

# SCIENCE PLE 2016

## CANDIDATE'S INFORMATION

Index number :

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Name :

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Signature :

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School name :

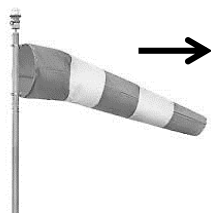
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District name :

\_\_\_\_\_

## SECTION A: 40 MARKS

1. Name the gas used in fire extinguishers.  
\_\_\_\_\_
2. State the eye disease spread by houseflies.  
\_\_\_\_\_
3. Which part of a fish performs a similar function as the human ear?  
\_\_\_\_\_
4. Name the male reproductive cells in flowers.  
\_\_\_\_\_
5. Give any one way in which wood fuel can be conserved.  
\_\_\_\_\_
6. The diagram below is of a weather instrument. Use it to answer the question that follows.

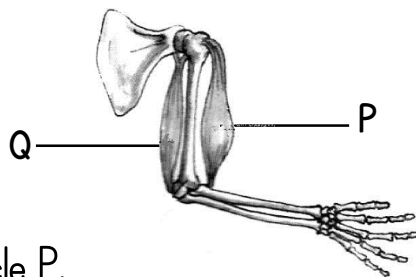


What is the use of this instrument at the weather station?

7. Which method of heat transfers enables a person to iron clothes using a flat iron?  
\_\_\_\_\_

8. Why should cold water be poured on the part of the body which has been scalded or burnt?
- 
9. Apart from decomposition, in which other way is soil formed?
- 
10. What is the importance of smoke during the harvesting of honey?
- 
11. State the class of lever in which the effort is between the fulcrum and the load.
- 
12. Give a reason why male anopheles mosquitoes do not transmit malaria parasites to humans.
- 
13. How can foot and mouth disease be controlled in cattle?
- 
14. Give one way in which farmers can improve on the supply of nitrogen in the soil without the use of artificial fertilisers.
- 

The diagram below is of a human arm. Study and use it to answer questions 15 and 16.



15. Name muscle P.
- 
16. What happens to muscle Q when the arm is raised.
- 
17. Which intestinal worm enters the human body through bare feet?
- 
18. How do plants make use of the gas given out by animals during respiration?
-

19. State any one use of plane mirrors to people.
- 
20. Apart from helping in pollination, give one other way in which wind is useful to plants.
- 
21. Which part of a maize grain has a similar function as the cotyledon of a bean seed?
- 
22. State any one characteristic which shows that a bat is a mammal.
- 
23. Which blood cells carry oxygen in the body?
- 
24. Give any one reason why breast feeding is encouraged for at least two years?
- 
25. Name any one scale in which temperature is measured.
- 
26. The diagram below shows two bar magnets placed close to each other. Use it to answer the question that follows.



Use arrows to show what happens to the two bar magnets.

- 
27. Name the human body system to which the lungs, kidneys and the skin belong.
- 
28. Give any one way in which bacteria in pit latrines are useful.
- 
29. Name one disease that affects the stomach because of alcoholism.
- 
30. Apart from polio vaccine, name any other vaccine administered to children at 6 weeks of age.
-

31. In which part of the human alimentary canal is water absorbed?

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32. What is the danger of having too much wax in the human ear?

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33. What form of energy is produced by dry cells?

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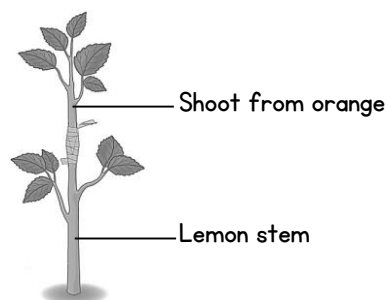
34. Give any one good health habit that can improve the working of the lungs.

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35. Apart from eating a balanced diet, give any one other way of controlling common diseases at home.

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36. The diagram below shows a method of plant propagation. Use it to answer the question that follows.



Name the method of plant propagation shown in the diagram above.

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37. Which organs are used by both fish and tadpoles for breathing?

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38. Give any one secondary sex characteristic which is common to both adolescent boys and girls.

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39. Name the fungi which normally grows on left over foods.

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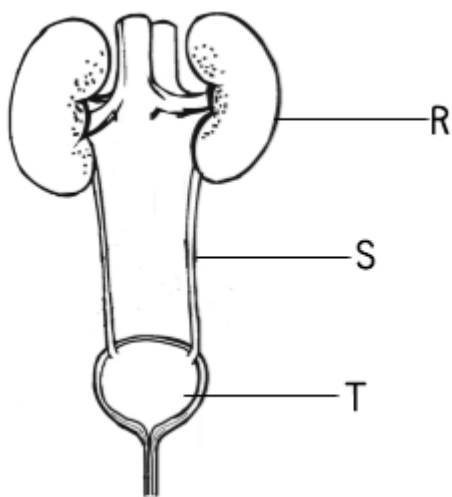
40. What happens to light rays when they meet a convex lens?

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**SECTION B: 60 MARKS**  
**(Questions 41 to 55 carry 4 marks each)**

41. a. State any two ways in which vectors spread diseases to humans.
- i. \_\_\_\_\_
- ii. \_\_\_\_\_
- b. Give any two ways of preventing vectors from spreading diseases to humans.
- i. \_\_\_\_\_
- ii. \_\_\_\_\_

42. The diagram below is of a human urinary system. Study and use it to answer the questions that follow.



- a. Name the parts marked S and T
- S \_\_\_\_\_
- T \_\_\_\_\_
- b. What is the function of part marked R.
- \_\_\_\_\_
- \_\_\_\_\_
- c. Give any one disease that affects the above system.
- \_\_\_\_\_

43. In the table below, part A shows activities carried out by farmers and part B shows the effects of the above activities.

Part A (activities)	Part B (effects)
Irrigation	preserves moisture.
Afforestation	leads to the death of crop pests.
Mulching	promotes convectional rainfall.
Crop rotation	allows growth of crops in all seasons.

Write the correct effect to the activity in the space provided below:

- a. Irrigation \_\_\_\_\_
- b. Afforestation \_\_\_\_\_
- c. Mulching \_\_\_\_\_
- d. Crop rotation \_\_\_\_\_

44. a. Give any two examples of non-renewable resources in the environment.

i. \_\_\_\_\_

ii. \_\_\_\_\_

b. State any two ways of conserving non-renewable resources.

i. \_\_\_\_\_

ii. \_\_\_\_\_

45. a. To which group of plants do ferns and liverworts belong?

\_\_\_\_\_

b. How is the reproduction of ferns similar to that of liverworts?

\_\_\_\_\_

c. Give two other plants that reproduce in the same way as ferns and liverworts.

i. \_\_\_\_\_

ii. \_\_\_\_\_

46. a. Name the change of state which takes place when;

– Vapour changes to liquid. \_\_\_\_\_

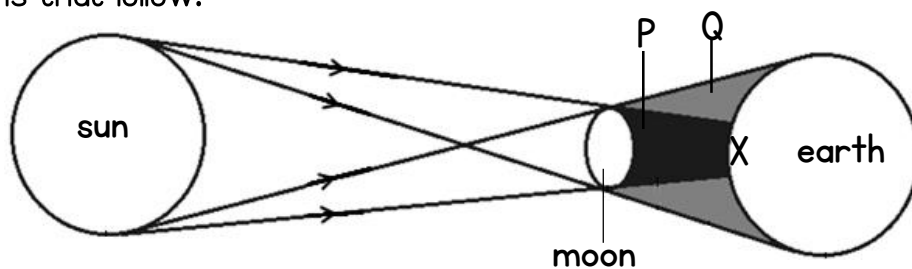
– A solid changes directly to gas. \_\_\_\_\_

b. Apart from causing change of state, give two other effects of heat on matter.

i. \_\_\_\_\_

ii. \_\_\_\_\_

47. The diagram below shows a type of eclipse. Study and use it to answer the questions that follow.



a. Name the type of eclipse shown in the diagram above.

\_\_\_\_\_

b. Name the shadows marked P and Q.

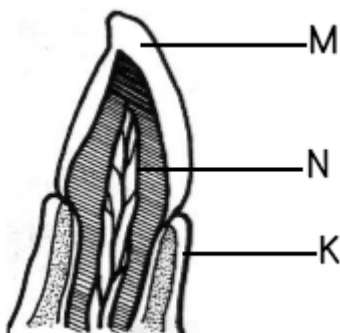
P \_\_\_\_\_

Q \_\_\_\_\_

c. What happens to a person who would be in part X during the eclipse?

\_\_\_\_\_

48. a. In which one way is each of the following elements of Primary Health Care (PHC) important to the community?
- Water and sanitation \_\_\_\_\_
  - Maternal and child health \_\_\_\_\_
- b. Give any two health care services which are provided through maternal and child health.
- i. \_\_\_\_\_
  - ii. \_\_\_\_\_
49. a. Name two systems of keeping poultry that enables a farmer to keep large number of birds.
- i. \_\_\_\_\_
  - ii. \_\_\_\_\_
- b. State any two viral diseases that can spread easily in the above systems of poultry keeping.
- i. \_\_\_\_\_
  - ii. \_\_\_\_\_
50. a. Give any one characteristic which is common to all invertebrates.
- \_\_\_\_\_
- b. To which group of invertebrates does of the following animals belong?
- Snail \_\_\_\_\_
  - Grasshopper \_\_\_\_\_
- c. State one way in which snails may be dangerous to humans.
- \_\_\_\_\_
51. The diagram below shows a section through a human tooth. Study and use it to answer the questions that follow.



- a. Name the parts marked M and K

M \_\_\_\_\_

K \_\_\_\_\_

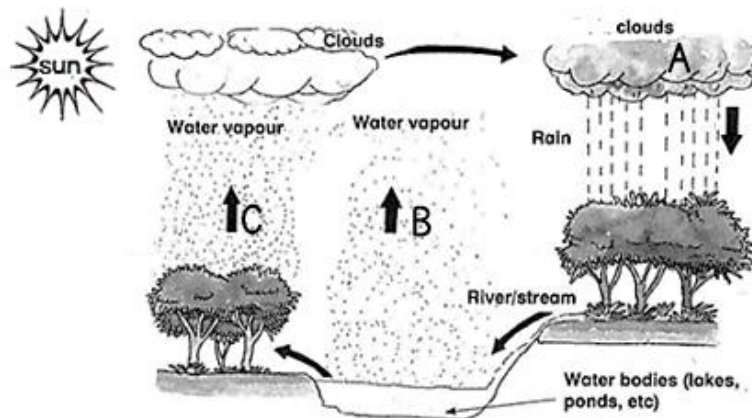
- b. Which mineral salt helps to form part M?

\_\_\_\_\_

- c. Give the function of part labelled N.

\_\_\_\_\_

52. a. State the method that can be used to separate;
- fruit seeds from juice. \_\_\_\_\_
  - Millet seeds mixed with its husks. \_\_\_\_\_
- b. Give the importance of the following steps in cleaning clothes at home.
- Sorting \_\_\_\_\_
  - Soaking \_\_\_\_\_
53. a. Write down any two examples of anti-social behaviours in our community.
- i. \_\_\_\_\_
  - ii. \_\_\_\_\_
- b. State any two ways of controlling anti-social behaviours in our community.
- i. \_\_\_\_\_
  - ii. \_\_\_\_\_
54. a. Apart from using solfa notation, mention any two other ways of storing sound.
- i. \_\_\_\_\_
  - ii. \_\_\_\_\_
- b. Name two instruments used to reproduce the sound stored by solfa notation.
- i. \_\_\_\_\_
  - ii. \_\_\_\_\_
55. The diagram below shows the water cycle. Study and use it to answer questions that follow.



- a. Name the type of clouds represented by letter A.
- \_\_\_\_\_
- b. State the process taking place at B and C.
- B \_\_\_\_\_
- C \_\_\_\_\_
- c. What is the importance of the sun in the above diagram?
- \_\_\_\_\_