Mention any two plant fibres in the environment.
 (i).....
 (ii).....
 (b) Give any two ways human beings use fibres from plants.
 (i).....
 (ii).....

55. Fill in the missing information in the table below.

Type of drugs	Examples
Contraceptives	(i).....
(ii).....	Paradoi
Curatives	(iii).....
(iv).....	Mabendazol

END

P.7 PRE-REGISTRATION SCIENCE MARKING GUIDE, 2024

<ol style="list-style-type: none"> 1. Vitamins /mineral salts. 2. Some insects are used as food /pollinate plant flowers /improve soil aeration /help in seed dispersal /give us honey. 3. They are porous to absorb sound waves. 4. Green vegetables supply iron which helps in the formation of blood. 5. It prevents injuries caused by heavy bulls on small cows /it is easier to transport semen than transporting a bull /semen from one bull can be used to serve many cows. 6. They are cheap /easy to apply /readily available in the environment /stay longer in crop gardens. 7. Meningitis. 8. By proper use of sanitary towels /regular bathing /wearing clean and dry under wears. 9. Swimming birds. 10. They are used for paddling in water as they swim. 11. Saliva. 12. They feed on blood. 13. To prevent egg eating among birds. 14. Lodestone. 15. Planting trees /using alternative source of energy apart from wood fuel /avoid bush burning /introducing new plant species /watering plants /application of manure in crop gardens. 16. It prevents growth and multiplication of micro organisms in food. 17. Mosquito. 18. Malaria /elephantiasis /yellow fever. 19. They allow movement in the human body. 20. Condensation of water vapour in the atmosphere. 21. Free anti-retroviral drugs /medical care /health education /proper feeding. 22. The plastic ruler gains electrons as it is rubbed against hair. 23. Clay made charcoal stoves retains more heat than metallic ones /clay made charcoal stoves use less fuel than metallic ones. 	<ol style="list-style-type: none"> 24. It helps to reduce body temperatures of the casualty. 25. Choking. 26. Lack of oxygen /water /when seeds are planted very deep in the soil /when seeds are damaged by pests /planting immature seeds. 27. Dustbin. 28. Flour does not dissolve in water. 29. Crop rotation starves pests to death /breaks the life cycle of crop pests. 30. Wheel chair. 31. It helps a crippled person to move from one place to another. 32. To make them harder. 33. It leads to the damage body organs /progressive forgetfulness /loss of memory /addiction. 34. Damage of the brood /over crowding of bees in a hive /over heating of the hive /direct sunshine into the hive /when bees are attacked by enemies /dampness and bad smell in a hive. 35. Health activities benefit all members of the community. 36. Permanent teeth. 37. They add taste /smell and colour in water /increase the boiling point of water /makes water hard. 38. By feeding on dead matter. 39. Eustachian tube. 40. Breaking the circuit at the source. 41. (a) Vagina. (b) Tubal ligation. (c) It prevents the ovum from moving down the uterus. (d) Vasectomy /use of birth control pills /condoms use /norplant method.
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<p>42. (a) Fodder crops /succulents /hay /pastures / concentrates.</p> <p>(b) To increase lactation period /promote proper growth /protect cattle against infections /prevent abortion in in-calfs /increase milk let down.</p> <p>43. (a) Loss of soil fertility.</p> <p>(b) It makes top fertile soil move from one place to another.</p> <p>(c) Leaching /over cultivation /bush burning / mono cropping /prolonged use of artificial fertilizers.</p> <p>44. (a) Sodium /potassium.</p> <p>(b) It leads to loss of water from the body through stools.</p> <p>(c) Dry mouth lips /sunken eyes /little or no urine is passed out /sunken soft spot on the head /pale skin.</p> <p>45. (a) Non flowering plants.</p> <p>(b) Plants in A reproduce by means of spores while those in B reproduce by seeds.</p> <p>(c) Pedo /cedar /gingko.</p> <p>46. (a) Dust /insects /seeds /food /small stones.</p> <p>(b) (i) Choking — Giving several sharp blows at the victim's back.</p> <p>(ii) Insect in the ear — Pour clean cold water in the ear until the insect comes out floating.</p> <p>47. (a) Potential energy changes to kinetic energy.</p> <p>(b) Due to the force of inertia.</p> <p>(c) Mechanical energy /heat energy /sound energy / magnetic energy /electric energy.</p> <p>48. (a) (i) O — Venacava.</p> <p>(ii) R — Aorta.</p> <p>(b) Both carry blood away from the heart.</p> <p>(c) Chamber Q pumps oxygenated blood with</p>	<p>greater pressure over a long distance.</p> <p>49. (a) Removal of sick and unproductive rabbits from the farm.</p> <p>(b) To prevent the spread of diseases from sick rabbits to health ones.</p> <p>(c) Regular vaccination /keeping the hutch clean and dry /proper feeding of rabbits / provide proper ventilation in the hutch.</p> <p>50. (a) Mushrooms /moulds /yeast.</p> <p>(b) They help in the decomposition of organic matter /some fungi are used as food /for baking bread /fermentation of alcohol / making of antibiotics.</p> <p>51. (a) Tube fiddle.</p> <p>(b) It is used for plucking the string.</p> <p>(c) Guitar /adungu /lyre /violin /viola.</p> <p>52. (a) It enables chemicals to come out of the knapsack sprayer when spraying /helps in injecting medicine into the body using a syringe /helps to drink water using a straw.</p> <p>(b) Air occupies space /has volume /air has weight.</p> <p>53. (i) Docking — Makes mating easy.</p> <p>(ii) Deworming — Controls internal parasites.</p> <p>(iii) Hoof trimming — Prevents foot rot in shecp.</p> <p>(iv) Spraying — Controls external parasites in sheep.</p> <p>54. (a) Sisal /jute /banana fibres /cotton /palm leaves.</p> <p>(b) For making ropes /mats /balls /dolls / clothes /mulching /crop gardens /thatching houses.</p> <p>55. (i) Birth control pills.</p> <p>(ii) Pain killers.</p> <p>(iii) Coartem /quinine.</p> <p>(iv) Dewormers.</p> <p style="text-align: right;">END</p>
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