

SCIENCE PLE 2015

CANDIDATE'S INFORMATION

Index number :

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Name :

Signature :

School name :

District name :

SECTION A: 40 MARKS

1. Which type of immunity do babies get from their mothers?

2. Name the blood vessel which takes blood from the heart to the lungs.

3. Name the energy resource obtained from animal dung and urine.

4. Mention any one factor that affects the rate of evaporation.

5. State the difference in units used to measure weight and mass.

The diagram below shows a simple machine. Use it to answer questions 6 and 7.



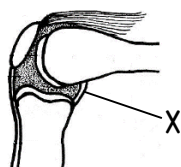
6. To which class of levers does the machine above belong?

7. Use an arrow with letter P to show the fulcrum on the diagram.
8. Give any one way in which litter is important in a poultry house.

9. Apart from the bright coloured petals, state one other thing that attracts insects to flowers.

10. State any one way in which drought affects food production in the community.
-
11. State the difference between the feeding of a tapeworm and a hookworm.
-
12. Why is water obtained by distillation method not good for drinking?
-
13. State the sense organ for feeding in the human body.
-
14. Which property of magnets enables a magnetic compass to work?
-
15. State any one way which the spread of scabies can be prevented.
-
16. Why do some plants shed their leaves during dry season?
-
17. Mention one permanent method of birth control in males.
-
18. Why does a fish die soon after it has been removed from water?
-
19. Give the use of a drenching gun to a cattle farmer.
-
20. Give one reason why pregnant women are advised to feed on food rich in proteins.
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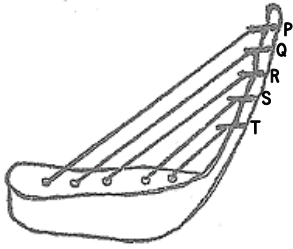
The diagram below shows parts of a joint. Study and use it to answer questions 21 and 22.



21. Name the part marked with letter X.
-
22. Using letter W, label the part that reduces friction in the joint, apart from the synovial fluid.

23. State the method of controlling soil erosion where farmers plough land across a slope.
-
24. Which element of Primary Health Care helps to prevent tooth decay?
-
25. State the role of enzymes during food digestion.
-
26. Apart from cameras and microscopes, name any one other optical instrument that uses a lens.
-
27. Give one way in which mosses are similar to mushrooms in the way they reproduce.
-
28. Why is tepid sponging an important First Aid to a person with fever?
-
29. Why are sun birds able to suck nectar from the bottom of flowers?
-
30. Give an example of mollusk which is a vector to humans.
-
31. Name the human body system which eliminates wastes.
-
32. Give any one way in which a VIP latrine is different from an ordinary pit latrine.
-
33. Name the root crop which is attacked by the mosaic disease.
-
34. Give any one reason why sheep farmers carry out docking.
-
35. Apart from a flat iron, give any one other appliance used at home that changes electric energy to heat energy.
-

36. The diagram below shows a well-tuned musical instrument. The strings P, Q, R, S and T are of uniform thickness. Use it to answer the question that follows.



Why does string T produce sound of the highest pitch?

37. State the any one way in which smoking affects the human respiratory system.
-

38. Give the importance of plants in a food chain.
-

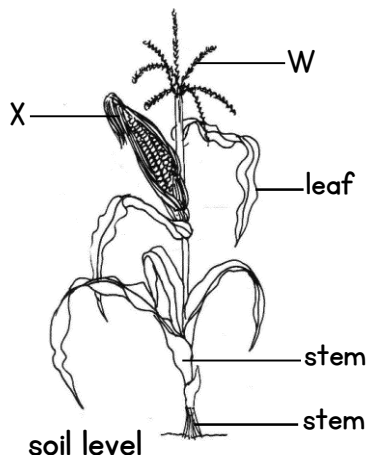
39. Name the fungal caused sexually transmitted disease, which is spread through poor hygiene.
-

40. State one reason why farmers stake tomato plants.
-

SECTION B: 60 MARKS

Each question carries 4 marks

41. a. Give two examples of natural fertilizers.
- -
- b. State any two ways in which natural fertilizers are better than artificial fertilizers.
- -
42. The diagram shows a flowering plant. Study and use it to answer the questions that follow.



- a. To which group of flowering plants does the above plant belong?
-
- b. What type of root system does the plant have?
-

c. State the importance of the type of root marked Y to the plant.

d. In which one way is part W different from X in their reproductive function?

43. a. Give any two conditions in which women are vulnerable.

- i. _____
- ii. _____

b. State any two ways in which family members can care for vulnerable women.

- i. _____
- ii. _____

44. a. Name the respiratory organs which are protected by the rib cage.

b. What happens to the rib cage during the following stage processes?

- Breathing in _____
- Breathing out _____

c. Give the use of oxygen we breathe in.

45. The table below shows diseases, the vectors that spread them and the disease causing germs. Study and complete it correctly.

Disease	Vector	Germ
Cholera	Houseflies	_____
Yellow fever	_____	Virus
_____	Infected cats	Virus
River blindness	Black flies	_____

46. a. Give the function of each of the following parts of a modern beehive:

- The brood chamber _____
- The honey chamber _____

b. A part from being used as food, give two other ways in which honey is useful to people.

i. _____

ii. _____

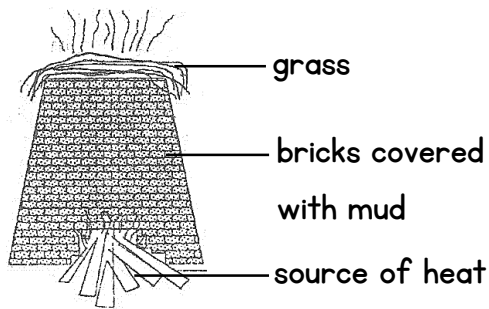
47. a. What kind of food is made by green plants during photosynthesis?

b. State any one raw material used by green plants for photosynthesis.

c. How is chlorophyll important during the process of photosynthesis?

d. Give one reason why photosynthesis does take place at night.

48. The diagram below shows firing bricks in a skin. Study it and use it to answer the questions that follow.



a. Name the source of heat energy used in firing the bricks

b. Give any one reason why the bricks are covered with mud before firing starts.

c. What is the importance of the grass put on top of the kiln during firing?

d. State any one disadvantage of using the above method of firing bricks to the environment.

49. The table below shows parts of a human eye in A and those of a camera in B.

A	B
Iris	Shutter
Pupil	Film
Eye lid	Diaphragm
Retina	Aperture

For each of the parts of the human eye, write the part of the lens camera from B which performs a similar function.

- a. Iris _____
- b. Pupil _____
- c. Eye lid _____
- d. Retina _____

50. a. Which communicable disease shows signs and symptoms similar to that of tuberculosis?

b. Name the one cattle product through which tuberculosis can spread to human beings.

c. When is the vaccine against tuberculosis administered in babies?

d. Apart from immunization, give one other way in which the spread of tuberculosis can be controlled in humans.

51. a. Give any two ways in which alcohol is used in hospitals.

i. _____

ii. _____

b. State any two effects of alcoholism to an individual.

i. _____

ii. _____

52. a. Apart from the respiratory and body wastes, name any other two materials carried in blood.

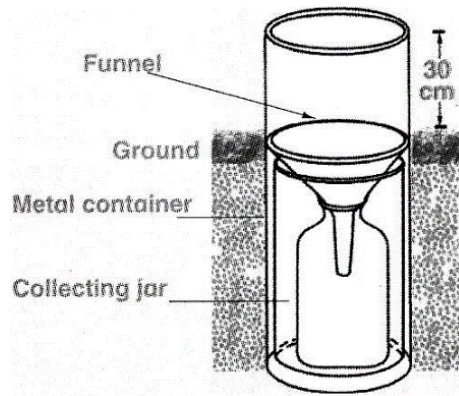
i. _____

ii. _____

b. Name the component of blood which transport oxygen in the human body.

c. Which disease causing germ attacks the white blood cells in humans?

53. The diagram below shows a weather instrument. Use it to answer the questions that follow.



- a. Name the weather instruction shown in the diagram above.

- b. What is the use of the instrument above at weather station?

- c. Give reason why people are advised to:

- Put the instrument in an open ground when using it.

- Raise the instrument 30cm above the ground when using it.

54. a. To which class of vertebrates do toads belong?

- b. Give one way in which the breathing of a toad is different from that of a tadpole.

- c. State any two ways in which the jelly round the egg of toads is important.

55. a. Apart from ticks, name any one other cattle pest.

- b. State any two diseases spread by ticks to cattle.

- c. Give any one way in which the tick borne diseases can be controlled.
