SUREKEY EXAMINATIONS BOARD

PRIMARY FOUR LPTE PREPARATION SET TWO

2023

INTEGRATED SCIENCE

OFFICIAL MARKING GUIDE

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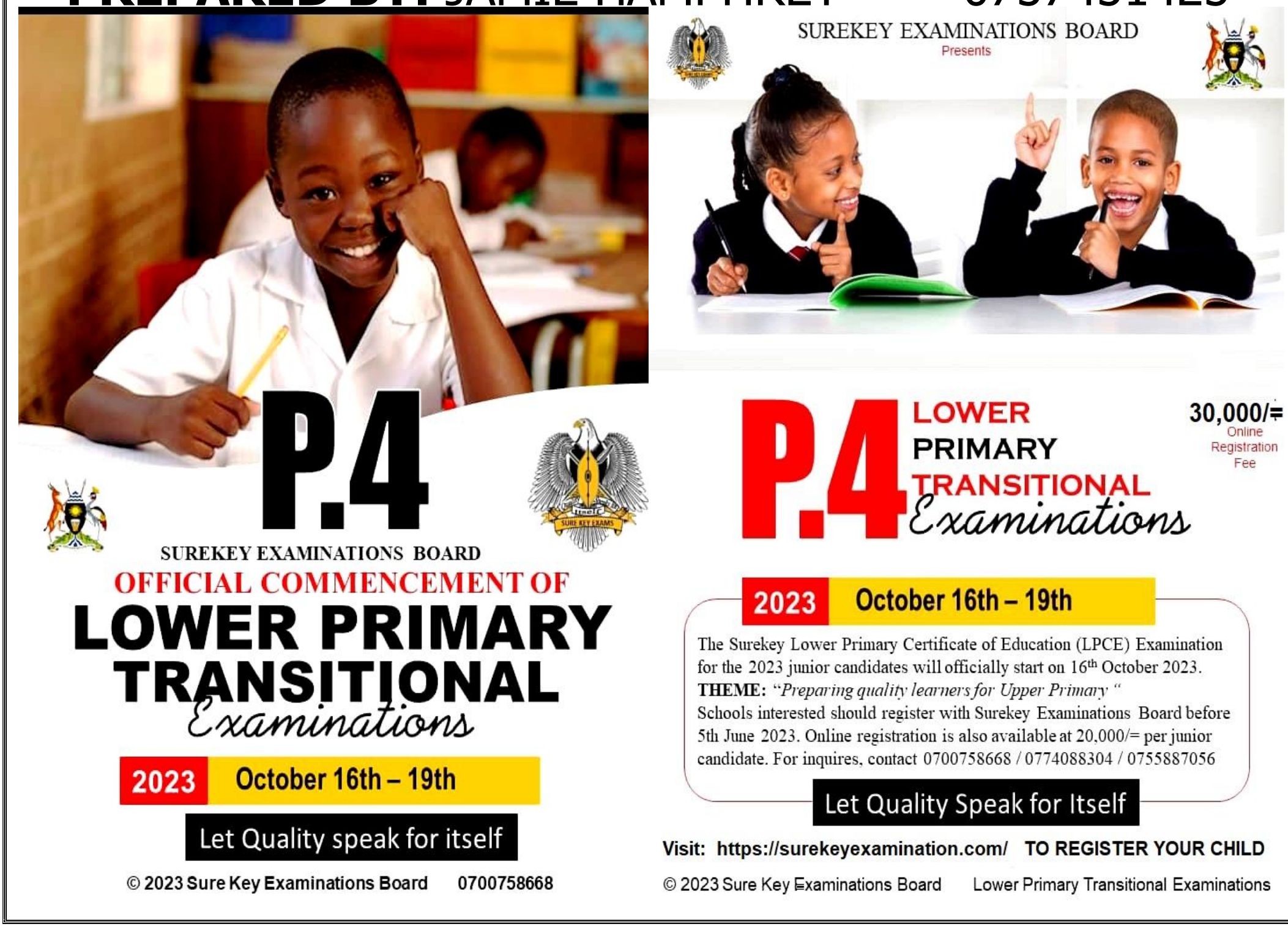


SECTION A: 40 MARKS

1. Name the type of cloud that promotes plant growth
   - **Nimbus clouds**
2. Which animal product is used to make shoes?
   - **Skin /hide**
3. State any **one** characteristic of clay soil.
   - **Has small particles**
   - **Has small inter particle spaces**
   - **Has smooth particles**
   - **Has highest water capillarity**
   - **Sticky when wet**
   - **Poorly aerated**
   - **Has low water drainage**
4. Give any **one** way of caring for sick children at home.
   - **Bathing young children** **-Feeding children well**
   - **Teaching children good health habits**
   - **Washing their clothes** **-Ironing their clothes and beddings**
   - **Playing with children.**

The diagram below shows a message commonly found in the school compound. Use it to answer questions **5** and **6**.

5. Identify the programme that emphasizes the above message
   - **PIASCY**
6. How is the above message useful to school children?
   - **Protects them from contracting HIV/AIDS**
   - **Prevents them from getting early pregnancies.**
7. Write down any **one** activity done to conserve trees in the environment
   - **Fencing trees**
   - **Afforestation**
   - **Re-afforestation**
   - **Weeding**
   - **Setting up forest reserves**
   - **Controlling deforestation**
8. Give any **one** advantage of pruning crops in the garden.
   - **Reduce the weight of the plant.**
   - **Makes harvesting and weeding easy.**

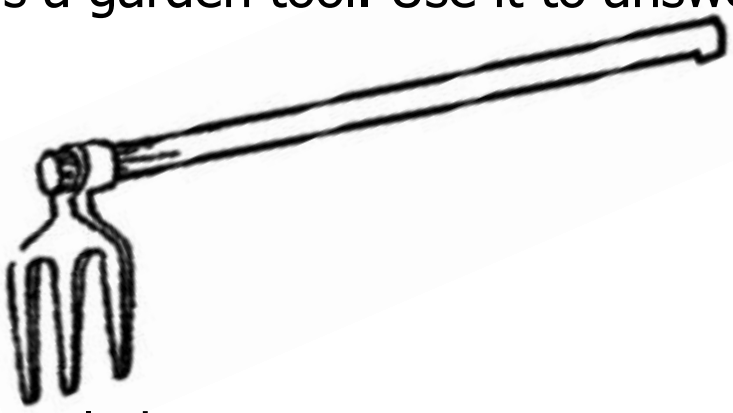
- **Controls crop pests and diseases**
- **Reduces competition for space**
- **Enables crops to receive enough sunlight**
- **Improves on crop yields.**

9. Name the body organ that enables a primary four child to listen to the teacher during a lesson.
   - **Ear**

10. How does a caterpillar benefit from its prickly hair?
    - **For protection**

11. State any **one** agent of soil erosion.
    - **Flowing water**
    - **Strong wind**
    - **Moving animals**

The diagram below shows a garden tool. Use it to answer questions **12** and **13**.



12. Name the garden tool above.
    - **Forked hoe**

13. How is the above garden tool important to a crop farmer?
    - **For digging in stony areas**

14. Why should water obtained from open walls be boiled before drinking it?
    - **To kill germs in water**

15. State any **one** way in which a rabbit benefits from a bean plant.
    - **Gets food**
    - **Gets oxygen**

16. State any **one** way of reducing dust in the school compound.
    - **Sweeping**
    - **Scrubbing**
    - **Putting pavers**
    - **Sprinkling water**

17. What plant system does the radicle form when it grows?
    - **Root system**

18. How can germs be removed from hands after visiting a latrine?
    Washing hands with clean water and soap.

19. Mention any **one** local method of keeping food safe for future use.
    - **Sun-drying**
    - **salting**
    - **Smoking**

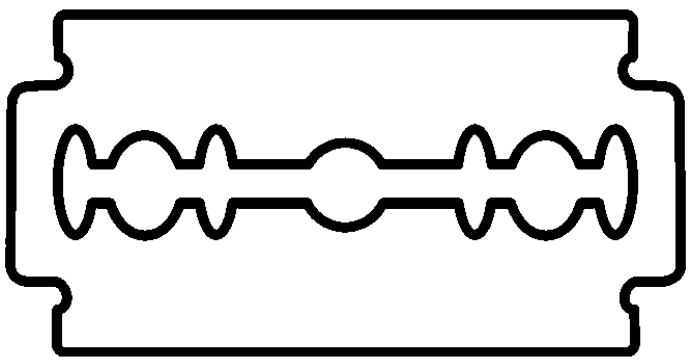
20. Name the gas contained in a fire extinguisher.
    - **Carbon dioxide**

21. State any **one** role of children at home.
    - **Fetching water and firewood**
    - **Cleaning the house**
    - **Washing clothes**
    - **Looking after animals**
    - **Cooking food**
    - **Bathing siblings**
    - **Cleaning the compound.**

22. How is the function of stomata in a leaf similar to that of gills in a fish?
    - **Both are used for breathing**

23. State any **one** way of protecting domestic animals from diseases.
    - **Proper feeding**
    - **Providing clean feeds**
    - **Cleaning their shelter daily**
    - **Cleaning their feeding equipment daily**
    - **Regular vaccination of animals.**

The diagram below shows an item used to promote personal hygiene. Study it and answer questions **24** and **25.**



24. Name the item used to promote personal hygiene above.
    - **Razorblade**

25. Give any **one** way in which the above item helps to promote personal hygiene.
    - **For grooming finger and toe nails**
    - **For shaving hair**

26. Write down any **one** cause of natural changes in the environment.
    - **Floods**
    - **Drought**
    - **Landslides**
    - **Volcanic eruption**

27. How is a safety pin useful when giving first aid?
    - **For stitching the bandage**

28. What happens to a fish when removed from water?
    - **Dies**

29. Give any **one** way of controlling aphids in the garden.
    - **Spraying pesticides**
    - **Early planting**
    - **Crop rotation**
    - **Uprooting the affected plants.**
    - **Using beetles to feed on aphids.**

30. How are rats similar to snakes in the way they live?
    - **Both live in bushes/forests**
    - **Both are wild**
    - **Both live on their own**

31. Which component of soil is formed from animal wastes?
    - **humus**

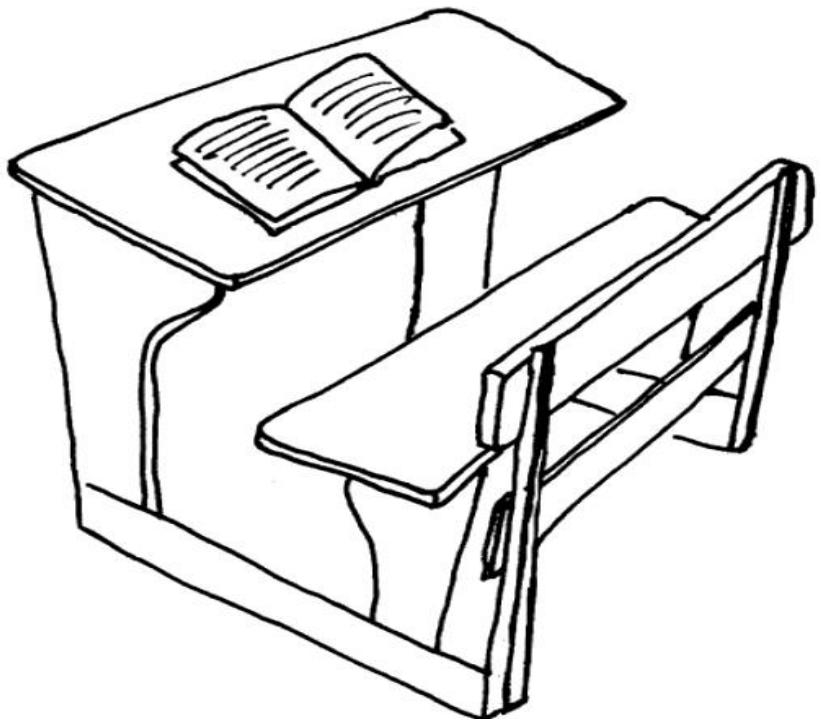
32. Give any **one** use of water in promoting sanitation.
    - **Used for mopping**
    - **Used for scrubbing/washing**
    - **Flushing wastes in flush toilets.**

33. State any **one** way in which windy weather is useful to people.
    - **Helps in winnowing**
    - **Helps in sailing boats**
    - **Helps in flying kites**
    - **Helps in drying clothes**
    - **Helps in running windmills.**

34. Give any **one** way of preventing germs from food.
    - **Keeping food in clean containers**
    - **Preparing food from clean places**
    - **Serving food in clean containers**
    - **Washing hands before touching food**
    - **Proper covering of food.**

35. Which condition is prevented by painting metals?
    - **Rusting**

The diagram below is of an item commonly found in the classroom. Study and use it to answer questions **36** and **37.**



36. Name any **one** source of raw material commonly used to make the above item.
    - **Swamp**
    - **Wetland**
    - **Woodlot**
    - **Jungle**
    - **Mountains**
    - **gardens**

    (Reject wood/timber/metals/nail)

37. In which way is the above item useful to school children?
    - **Used as a seat / For sitting at.**
    - **For practical studies**
    - **For placing the books or paper while writing.**
    - **For keeping their scholastic materials.**

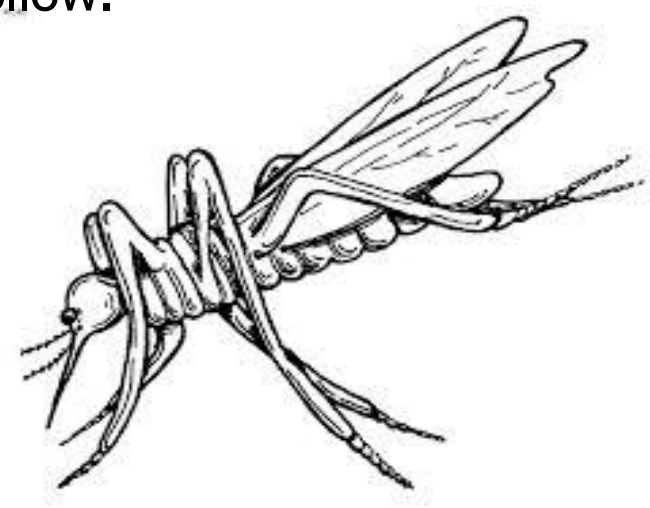
38. Give the meaning of the term environment.
    - **The surrounding of a living thing / organism.**

39. Give any **one** effect of too much sunshine in an area.
    - **Spoils crops**
    - **Dries up water sources**
    - **Causes drought**
    - **Kills some animals and plants**
    - **Increases famine**
    - **Makes soil hard for cultivation.**

40. In which **one** way is a cat useful at home?
    - **Kills and eats rats.**
    - **Controls the breeding of rats.**

SECTION B: 60 MARKS

41. The diagram below shows a disease vector. Study and use it to answer the questions that follow.



(a) Identify the disease vector shown above.

- **mosquito**

(b) Mention any **two** diseases spread by the vector shown above.

- **Malaria**
- **Yellow fever**
- **Elephantiasis**
- **Filariasis**
- **Dengue fever**
- **Zika fever**

(c) State any **one** way of controlling the above vector at home.

- **Draining still water.**
- **Pouring oil in still water**
- **Spraying insecticides**
- **Keeping fish in ponds**
- **Using mosquito repellents**
- **Smoking coils.**
- **Sleeping under a treated mosquito net**
- **Early closing of doors and widows**

42. (a) Mention **two** parts of the seed that store food.

- **Cotyledon**
- **Endosperm**

(b) Give any **two** uses of seeds to people.

- **Some seeds are eaten.**
- **Used for planting**
- **Sold for money**
- **Some seeds are used to make cooking oil.**
- **For research**
- **For practical studies**

43. (a) Name the weather instrument used to measure;

(i) Humidity **hygrometer**

(ii) Air pressure **barometer**

(b) Mention any **two** elements of weather that supports plant growth.

- **Rainfall**
- **Sunshine**
- **Temperature**
- **Wind**

(Reject cloud cover)

44. The diagram below shows part of the body. Study and use it to answer the questions that follow.

(a) Name the parts labelled **A** and **C.**

(i) **A- calf**

(ii) **C- heel**

(b) How is part labelled **B** useful to a person while moving?

- **Helps a person's leg to step firmly on the ground.**

(c) State any **one** way of caring for the above part of the leg.

- **Washing**
- **Massaging it.**
- **Applying Vaseline**
- **Putting on clean clothes.**
- **Wearing clean sandals/shoes/ or stockings.**
- **Scrubbing the sole to remove patches.**
- **Wearing gumboots when working in dirty places.**
- **Treating any injury on it early.**

45. The table below shows some components of the environment in part **A** and their uses in part **B.**

Part **A: Components**	Part **B: Uses**
Sun	Source of charcoal.
Lake	Source of water.
Rain	Source of fish.
Plants	Source of heat.

Match correctly the components with their uses in the spaces provided below.

(i) Sun **– source of heat**
(ii) Lake **– source of fish**
(iii) Rain **– source of water**
(iv) Plants **– source of charcoal**

46. (a) Mention any **two** materials that can be used to dispose wastes at home.

- **Latrines**
- **Toilets**
- **Rubbish pit**
- **Dustbins**
- **Potties**

(b) State any **two** dangers of poor disposal of wastes at home.

- **Causes outbreak of diarrhoeal diseases**
- **Causes water and air pollution**
- **Increases the breeding of vectors and germs.**

47. (a) Give any **two** elements of a balanced diet.

- **Proteins**
- **Carbohydrates**
- **Mineral salts**
- **Vitamins**
- **Fats and oils.**

(b) State any **two** importance of having a balance diet.

- **Promotes good health**
- **Prevents deficiency diseases**
- **Makes the body to grow well**

48. The picture below shows a method of harvesting crops. Study and use to answer the questions that follow**.**

(a) Name the method of harvesting crops shown above.
- **Cutting**

(b) Write down any **two** crops harvested using the above method.
- **Sugarcanes**
- **Sorghum**
- **Millet**
- **Wheat**
- **Rice**
- **banana**

(c) Apart from the above method, give any **one** other method of harvesting crops in the garden.
- **Handpicking**
- **Plucking**
- **Digging out**
- **uprooting**

49. (a) Name the body sense detected by the;

i) Ear **– sense of hearing/ hearing**

ii) Nose **- sense of smell/smelling**

(b) State any **two** ways of caring for the ear and the nose.
- **Washing them**
- **Removing mucus from the nose**
- **Removing excess wax from the ear**
- **Avoid rough games**
- **Scrubbing the ears**

50. The table below shows a list of insects. Study and use it to answer the questions that follow.

E	F
Wasp	Housefly
Honey bee	Grasshopper
White ant	Bedbug
Termite	Flea

(a) State any **one** characteristic common to all insects in the table above.
- **All have three main body divisions**
- **All have three pairs of jointed legs**
- **All breathe through spiracles.**

(b) Identify any **one** insect from the table which has no wings.
- **Flea**
- **Termites**
- **bedbug**

(c) Which list from the table above has insects that live and work together?
- **List E / E**

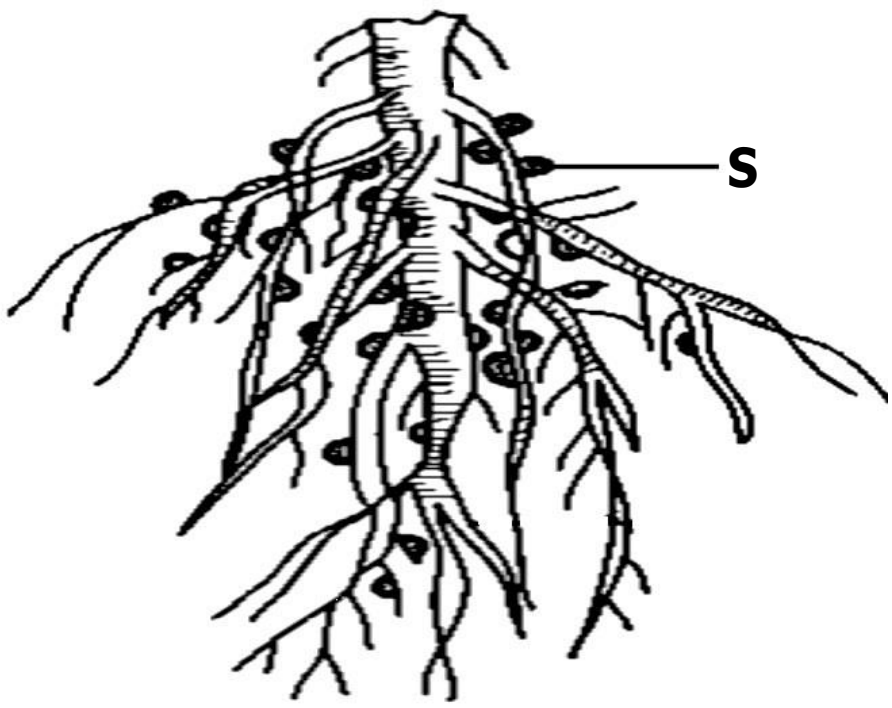
(d) Why would you place a cockroach in list **F** on the table above?
- **A cockroach is a solitary insect.**

51. (a) Name any **two** parts on the human body that need to be kept clean.
- **Eyes**
- **Skin**
- **Ears**
- **Teeth**
- **Mouth**
- **Tongue**
- **Vagina**
- **Penis**
- **Anus**
- **Armpits**
- **Nose**
- **Head**
- **legs**

(b) Mention any **one** disease that can break out when the body is not kept clean.
- **Scabies**
- **Ringworm**
- **Athlete's foot**
- **Tooth decay**

(c) State any **one** way of preventing such a disease mentioned in (a) above.
- **Regular bathing**
- **Regular brushing of teeth**
- **Regular washing of clothes**
- **Regular ironing of clothes**
- **Regular combing of long hair**
- **Shaving overgrown hair.**

52. The diagram below shows a type of root system. Study and use it to answer the questions that follow.



(a) Identify the type of root system shown above.
- **Taproot system**

(b) Give any **two** plants that grow the type of root system above.
- **Beans**
- **Peas**
- **Ground nuts**
- **Carrots**
- **Jackfruits trees**
- **Mango plants**
- **Tomato plants**
- **Simsim plants**
- **Soya bean plants**
- **Orange plants**

(c) How is the root structure marked **S** important to a plant?
- **store nitrogen fixing bacteria**

53. (a) Write down any **two** components of a fertile soil.

- **Presence of humus**
- **Presence of enough water** ***(moderate water drainage)***
- **Presence of enough air** ***(Good aeration)***
- **Presence of soil organisms.**
- **Presence of mineral salts.**

(b) Give any **two** ways in which a mother can make use of sand soil a home.

- **For scrubbing metallic utensils e.g. saucepans**
- **For filtering water**
- **For building houses.**
- **For making building blocks.**

54. (a) Name the component of the environment that;

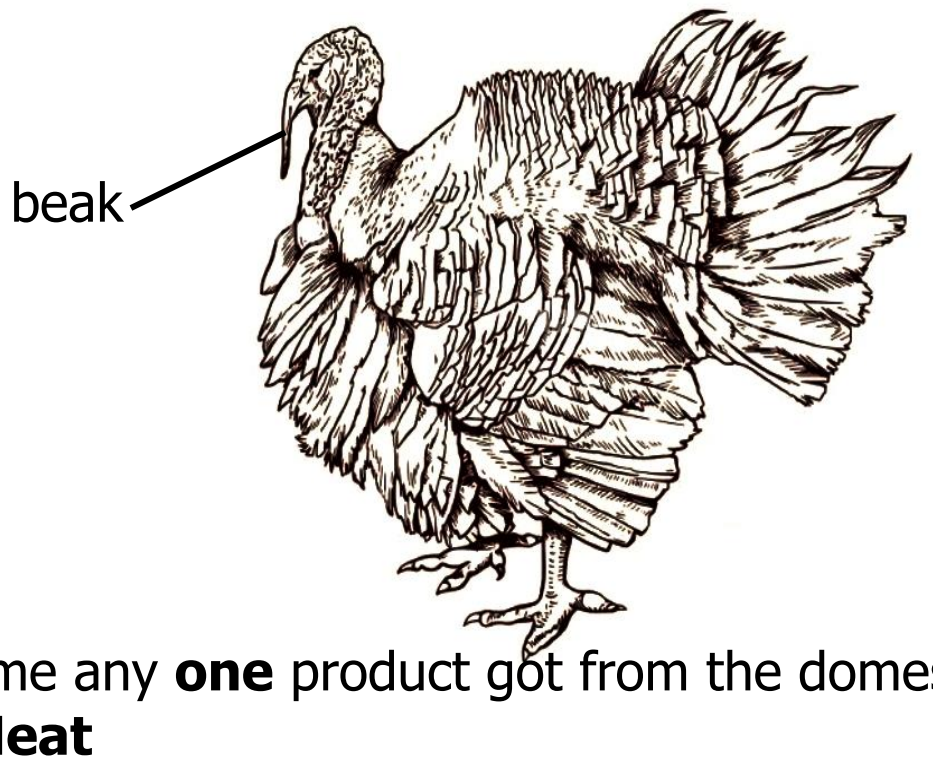
(i) Can cause landslide **– rain/rainfall**
(ii) Can raise dust - **wind**

(b) State any **two** characteristics of air.

- **Air exerts pressure**
- **Air has weight**
- **Air can be compressed**
- **Air occupies space**
- **Air moves things.**

(Use mnemonic WECOM)

55. The diagram below shows a domestic bird. Study and use it to answer the questions that follow.



(a) Name any **one** product got from the domestic bird shown above.

- **Meat**
- **Feathers**
- **Eggs***(reject: droppings)*

(b) How is the movement of the above bird different from that of a frog?

- **The above bird moves by flying or walking or running while a frog moves by leaping** ***(Reject hopping)***

(c) State any **one** way of caring for the domestic bird shown above.

- **Proper feeding**
- **Regular vaccination**
- **Regular cleaning of its shelter**

(d) On the diagram above, label the beak.

- **(refer to the diagram)**

END