



SUREKEY EXAMINATIONS BOARD

PRIMARY SEVEN PLACEMENT SET

2025

INTEGRATED SCIENCE

OFFICIAL MARKING GUIDE

Read the following instruction carefully:

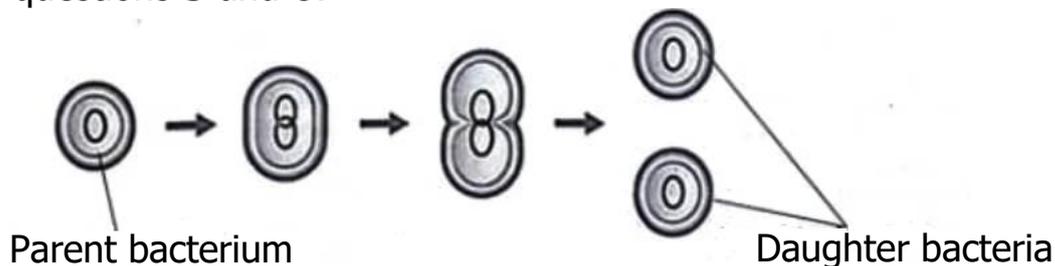
1. Do not forget to write your **school** or **district name** anywhere on this paper.
2. This paper has **two** sections: **A** and **B**. Section **A** has **40** questions and section **B** has **15** questions. The paper has **15 printed pages** altogether.
3. Answer **all** the questions. **All** answers to both sections **A** and **B** must be written in the spaces provided.
4. All answers **must** be written using a **blue** or **black** ball point pen or ink. Any work written in pencil will **not** be marked.
5. Unnecessary **changes** in your work and handwriting that cannot be read easily may lead to **loss of marks**.
6. Do not fill anything in the table indicated: **"FOR EXAMINERS' USE ONLY"** and boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
QN.NO.	MARKS	EXR'S NO.
1 - 10		
11 - 20		
21 - 30		
31 - 40		
41 - 43		
44 - 46		
47 - 49		
50 - 52		
53 - 55		
TOTAL		

SECTION A: 40 MARKS

1. Name any **one** vector that spreads germs without biting.
Housefly//cockroach
2. Give any **one** way in which electricity helps in solving our daily problems.
It is used for lighting//charging//operating machines//cooking
3. State any **one** function of enzymes during the process of digestion in the human body. **They speed up digestion of food.**
4. Name any **one** element of weather that causes natural disasters.
Rainfall//sunshine//wind

The diagram below shows a mode of reproduction in an organism. Use it to answer questions **5** and **6**.



5. Name the mode of reproduction shown in the diagram above.
Binary fission//cell division
6. Give any **one** organism that reproduces as shown in the diagram above.
bacteria//amoeba
7. Mention any **one** way in which mothers can improve the immunity of their babies
Feeding babies on a balanced//taking baby for immunisation
8. State **one** way in which breathing of a toad is similar to that of a snake.
Both breathe through lungs.
9. Give the reason why adolescent girls are advised to feed on food rich in iron during menstruation periods.
To replace the lost iron in blood during menstruation period.
10. Mention **one** way in which endoparasites can be controlled in goats
Regular deworming (Accept drenching//dosing)
11. State any **one** reason why lungs are able to carry out gaseous exchange in the human body.
They have alveoli //have thin walls for easy diffusion of gases// have ability to expand and contract during breathing.
12. Give any **one** way in which you can reduce the accumulation of plastic materials in the environment.
Recycling//reusing//burning them

13. Mention **one** function of the suckers to a tapeworm.
For attachment onto the intestinal walls
(Reject for sucking digested food)
14. State any **one** way in which yeast is important during baking.
Yeast makes the dough to rise// Yeast ferments sugar and oxygen in the dough.
15. State any **one** reason why it is easier for a person to ride a bicycle down the slope than up the slope.
There is more gravity to support the movement of the bicycle down the slope than up the slope.

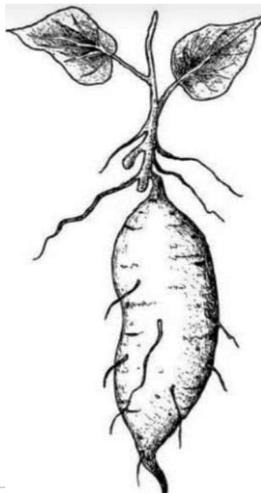
The diagram below shows the structure of a human tooth. Use it to answer questions **16** and **17**.



16. Name the type of tooth shown in the diagram above.
Premolar tooth
17. Give the function of the part marked **K**.
For grinding/crushing/chewing food.
18. Identify any **one** danger of late harvesting of crops in the garden.
It may lead to wastage of crop yields//causes rotting of crops// can lead to germination of seeds in the garden.
19. State any **one** way in which brick making increases the spread of malaria among people.
It creates pits which hold stagnant water where mosquitoes breed.
20. Mention any **one** activity a poultry farmer can do to prepare a hen for natural incubation.
providing laying nests//providing security for a hen.
21. Name the food value that absorbs water from the stool to make it soft in order to prevent constipation in an individual.
Roughages

22. State the reason why echoes are not heard in a room covered with thick curtains and soft boards.
Thick curtains and softboards absorb sound waves.
23. State any **one** way in which a cattle farmer can easily identify a cow affected by mastitis.
Presence of blood stains//pus in milk//swollen udder and teats
24. Give **one** way in which moulting is important to insects.
It enables the insects to grow.
25. Name the water borne disease that causes internal bleeding in the body.
Typhoid//dysentery//cholera
26. Mention any **one** life skill that can help school adolescent girls to overcome teenage pregnancy.
**Critical thinking//problem solving//assertiveness//
effective communication//decision making//creative thinking**
27. State any **one** way in which plants benefit from air in the environment.
They used carbon dioxide to make food//they use oxygen for respiration.
28. State any **one** way in which you can protect the soil from being affected by harmful materials.
**Detrashing//burning plastics., polythene bags and rubber materials
//recycling harmful materials//reusing harmful materials.**
29. Give any **one** danger of keeping long fingernails on your hands.
**Long fingernails are hiding places for germs//
they can cause injury to the skin.**
30. Mention any **one** way in which people benefit from harvesting grasshoppers.
Grasshoppers are sold for money//they are source of food.
31. Give **one** reason why heat transfer by conduction is possible in solids.
Solids have closely packed molecules.

The diagram below shows a tuber crop. Use it to answer questions **32** and **33**.

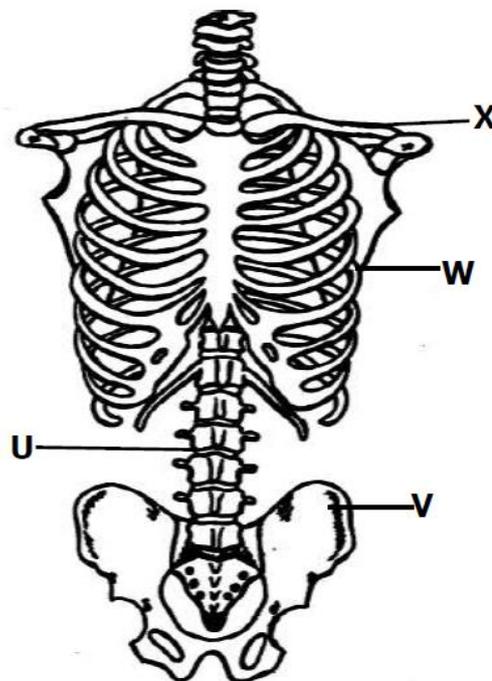


32. Name the tuber crop shown above.
Sweet potato
33. State any **one** way in which people process the tuber crop shown in the diagram above.
Peeling//sun-drying//grating//pounding//slicing//roasting//washing
34. Give any **one** way in which doing regular physical exercises is useful to the muscular-skeletal system.
It increases flexibility in joints//it enables muscles and bones to grow stronger//improves on body fitness.
35. Name the part of human body that is affected by diphtheria.
Throat (*reject lungs*)
36. State the reason why the sun is regarded as the main natural source of heat in the environment.
Most of the heat used on earth comes directly or indirectly from the sun.
37. State any **one** way of controlling dust in the classroom.
Dusting furniture//mopping the floor//sweeping the floor//scrubbing the floor
38. Mention **one** reason why flowers are able to be pollinated by the moths at night. **Flowers produce scent at night.**
39. State any **one** way in which calendars are important to crop farmers in the community.
It enables the farmer to know the right time for planting. // it ensures timely harvesting// it helps farmers to monitor weather changes for better land preparation.
40. Give any **one** way in which the mixture of paraffin and water can be separated.
Using a separating funnel//using distillation.

SECTION B: 60 MARKS

41. (a) Name the weather instrument used to measure humidity.
Hygrometer
- (b) Mention any **two** effects of humidity in an area.
Cools the environment//reduces transpiration rate
- (c) State any **one** way in which people use gumboots to manage rainy weather.
Gumboots protect people's feet from mud and water.

42. (a) Name any **one** unit used to measure density.
Grammes per cubic centimeteres // grammes per cubic millilitres // grammes per cubic metres
- (b) Explain how density affects objects when immersed in water.
Objects which are less dense than water float on water while those that are denser than water sink in water.
- (c) Apart from gravity, mention any **one** other factor that determines the weight of an object.
Nature of an object // force of gravity // upthrust force // mass of an object.
43. (a) Name the type of food worker bees use to feed the queen bee.
Royal jelly
- (b) State the reason why a worker bee dies soon after stinging a person.
A worker bee loses its stinger which leads to dehydration to death.
- (c) Mention any **two** activities a bee keeper can do to prevent honey bees from swarming.
Ensure the presence of flowers near the hive // ensure the presence of water near the hive // protect bees from pest attack
44. The diagram below shows part of the human skeleton. Study and use it to answer the questions that follow.



- (a) Name the bones marked **U** and **V**.
- (i) **U : backbone/spine/vertebral column**
- (ii) **V : pelvic girdle**

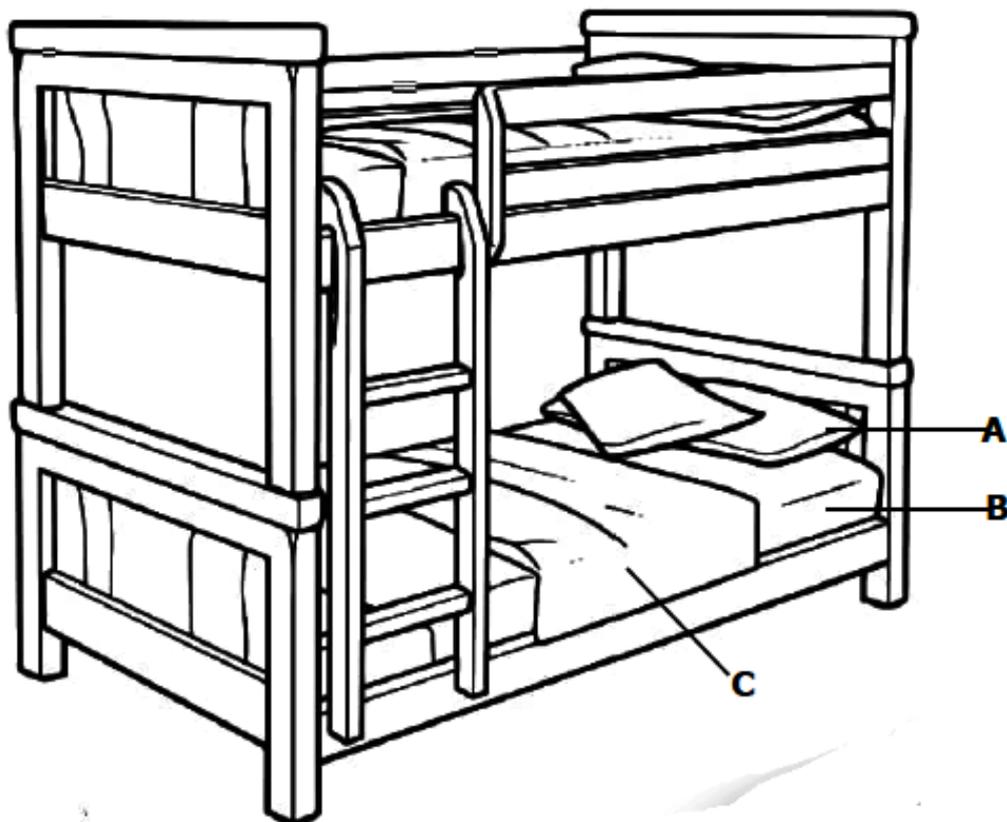
- (b) Give the protective function of the bone marked **W** on the human skeleton. **It protects the heart and the lungs.**
- (c) Identify the type of bones to which the bone marked **X** belongs.
Long bones

45. The table below shows the parts of a flower and the function of each. Complete the table correctly.

Part	Function
Sepal	Protects the flower at the bud stage
Petal	Attracts pollinators
Stigma	Receives pollen grains during pollination.
Anther	Produces pollen grains

46. (a) Give the meaning of the term matter.
Matter is anything that has mass and volume.
- (b) You are provided with the following items: 2 balloons, 2 sticks and 2 strings. Describe how you can use the items to show that matter has weight. *(3 marks)*
- (i) **Inflate the balloons and tie one balloon to each end of a stick using the strings to balance it horizontally.**
 - (ii) **Ensure that the stick remains balanced when both balloons are filled with air.**
 - (iii) **Prick one balloon and let the air escape while keeping the other intact.**
 - (iv) **The stick tilts towards the inflated balloon, showing that air (matter) has weight.**

47. The diagram below shows a school decker. Use it to answer the following questions.



- (a) Name the bedding materials marked **A** and **B**.
- (i) **A : pillowcase**
- (ii) **B : mattress**
- (b) Give any **one** way of keeping the bedding material marked **C** clean.
Regular washing//ironing//keeping in a clean place
- (c) Identify any **one** danger of sharing the bedding material marked **B** with a friend.
It leads to the spread of skin diseases.
48. (a) Mention any **two** materials that can be used in a pit to make compost manure.
Plant leaves, banana peelings, dry grass, leftover food, household refuse
- (b) Give a reason why water is sprinkled on the materials in a pit when making compost manure.
To speed up the rate of decomposition.
- (c) State any **one** advantage of using compost manure in gardens.
Stays longer in the soil//rich source of humus// improves soil structure//do not pollute the soil.

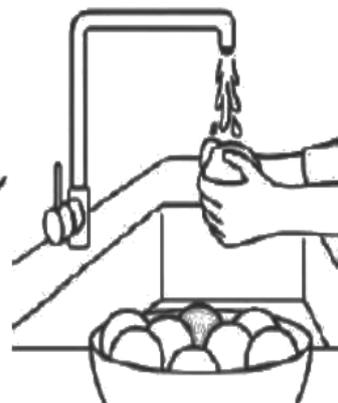
49. (a) Give the function of each of the following parts in an electric bulb.
- Coiled filament : **Produces light in the bulb.**
 - Contact terminal : **It conducts electricity into the bulb when the circuit is complete.**
- (c) Name any **two** methods of making temporary magnets.
Electrical method//induction method//stroking method
50. (a) Name the component of air that occupies the greatest percentage in the atmosphere.
Nitrogen
- (b) Give any **one** way in which air is useful to people.
Oxygen supports burning of charcoal and candles// carbon dioxide enables people to put out fire// Nitrogen is used in electric bulbs.
- (c) State any **two** human activities that degrade the quality of air in the environment.
Bush burning//industrialisation//burning car tyres// charcoal burning//spraying agrochemicals.
51. The diagrams below show steps taken to prepare a meal at home. Study and use them to answer the questions that follow.



P



Q

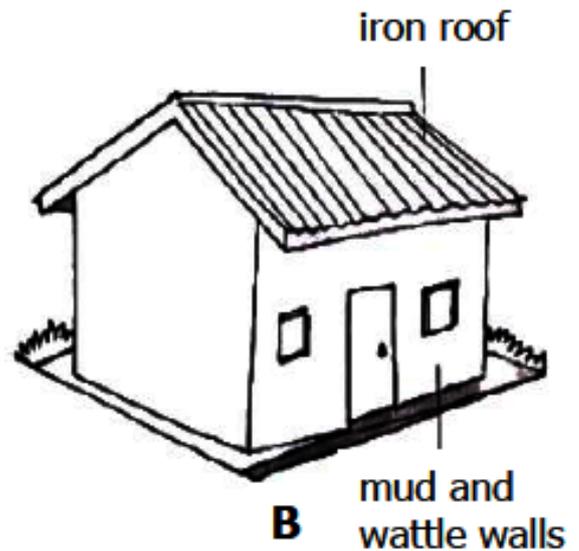
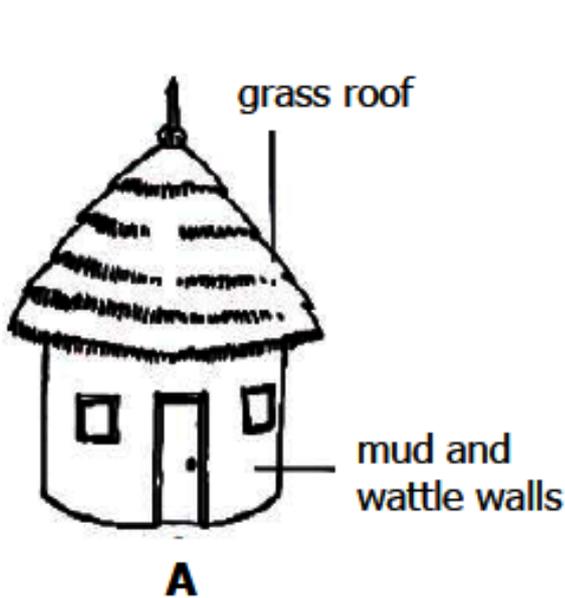


R

- (a) Name the steps of preparing a meal marked **P** and **Q**.
- P : slicing food**
 - Q : peeling food**
- (b) Give the importance of the step marked **R** when preparing a meal at home. **It removes dirt from food.**
- (c) Name any **one** food prepared using the step marked **Q**.
Sweet potatoes//cassava//irish potatoes//matoke

52. (a) State the meaning of the term nursery bed.
A small garden prepared for raising seedlings.
- (b) Mention any **one** activity crop farmers do when preparing a nursery bed.
Site selection, clearing land, digging, harrowing, adding fertilisers and constructing the shade
- (c) Give any **one** advantage of first planting tomato plants in a nursery bed before taking them to the main garden.
It gives a firmer time to prepare the garden//it allows a farmer to select healthy seedlings//it protects seedlings from harsh weather conditions//it prevents wastage of seedlings
- (d) Identify any **one** way in which a crop farmer can care for the tomato seedlings when they are still in the nursery bed.
Watering seedlings//regular weeding//thinning//fencing the nursery bed.
53. (a) Name the biological change in plants that;
(i) Reduces transpiration: **shedding leaves**
(ii) Requires oxygen to take place: **germination**
- (b) State any **two** ways of managing biological body changes in human beings.
Regular bathing//shaving overgrown hair//washing clothes//ironing clothes
54. (a) Write down any **two** activities that take place in the respiratory system during breathing in.
expansion of lungs//contraction of the diaphragm//contraction of intercostal muscles
- (b) State any **one** role of the circulatory system during respiration.
**Blood plasma supplies digested food to the body cells.
Red blood cells transport oxygen to the body cells.**
- (c) State the importance of cilia found in the human nose.
Cilia trap dust//cilia filter air.

55. The diagrams below show two houses. Study and use them to answer the questions that follow.



- (a) Identify the house that remains cool inside during dry season.

House A

- (b) Give the reasons why the house you have identified in (a) above remains cool inside during dry season.

It is made up of grass which is an insulator of heat.

- (c) State any **two** advantages of using the house marked **B** over the house marked **A**.

House B lasts longer than house A.

House B is less affected by harsh weather like windy weather than house A

END

