



## THE NERDS EXAMINATION SERIES

### P.7 EXAMINATIONS 2024 (SET 8)

#### INTEGRATED SCIENCE

*Time allowed: 2hours 30minutes*

**INDEX  
NO.**

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CANDIDATE'S NAME.....

CANDIDATE'S SIGNATURE .....DATE .....

SCHOOL'S EMIS

NO.....

DISTRICT NAME .....

#### READ THE FOLLOWING INSTRUCTIONS CAREFULLY:

1. This paper has two sections **A** and **B**
2. All the working in both sections **A** and **B** should be shown in the spaces provided.
3. All working must be done using blue or black point pen or fountain pen. Diagrams must be drawn in pencil.
4. Unnecessary changes of work may lead to loss of marks.
5. Any handwriting that cannot be easily read may lead to loss of marks
6. Do not fill in anything indicated for *examiner's use only* and those inside the paper.

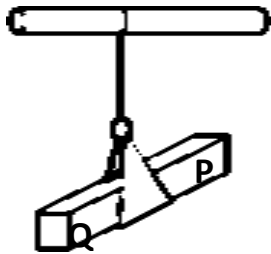
*For examiner's use only*

| SECTION   | MARKS |
|-----------|-------|
| SECTION A |       |
| SECTION B |       |
| TOTAL     |       |

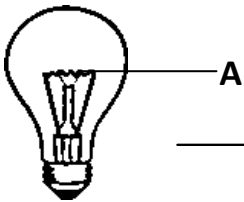
### **SECTION A (40 MARKS)**

1. Name any **one** cause of soil erosion.  
\_\_\_\_\_
2. State **one** way of controlling endo parasites in cattle.  
\_\_\_\_\_
3. Give any **one** human activity that can result into environmental degradation.  
\_\_\_\_\_
4. Which immunisable disease causes stiffness of muscles?  
\_\_\_\_\_
5. How does a mushroom differ from a conifer as far as feeding is concerned?  
\_\_\_\_\_

6. Name any **one** device that changes mechanical energy into electric energy.  
**The diagram below shows a freely suspended magnet. Use it to answer the questions 7 and 8.**



7. Name the pole of the above magnet marked with letter **Q**.  
\_\_\_\_\_
8. How is the property of magnet shown above useful to pilots?  
\_\_\_\_\_
9. The diagram below is of an electric bulb. Give a reason why part A is coiled.  
\_\_\_\_\_



10. Name the plant process that helps in cooling the plants.  
\_\_\_\_\_
11. How is water useful to a germinating bean seed?  
\_\_\_\_\_
12. Name any **one** mineral deficiency disease.  
\_\_\_\_\_
13. State **one** of maintaining proper functioning of the heart.  
\_\_\_\_\_
14. Which type of change maintains the properties of the original substance?  
\_\_\_\_\_  
\_\_\_\_\_

15. In which chamber of a modern bee hive does a queen bee lay its eggs?

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16. Why does a child suffering from tape worms become malnourished?

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17. In which way does the cutting of finger nails short control the spread of diarrheal diseases?

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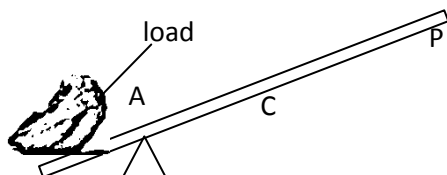
18. How does the use of charcoal saving stoves help to conserve the environment?

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19. Name **one** living natural source of light.

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20. The diagram below shows a lever system used to raise a load. On which part of the lever marked **C** and **P** would one use more effort to lift the load.



21. Why is water not good for putting out fire caused by Petrol?

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22. Name the type of energy possessed by a bird resting on a branch of a tree.

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23. How does the practice of crop rotation control pests in the garden?

---

24. Name the mineral salt that helps in the formation of blood.

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25. Which habit in pregnant women leads to produce under weight babies?

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26. Write any **one** way in which seeds are useful to people.

---

27. Which sexual transmitted disease can cause blindness in young babies?

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28. Identify the form of energy that can pass through wood without destroying it.

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29. Musa's child was found to be dehydrated. Mention any one possible cause of dehydration.

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30. Mention any **one** disorder of digestive system.

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31. How does smoke move from fire move through the chimney?

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32. What is the use of a switch in an electric circuit?

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33. How is a scald different from a burn as used in accidents and first aid?

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34. What scientific term do we give to the degree of coldness or hotness of a place or an object?

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35. Give **one** reason why movement is essential to living things.

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36. How is demography important to the government?

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37. Identify **one** component of the living environment.

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38. What is the importance of a strip cup on livestock farm?

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39. Mention any **one** way school children can control dumping of rubbish in the school compound.

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40. State the component of air used by plants to make plant proteins.

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### **SECTION B.**

41. (a) Name any **one** practice that promotes oral health.

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(b) State any **one** adaptation of the molar teeth for their function during digestion.

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(c) Which region of a tooth appears above the gum?

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(d) Give any **one** disease of the teeth.

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42. Kato weighs 72kgs and sits 6m away from the fulcrum on a seesaw. His sister Nyangoma who weighs 36kg sits on the opposite side of the seesaw and they balance.

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- (i) Draw a sketch to show the positions of Kato and his sister Nyangoma on the see saw.

- (ii) How far is Nyangoma from Kato?

**43. Match the insects in group A with their respective larva in group B.**

**A**

Butterfly  
Bees  
Mosquito  
Cockroach

**B**

grub  
Nymph  
caterpillar  
wiggler.

- (a) Butterfly .....
- (b) Bees .....
- (c) Mosquito .....
- (d) Cockroach .....

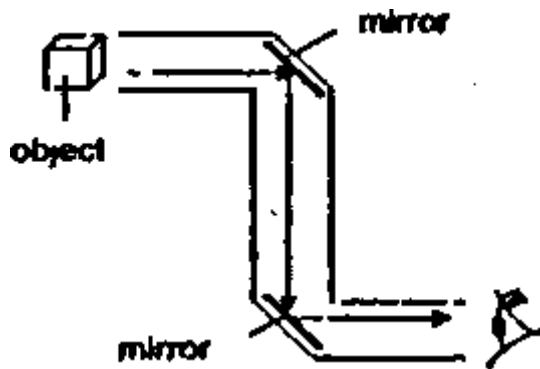
**44. In which way are the following parts important in the human muscular skeleton system?**

- (i) Ligament .....
- (ii) Cartilage .....

(b) Name any **two** long bones found in the human leg.

- i) \_\_\_\_\_
- ii) \_\_\_\_\_

45. The diagram below shows one of the optical instruments. Use it to answer the questions that follow.



(a) Name the above optical instrument.

(b) Name the type of mirrors used in the above instrument.

(c) State the use of the mirrors in the instrument.

(d) How is the above instrument useful to submarine soldiers?

46. (a) Name any **one** enzyme found in;

(i) Gastric juice.....

(ii) Pancreatic juice.....

(b) Which acid is used to kill germs taken in with food in the stomach?

(c) Name the class of food first digested in the stomach.

47. The diagram below shows different seeds in our environment.



(a) State the way the above seeds are dispersed in our environment.

**A**.....

**B** .....

(b) State any **two** importance of seed dispersal to plants.

i).....

ii).....

48. (a) Give the meaning of the following terms as used in sound.

i) Pitch:.....  
.....

ii) Volume:.....  
.....

iii) Noise:.....  
.....

(b) How do we call musical instruments that produce sound when hit?

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49. (a) What is a biological change?

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(b) Name any **two** biological changes in plants.

i) \_\_\_\_\_

ii) \_\_\_\_\_

(c) How are biological changes similar to chemical changes?

i) \_\_\_\_\_

ii) \_\_\_\_\_

50. (a) What is drug Prescriptions?

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(b) Give any **two** uses of drug prescription to a sick person.

i) \_\_\_\_\_

ii) \_\_\_\_\_

(c) Why should drugs be kept out of reach of young children?

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51. (a) State any **one** way of making water safe for drinking.

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(b) Why is distilled water not recommended for drinking?

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(c) Name any **one** immunisable disease spread through drinking contaminated water.

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(d) Give any **one** way we care for water bodies.

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52. (a) Name the garden tool used for the following:

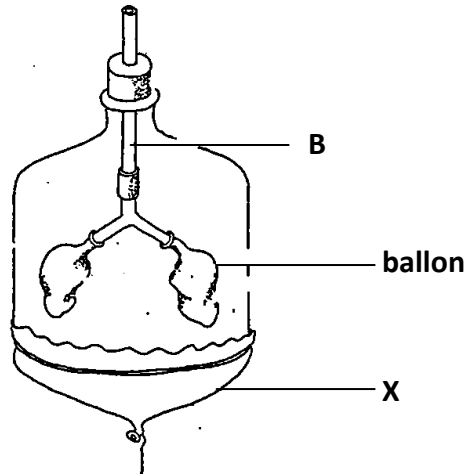
(i) Leveling soil.....

(ii) Transplanting seedlings.....

(b) State any **one** way of controlling rusting of our garden tools.

(c) Mention any **one** danger of rusting on garden tools.

**53. The diagram below shows the model of breathing mechanisms of the lungs. Use it to answer the questions that follow.**



(i) Which body system does the above diagram represent?

(ii) What do the following parts stand for?

**B**.....

**X**.....

(iii) Why is it not advisable for a person to breathe through the mouth?

**54. (a) What are annual crops?**

(b) Mention any **two** examples of annual crops.

i) \_\_\_\_\_

ii) \_\_\_\_\_

(c) How does a scare crow control birds in the gardens?

**55. Most diarrheal diseases are spread through the 4F's; write the 4Fs in their correct order.**

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**END**

**Nerd wishes you a bright future!**



