



PACE - PREPARE A CHILD EXAMINATIONS COUNCIL
PRE-MOCK EXAMINATION SET 4
2025

INTEGRATED SCIENCE

Time Allowed: 2 hours 15 minutes

Random NO.						Personal No.		

Candidate's Name:

Candidate's Signature:

School EMIS No.

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Read the following instruction 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 **16** questions. The paper has **15 printed pages** altogether.
3. Answer **all** the 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 will **not** be marked.
5. Unnecessary **changes** in your work and handwriting that cannot be read easily 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		

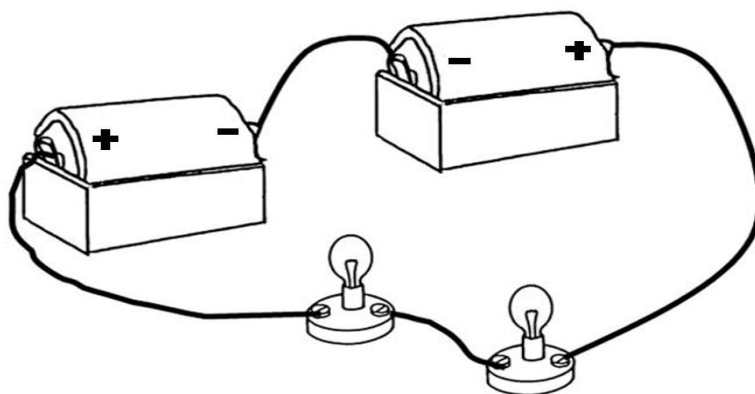
SECTION A: 40 MARKS

*Answer **all** questions in this section*

Questions **1** to **40** carry one mark each.

1. State the role played by yeast in brewing alcohol.
.....
2. Give the way in which washing of hands after visiting a latrine helps to control the spread of germs.
.....
3. Identify the type of false roots that enables plants that grow in water logged areas to survive.
.....
4. Name the crop management practice that reduces the weight of the crops.
.....
5. State **one** way in which a bee farmer makes use of a centrifuge machine.
.....

A P.7 pupil connected two dry cells with bulbs and a wire as shown in the diagram below. Use it to answer question **6** and **7**.



6. State what happened to the electric bulbs.
.....
7. Give a reason for your answer in (6) above.
.....

8. Name the body part of a scorpion that serves a similar purpose as the spiracles of an insect.

.....

9. State any **one** advantage of rearing crossbreeds of cattle over exotic breeds of cattle.

.....

10. State the condition for germination in bean seeds that dissolves food nutrients in the cotyledon for the growing embryo.

.....

11. A P.7 pupil wanted to ride a bicycle one evening but he realized that it was difficult for him to turn the bicycle pedals. Write **one** piece of advice you would give to the above pupil in order to solve the above challenge.

.....

12. Give a reason why anopheles mosquito cannot spread AIDS.

.....

13. State the cause of wind in the environment.



.....

14. Identify the practice done by people at home that encourages free air circulation in a VIP latrine.

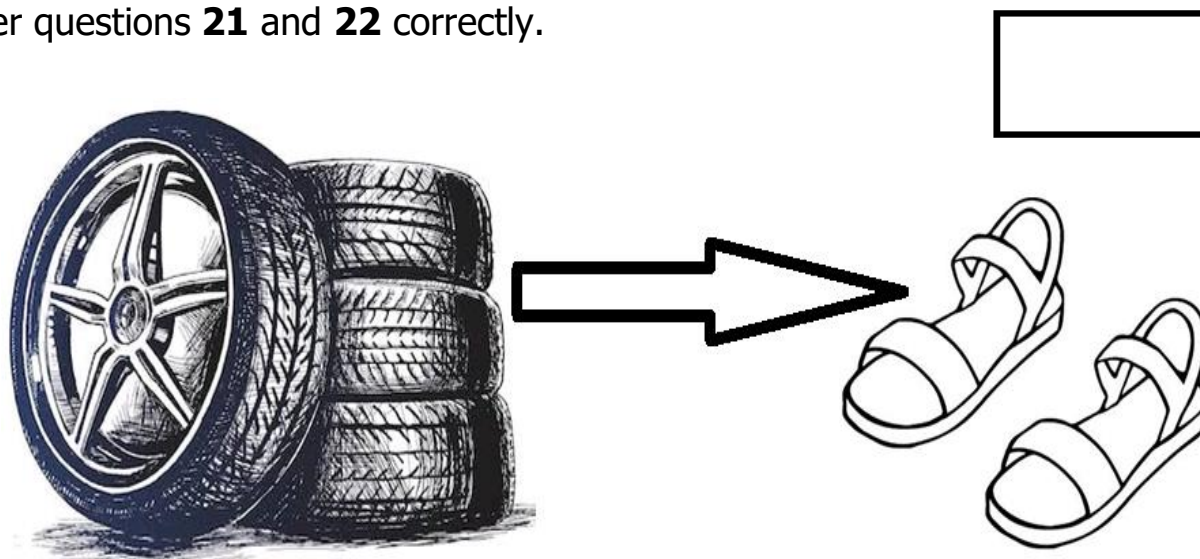
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15. Name any **one** substance that has the ability to sublime.

.....

16. Mention any **one** quality of a good planting material.
.....
17. Name any **one** vector that spreads typhus fever among people.
.....
18. State the reason for raising the legs of a fainted person above the head level when giving first aid to him or her.
.....
19. During the health parade, a child was found with the following signs, itching of the skin, hair falling off the skin and round white patches on the skin. Identify the skin disease which the child was suffering from.
.....
20. Mention any **one** bad practice which the above child may have encountered.
.....

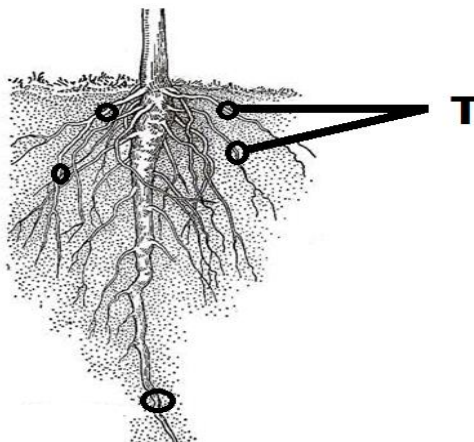
The diagram below shows a mode of waste management. Study and use it to answer questions **21** and **22** correctly.



21. State the waste management practice shown in the above diagram.
.....

22. Mention any **one** advantage of carrying out the above waste management practice in the environment.
-
23. Name the method of extracting milk from the udder of a cow that involves squeezing of the teats with hands in order to get milk out of the udder of a cow.
-
24. Give a reason why salt disappears when mixed with water.
-
25. Give any **one** danger of teenage pregnancies to teenage girls.
-
26. Name the type of friction experienced by objects moving on solid surfaces.
-
27. State what happens to the density of water if its volume is reduced.
-

The diagram below shows a root system. Use it to answer questions **28** and **29** correctly.



28. Name the structures marked with letter **T** above.
-

29. State the way in which structures marked **T** are useful to plants.

.....

30. Mention any **one** cause of drug overdose among people.

.....

31. Give a reason why displacement method is used to find the volume of a stone.

.....

.....

32. Name the group of non-flowering plants to which a thallophyte plant undergo.

.....

33. State any **one** reason why would you choose to use solar energy instead of wood fuel as a source of energy.

.....

.....

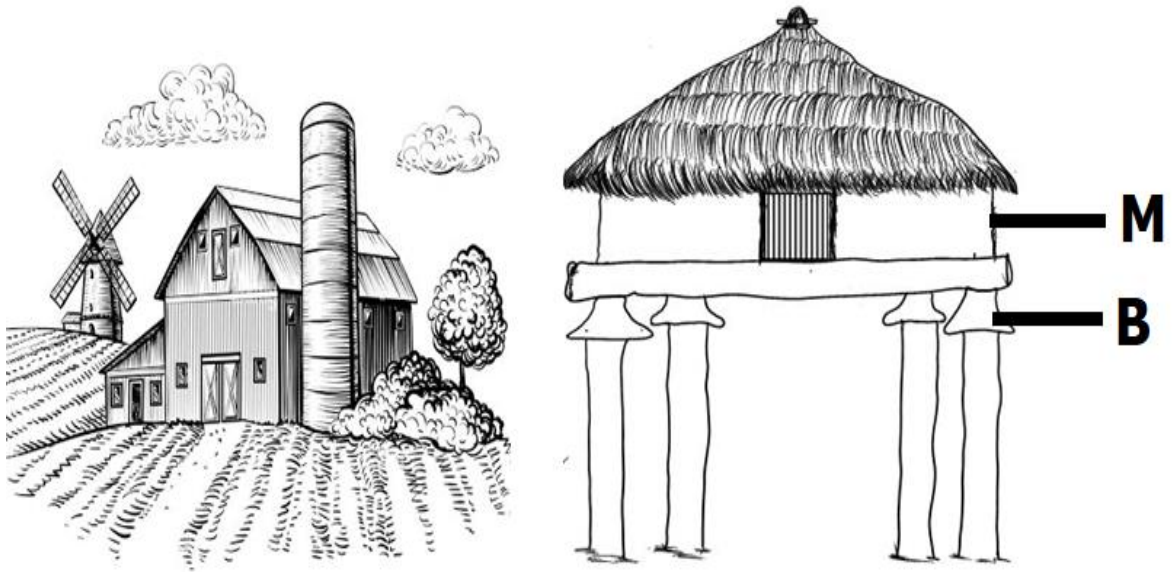
34. Give a reason why moulds are able to develop on expired food.

.....

.....



The diagram below shows a food store found in some homes in rural areas. Use it to answer number **35** and **36**.



35. Name the part of the store marked **M** above.

.....

36. State any **one** adaptation of part marked **B** above to its purpose.

.....

37. Identify the source of food that undergoes asexual reproduction.

.....

38. Mention any **one** way how the kidneys are useful to the human body besides producing urine.

.....

39. Mention the way in which whiskers are useful to a rabbit.

.....

40. Name the costless natural method of conserving food at home.

.....

SECTION B: 60 MARKS

Answer **all** questions in this section

Questions 41 to 55 carry four marks each

41. Identify the cause of a short circuit.

.....

(b) State the way in which the function of a fuse is different from that of a switch as components of an electric circuit.

.....

.....

(c) Mention any **two** ways of preventing short circuits.

(i)

(ii)

42. (a) Give the meaning of the term **respiration**.

.....

.....

(b). The table below shows the percentage of different gases during inhalation and exhalation the air we breathe out. Study and complete it correctly

Gases	Inhaled air	Exhaled air
Oxygen	16%
carbon dioxide	0.03%
Nitrogen	78%
Rare gases	0.97%	0.97%

43. (a) Give any **two** conditions in which bottle feeding may be recommended for babies.

(i)

(ii)

(b) State the reason why breast feeding is regarded as a natural family planning method in some women.

.....

(c) Apart from breast feeding, give any **one** other condition when a woman can be vulnerable.

.....

44. (a) Name the physical process that forms nimbus clouds in the sky.

.....

(b) Name the type of cloud that;

(i) Resembles cotton piles in the sky.

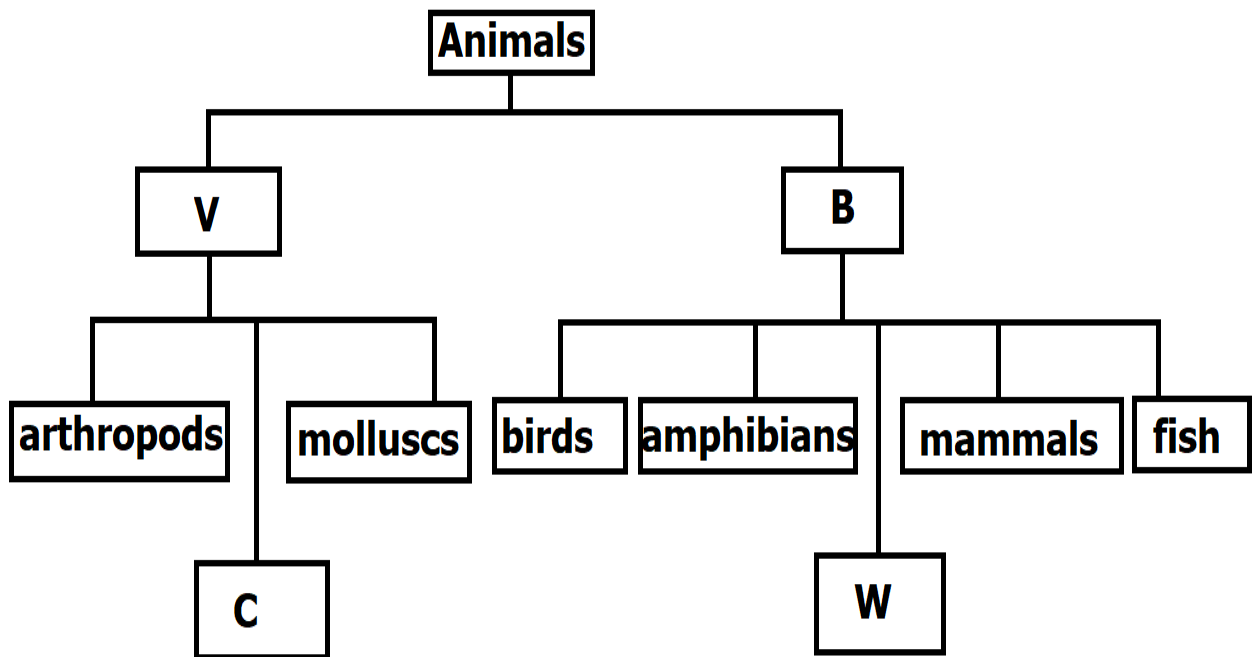
(ii) Shows a clear weather.

45. (c) Mention any **one** use of clouds in the environment apart from providing rainfall to people

.....



46. The table below shows classification of animals. Use it to answer questions that follow.



(a) Name the groups of animals in the boxes marked with letters **V** and **W**.

(i) **V**.....

(ii) **W**.....

(b) State the way in which animals in the box with letter **C** are different from fish in form of sensing sound waves.

.....

.....

(c) Name the type of skeleton animals in the box with letter **B** has.

.....

47. (a) Give the meaning of the term **crop rotation**.

.....

.....

(b) Identify any **two** factors considered by crop farmers when designing crop rotation.

(i)

(ii)

(c) State the way in which crop rotation controls soil erosion in a crop garden.

.....

48. **Transpiration** is the process by which plants lose water in form of water vapour to the atmosphere. It majorly takes place in plant leaves by the use of the stomata.

(a) Name the part of a stem in which the above process takes place.

.....

(b) Explain how wind affects the rate of transpiration. *(02 marks)*

.....

.....

.....

.....

(c) State any **one** way how transpiration may be a menace to the plant life.

.....



49. Identify the state of matter in which heat transfer by conduction is slowest.

.....

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

.....

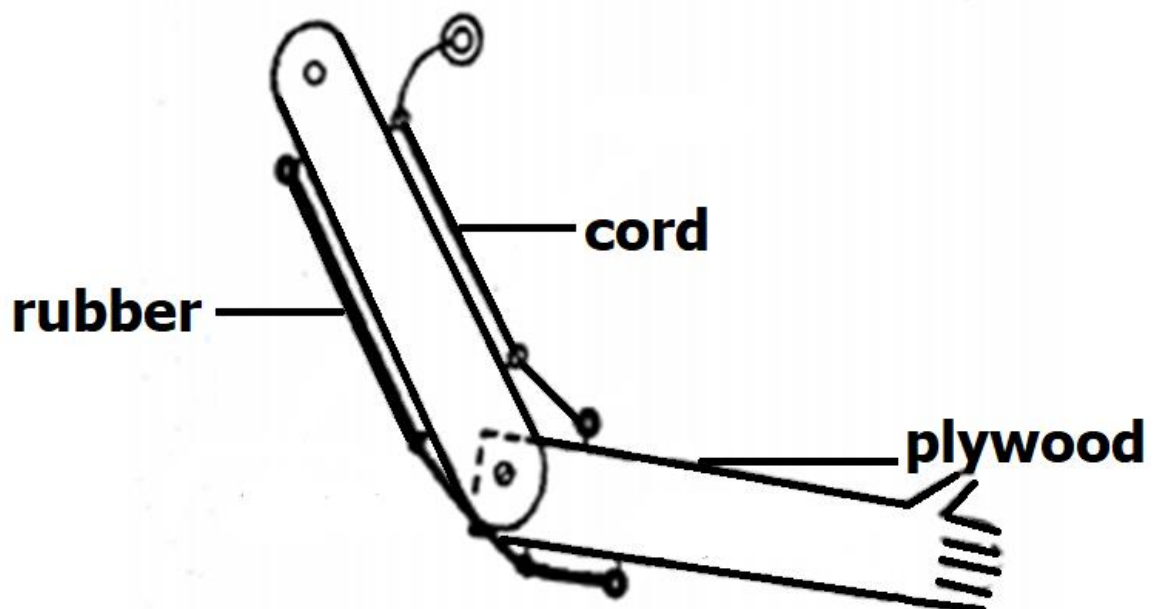
- (c) Name the kind of heat whose transfer does not need a medium of transmission.

.....

- (d) Mention any **one** way through which heat transfer by conduction is useful to a hairdresser.

.....

50. The diagram below shows the action of certain muscles in the body. Use it to answer the questions that follow.



- (a) What name the muscle represented by the,

(i) Cord

(ii) Rubber

(b) State what happens to the rubber when the plywood is straightened.

.....

(c) Mention any **one** practice done by people to improve the efficiency of the skeletal muscular system.

.....

51. (a) Give the meaning of the term **farm records**.

.....

.....

(b) Mention any **two** forms of inventory records kept at the farm.

(i)

(ii)

(c) State any **one** way how a farmers benefits from keeping farm record.

.....

52. (a) Name the component of air used by plants to make plant proteins.

.....

(b) Mention any **one** way in which cattle farmers make use of the component of air names in (a) above.

.....

(c) State **two** differences between the exhaled air and inhaled air.

(i)

(ii)

53. (a) One of the properties of matter is "matter exerts pressure".
Mention any **one** other property of matter.

.....

- (b) Mr. Julius Jasper wanted to do an experiment to prove that matter exerts pressure using the following materials. **Cold water, open bottle** and **charcoal stove**. Write three steps through which he underwent in order for him to get accurate results. *(03 marks)*

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.....



54. (a) Mention the process through which seeds are scattered from a parent plant to other areas.

.....

- (b) Mention any **two** features that develop on some seeds in order to ease the above process.

(i)

(ii)

- (c) State **one** way in which plants makes use of the above process.

.....

55. Match the following deficiency diseases to their signs correctly.

Deficiency disease

Signs

Scurvy

Ox bow legs

Kwashiorkor

Bonny face

Rickets

Bleeding gum

Marasmus

Swollen moon like face

Scurvy

.....

Kwashiorkor

.....

Rickets

.....

Marasmus

.....

**PACE Examinations Board wishes
you success**