

# SCIENCE PLE 2018

## CANDIDATE'S INFORMATION

Index number :

--	--	--	--	--	--	--	--	--	--

Name :

\_\_\_\_\_

Signature :

\_\_\_\_\_

School name :

\_\_\_\_\_

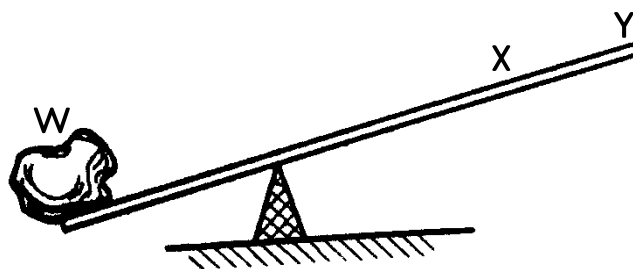
District name :

\_\_\_\_\_

## SECTION A: 40 MARKS

1. State any one sign of a compound fracture.  
\_\_\_\_\_
2. What happens when a new queen is born in a hive?  
\_\_\_\_\_
3. Which human body organ balances the amount of water needed in the body?  
\_\_\_\_\_
4. Give any one disorder of the human digestive system.  
\_\_\_\_\_

The diagram below is of a crow bar. Study and use it to answer questions 5 and 6.



5. Which of the two positions X and Y requires less effort to overcome the load W?  
\_\_\_\_\_
6. Indicate on the diagram with an arrow E, the direction of the effort used to overcome the load W.
7. Why do houseflies lay their eggs in decaying matter?  
\_\_\_\_\_

8. Why is a fuse made of a thin wire?

9. Where are seeds of coniferous plants found?

10. How is the function of anthers in flowers similar to that of testes in humans?

11. How do farmers control the breeding of poor quality animals on their farms?

12. By what process is alcohol made from fruit juice?

13. Give any one way in which school children can promote immunisation in their community.

14. What First Aid would you give to a child who has taken paraffin?

15. State the importance of observing good posture to the human body.

The diagram below shows a fruit crop. Use it to answer questions 16 and 17.



16. How is the above crop propagated?

17. Give one other crop which is propagated in the same way as the crop shown above.

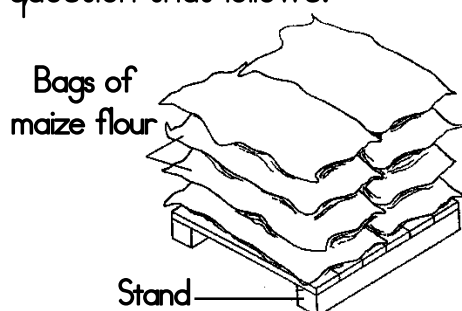
18. Give any one way in which human beings can prevent tapeworm infection.

19. How does smoking control the effect of bacteria in food preservation?

20. How are arteries able to withstand pressure of blood pumped from the heart?

21. State any one way in which people use sand soil.

22. Give any one disadvantage of overcrowding chicken in their house.
- 
23. Which part of a maize grain absorbs and supplies food to the embryo?
- 
24. What is the importance of the black lining inside a solar drier?
- 
25. Mention any one factor considered when sorting clothes for washing.
- 
26. Apart from removing dirt, why should the udder and teats be washed with warm water before milking?
- 
27. How does prolonged breastfeeding help in child spacing?
- 
28. What type of change is moulting in insects?
- 
29. How is a lunar eclipse formed?
- 
30. What determines the sinking or floating of an object in water?
- 
31. How does covering of food during cooking help to conserve wood fuel?
- 
32. State any one characteristic of images formed on the retina.
- 
33. Why are eagles referred to as birds of prey?
- 
34. The diagram below shows bags of maize flour in a store. Use it to answer the question that follows.



Why are the bags of maize flour put on such a raised stand?

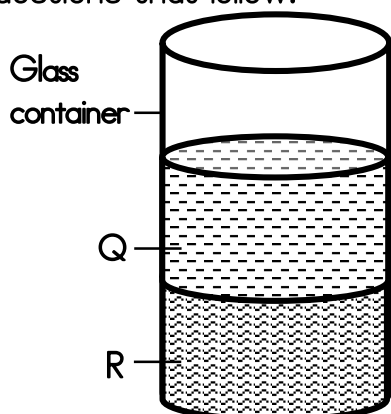
---

---

35. How is water as a renewable resource replaced in the environment?  
\_\_\_\_\_
36. Give any one way in which proper disposal of wastes is important in our environment.  
\_\_\_\_\_
37. What would you do to a guitar string to make it produce a high pitched sound?  
\_\_\_\_\_
38. Why do the lungs expand during breathing in?  
\_\_\_\_\_
39. Give any one way in which the spread of Hepatitis B disease can be controlled.  
\_\_\_\_\_
40. How are plants important in a food chain?  
\_\_\_\_\_

### **SECTION B: 60 MARKS**

41. a. Name the outermost layer of the human skin.  
\_\_\_\_\_
- b. State any one waste product removed by the skin.  
\_\_\_\_\_
- c. Apart from removing wastes, mention two other functions of the human skin.
- i. \_\_\_\_\_
- ii. \_\_\_\_\_
42. The diagram below shows a glass container into which water and cooking oil were poured. The two liquids settled as shown. Study and use it to answer the questions that follow.



- a. Which of the two liquids is represented by:  
Q \_\_\_\_\_  
R \_\_\_\_\_
- b. State any one method that can be used to separate the two liquids.  
\_\_\_\_\_
- c. Why has liquid Q settled on top of liquid R?  
\_\_\_\_\_

43. In the table below, part A shows processes in human reproduction. Part B shows meaning of the processes in their wrong order.

A: Processes	B: Meaning
a. Ovulation	union of a sperm and an ovum.
b. Implantation	release of ovum from ovary.
c. Pregnancy	attachment of the embryo on the uterus wall.
d. Fertilization	a period from fertilization to birth.

Select from the table the correct meaning of the processes and write in the space provided below.

- a. Ovulation \_\_\_\_\_
- b. Implantation \_\_\_\_\_
- c. Pregnancy \_\_\_\_\_
- d. Fertilization \_\_\_\_\_

44. a. Write down any two causes of weathering of rocks.

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

- b. Apart from weathering, name the other process by which soil is formed.

- c. How do living organisms in soil help to improve soil fertility?

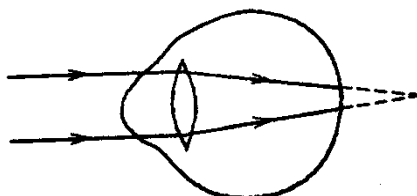
45. a. Give the importance of each of the following components of oral rehydration solution (ORS) to a patient.

- i. Sugar \_\_\_\_\_
- ii. Water \_\_\_\_\_

- b. Apart from using ORS, give two other ways of replacing lost fluids in a patient.

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

46. The diagram below shows a defect of the human eye. Study and use it to answer the questions that follow.



a. Name the eye defect shown above.

\_\_\_\_\_

b. State the two causes of the eye defect shown above.

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

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

c. What type of lens is used to correct the above eye defect?

\_\_\_\_\_

47. The table below shows weather elements, instruments and their uses. Study and complete it correctly.

Element	Instrument	Use
Rainfall	_____	Measures the amount of rainfall.
_____	Hygrometer	Measures the amount of water vapour in the atmosphere.
Wind	_____	Measures the speed of wind.
temperature	thermometer	_____ _____

48. a. State the two ways in which animals depend on other animals.

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

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

b. Give any two ways in which plants depend on other plants.

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

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

49. The following is a list of animals that belong to different classes of vertebrates. Use it to answer the questions that follow.

**Monkey, Parrot, Crocodile, Tilapia**

a. In which class of vertebrates does a crocodile belong?

\_\_\_\_\_

b. Name the class of vertebrates which is not represented in the above list.

\_\_\_\_\_

c. Identify any one animal from the above list which is cold blooded.

\_\_\_\_\_

d. How is the reproduction of tilapia different from that of a parrot?

50. a. Give one reason why drugs should be kept;

i. Away from moisture and sunlight

ii. Out of reach of children

b. State any two ways in which people in a family can misuse drugs.

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

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

51. a. What germ causes mastitis in cattle?

b. Give any two signs of mastitis.

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

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

c. State any one way of controlling mastitis in cattle.

52. a. Give any two qualities of seeds that can germinate.

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

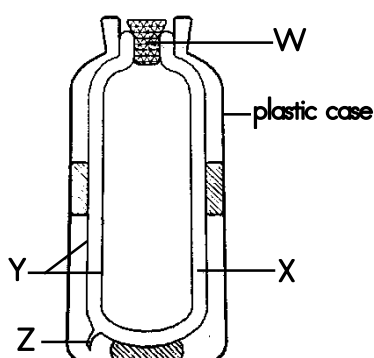
ii. \_\_\_\_\_

b. State any two farm practices which help in controlling insect pests in a garden.

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

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

53. The diagram below is of a thermos flask. Study and use it to answer the questions that follow.



a. Name the parts labelled Y and Z.

Y \_\_\_\_\_

Z \_\_\_\_\_

b. Give any one material that can be used for making part W.

\_\_\_\_\_

c. Why is part X able to prevent heat loss by conduction and convection?

---

54. a. State any two differences between the external parts of a hen and those of a cock.

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

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

b. Write down any one product got from poultry birds.

---

c. Give any one way in which farmers can improve on the quality of their local breeds of chicken.

---

55. a. Give any two possible ways through which a baby can get HIV/AIDS from a mother.

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

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

b. State any two ways in which an HIV positive pregnant woman can protect her unborn baby from getting HIV/AIDS.

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

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