



SUREKEY EDUCATION SERVICES

PRIMARY SEVEN UNIQUE SERIES

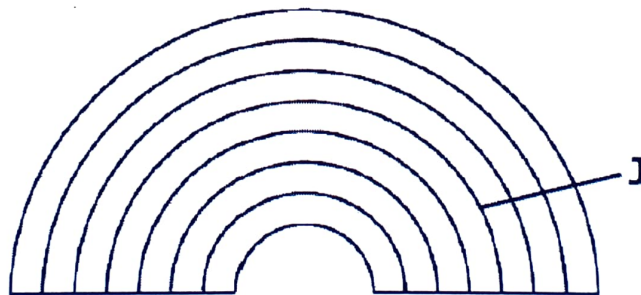
2025

INTEGRATED SCIENCE GUIDE

SECTION A: 40 MARKS

1. Name the kind of water recommended to be used when tepid sponging.
Lukewarm water (Reject cold water)
2. State any **one** way in which the stomach is useful during digestion.
It churns food//it produces gastric juice//it is where the chemical digestion of proteins begins.
3. Write down any **one** sign of dysentery in humans.
Blood-stained stool//diarrhoea//abdominal pain//vomiting
4. State **one** way in which a radio is important to a radio mechanic.
For holding nuts, bolts and tiny pins.

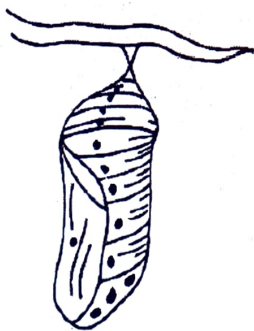
The diagram below shows a natural spectrum in the sky. Use it to answer questions 5 and 6.



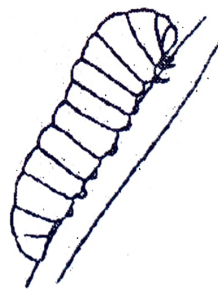
5. Name the spectral colour marked **J**.
Green
6. Give any **one** property of light that leads to the formation of the natural spectrum above.
Dispersion of light
7. Mention any **one** way in which wild life can be conserved in the environment.
Conserving swamps//planting trees//gazette forest reserves//controlling poaching
8. Name **one** organism that makes food to go bad.
Bacteria//fungi (accept moulds)

9. State any **one** effect of HIV/AIDS to the family.
It leads to poverty due to high treatment costs.//it leads to loss of important people in the family.
10. Mention the source of energy needed by a cabbage plant to make food in the food chain.
The sun
11. State any **one** quality of essential drugs.
They should be accessible//effective//common//cure diseases
12. Give any **one** example of a natural birth control method in a family.
Prolonged breastfeeding//withdrawal method//rhythm method//abstinence from sex//basal body temperature//cervical mucus method
13. Mention any **one** way in which the dumping of non-biodegradable wastes affects the quality of environment.
It causes soil exhaustion//it leads to loss of soil organisms//it causes soil pollution.
14. Give any **one** way in which textile industries benefit from Angora rabbits.
Angora rabbits provide fur used in textile industries.
15. Name any **one** disease spread by lice to humans.
Relapsing fever//typhus fever

The diagrams below show stage in the growth of a butterfly. Use them to answer questions **16** and **17**.



M



N

16. Name the stage marked **M**.
Pupa stage
17. Give **one** way in which the stage marked **N** affects food production in the community.
It destroys crops in the garden.
18. Mention any **one** reason why farmers carry out shearing in sheep during dry season.
The weather is warm enough for sheep to survive without wool// To protect the sheep against coldness.

19. State any **one** role played by teachers to prevent anti-social behaviour among pupils at school.
Punishing culprits//rewarding for good behaviour//treating all learners equally//setting school rules and regulations//
Guidance and counselling
20. Mention any **one** way in which poisoning by chemicals can be prevented at home.
Keeping drugs out of reach of children//keeping drugs in lockable facilities//avoid keeping drugs in soda bottles/food bowls.
21. Apart from burning and rusting, name any **one** other example of a chemical change in the environment.
Decomposition//fermentation//boiling an egg//heating sugar in the saucepan
22. State **one** way in which the fuse is able to break the circuit when there is too much current flowing in an electric appliance.
A fuse is made of a thin wire with a low melting point.
23. State **one** reason why smoke moves upwards when a person is burning rubbish.
Smoke is less dense than cool air in the atmosphere.
24. Give **one** factor that affects the size of the shadow formed by an object.
Distance of an object from the source of light//size of an object used//size of the source of light.

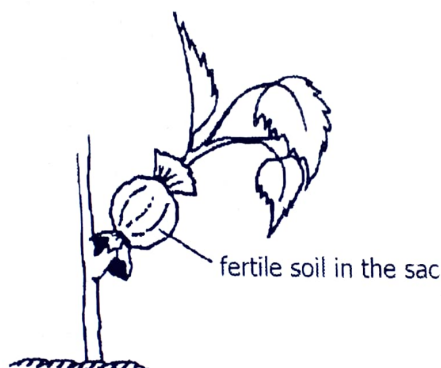
The diagram below shows intestinal worms. Use it to answer questions **25** and **26**.



25. Identify the intestinal worm shown above.
hookworms
26. State **one** way in which the above intestinal worms enter the human body.
Penetrating through the bare skin.
27. State the reason why rainfall is measured in millimetres (mm).
To determine the depth of rainwater that enters the soil.
28. Mention any **one** way in which crops affected by diseases can be identified in the garden.
Poor growth//yellowing of leaves//deformed leaves//deformed leaves//wilting of crops//brown or black spots on leaves//rotten crop parts//stunted growth of crops

29. Give any **one** way of correcting temporary deafness in human ear.
Use a soft material to remove excess wax from the ear//put oil ear drops in the ear overnight//syringe the ear using warm water.
30. Mention any **one** way in which the use of electricity is better than the use of wood fuel.
**Electricity conserves plants yet the use of wood fuel destroys plants.
Electricity saves time yet wood fuel consumes time.
Electricity does not pollute the environ yet wood fuel produces smoke that pollutes air.**
31. Name the commonly abused drug obtained by fermentation of starch.
Alcohol
32. State any **one** characteristic of climbing birds.
**They have two toes pointing forward and two toes pointing backwards.
They have strong pointed beaks. They feed on insects.**

The diagram below shows an artificial method of propagating plants. Use it to answer questions **33** and **34**.

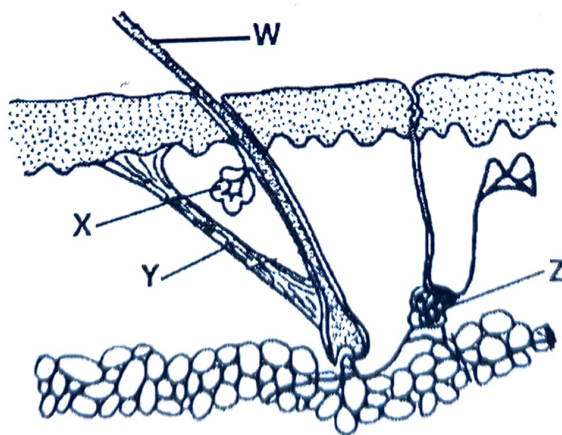


33. Identify the method of propagating plants shown above.
Marcotting
34. Give the function of fertile soil in the sack of the method above.
It encourages the growth of adventitious roots.
35. State any **one** way of preventing cassava from rotting after harvesting.
Sun-drying cassava//burying cassava in the ground
36. State the reason why the pit hole of a VIP latrine should be left open all the time.
To allow free circulation of air in the pit hole.
37. Mention **one** way in which farmers can improve nitrogen in the soil without using fertilisers.
Growing legumes.
38. Apart from using baits, state any **one** other method used by bee keepers when stocking the hive.
Using a farm catching net//using a catcher box.
39. Give **one** reason why bacteria are referred to as microscopic organisms.
Bacteria cannot be seen using our naked eyes//Bacteria are only seen using a microscope.

40. Identify the aspect of wind measured using the anemometer.
Speed of wind

SECTION B: 60 MARKS

41. (a) Apart from a maize grain, name any **one** other example of a monocotyledonous seed.
Millet seeds//sorghum seeds//rice seeds
- (b) State any **two** characteristics of monocotyledonous seeds.
They undergo hypogeal germination//they have one cotyledon/
They store food in the endosperm//they are grain seeds.
- (c) State any **one** function of the cotyledon in the maize grain during germination.
It absorbs food from the endosperm and supplies it to the embryo for growth.
42. (a) Name any **one** type of chicken kept in your community.
Layers//broilers//dual purpose chickens
- (b) Explain how keeping chickens helps in the prevention of deficiency diseases in children. **(02 marks)**
Chickens provide eggs and meat.(01 mark) These are sources of proteins which prevents kwashiorkor in children.(01 mark)
- (c) State any **one** reason why farmers sometimes cull their chickens.
It maintains high level of egg production in birds//it reduces the spread of diseases on the poultry farm//it saves the costs of feeding unproductive birds//it creates more space for healthy birds.
43. The diagram below shows part of the human body organ. Study and use it to answer the questions that follow.



- (a) Name the parts marked **X** and **Z**.
- (i) **X : sebaceous gland**
- (ii) **Z : sweat gland**

- (b) State any **one** function of the substance produced by the part marked **X** in the human body organ above.
It lubricates the skin//keeps the skin moist and soft//
It waterproofs the skin.
- (c) Mention any **one** way in which the part marked **W** regulates body temperature in the human body organ above.
It stands upright to trap escaping heat during cold weather
It lies flat to prevent heat loss during hot weather.
44. (a) Name the method of preserving fish in which;
 (i) Ice cubes are used : **ice glazing**
 (ii) Slow burning heat is used : **smoking**
 (b) Give any **two** reasons why fish mongers preserve fish.
To ensure food security//to add nutritional value to fish//
To keep fish for future use//To increase on the lifespan of fish/
For easy transportation of fish//To maintain the taste of fish.
45. At the health centre, parents line up with their children. A nurse carefully gives each child a small injection that protects them from dangerous diseases. One worried mother watches her neighbour's baby receive the shot without crying. Feeling, reassured, she agrees for her own child, knowing it will help keep the little one healthy and strong.
- (a) Name the substance the nurse is giving to the babies.
vaccines
- (b) State any **one** site on the babies' body where the nurse is giving a small injection.
Left upper thigh//right upper arm//left upper arm//right upper thigh
- (c) Give any **two** ways in which babies benefit from the injection given by the nurse.
It boosts the immunity of babies//it protects babies against childhood immunisable diseases//it enables children to grow healthy.
46. (a) State any **two** differences between a toad and a frog.
 - **A frog has brown tadpoles while a toad has black tadpoles.**
 - **A frog moves by leaping while a toad moves by hopping.**
 - **A frog has a smooth slippery skin while a toad has a dry rough skin**
 - **A frog breathes through lungs and moist skin while a toad breathes only through lungs.**
 - **A frog lives mostly in water while a toad lives mostly on land.**
 - **A frog has fully webbed feet while a toad has partly webbed feet.**
 - **A frog has long hind legs while a toad has short hind legs.**

- A frog lays eggs in mass rafts while a toad lays eggs in ribbon like strings.

- (c) Give any **two** ways in which amphibians help to promote human health. **They feed on vectors like mosquitoes and houseflies//they are eaten as food by some people.**

47. (a) Name the change of state of matter that increases the density of ice when heated.

Melting

- (b) You are provided with the following items:

Block of ice, lit charcoal stove and a saucepan

Describe how you can use the items to show that the density increases when ice is heated.

(03 marks)

- (i) **Put ice block in a saucepan.**
 (ii) **Heat it on a lit charcoal stove.**
 (iii) **Water formed sinks as density increases.**

48. (a) Apart from the solar panel, name any **one** other equipment used in the production of the energy resource from the sun.

solar battery//solar inverter(reject solar cells)

- (b) State the importance of the solar panel in the production of energy resource from the sun.

The solar panel absorbs sunlight.

- (c) Give any **two** advantages of using energy resource from the sun to the environment.

It does not produce smoke that pollutes the environment.

It reduces the rate of deforestation for wood fuel.

It is alternative to wood fuel.

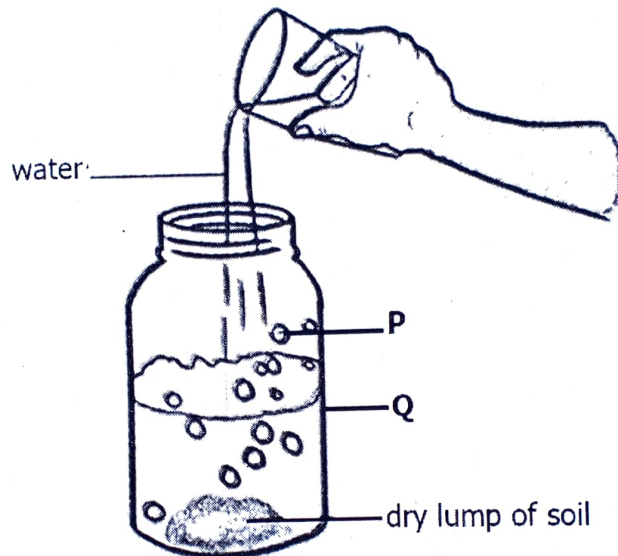
49. The table below shows cattle diseases in part **A** and their signs in part **B**.

Part A : Diseases	Part B : Signs
Mastitis	- Sudden death.
Heartwater	-Difficulty in breathing.
Pneumonia	-Swollen udder and teats.
Anthrax	-Animals walk in circles.

- (i) Mastitis : **Swollen udder and teats.**
 (ii) Heartwater : **Animals walk in circles.**
 (iii) Pneumonia : **Difficulty in breathing.**
 (iv) Anthrax : **Sudden death.**

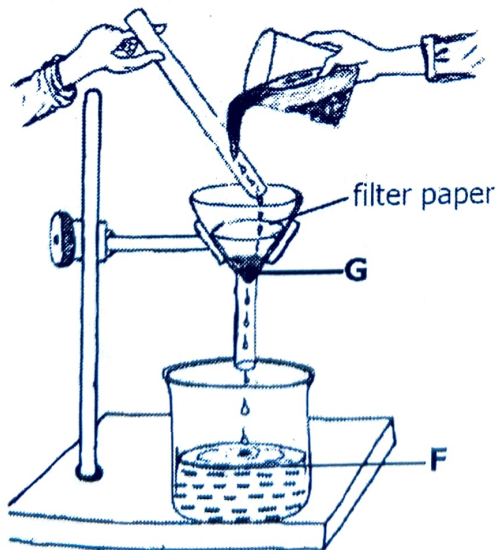
50. (a) Name the form of accident whose first aid is;
 (i) Dipping the injured part in cold water. **Scald//burn**
 (ii) Tying splints around the injured part. **fracture**
- (b) Apart from giving first aid, identify any **two** other ways of managing accidents at home.
Reporting accident cases//rushing the casualty to the hospital//
Good feeding the casualty//using a bandage, splint or tourniquet//
Taking of medicine//Daily cleaning of the cut or wound//
Making alarm.
 (Reject any of the ways of preventing/controlling accidents)

51. The diagram below shows an experiment carried out by a primary five class to investigate a component of soil. Study and use them to answer the questions that follow.



- (a) Name the substance marked **P**.
Air bubbles (reject bubbles alone)
- (b) Give the reason why the container marked **Q** should be transparent.
For clear observation of the air bubbles coming out of the soil.
- (c) State any **two** ways in which the component of soil investigated using the above experiment is useful in the soil.
It enables seeds to germinate//it enables plants to make their own food//it enables soil organisms to carry out respiration//
It enables legumes to make proteins.

52. (a) Mention any **two** disorders of teeth in humans.
Dental plaque//dental cavities//improper teeth growth//
Impacted teeth//broken or cracked teeth
- (b) State any **two** ways of preventing disorders of teeth in humans.
Regular brushing//avoid using teeth to open bottles//limit the
intake of biscuits and sweets//dental flossing//avoid smoking
53. (a) Give the meaning of the following terms;
 (i) Echo : **An echo is a reflected sound.**
 (ii) Frequency : **The number of vibrations produced per second.**
- (b) State any **two** methods used to produce sound in musical instruments
Hitting//blowing//plucking//beating//bowing//striking//pressing
54. (a) Write down any **two** pieces of information that are collected in a health survey.
Kind of food people eat//latrine coverage//population status//
Common diseases//sources of water//housing status//
Immunization coverage
- (b) Name any **one** method used when carrying out a health survey.
Using questionnaires//making direct observations//
Using oral interviews
- (c) Give any **one** way in which carrying out a health survey in an area is important.
It helps in identifying health needs of people.
It creates awareness about health challenges.
It provides health services.
It helps in monitoring health programmes.
55. The diagram below shows a method used to prepare clean water for washing at home. Study and use it to answer the questions that follow.



- (a) Identify the method used to prepare clean water shown above.
Filtration (reject filtering)
- (b) Name the substances marked **F** and **G**.
(i) **F : filtrate**
(ii) **G : residues**
- (c) State the importance of the **filter paper** when using the method above to prepare clean water.
To trap residues.

END