



# SUREKEY EXAMINATIONS BOARD

## PRIMARY SEVEN PLACEMENT SET

2025

## INTEGRATED SCIENCE

# OFFICIAL MARKING GUIDE

Read the following instruction carefully:

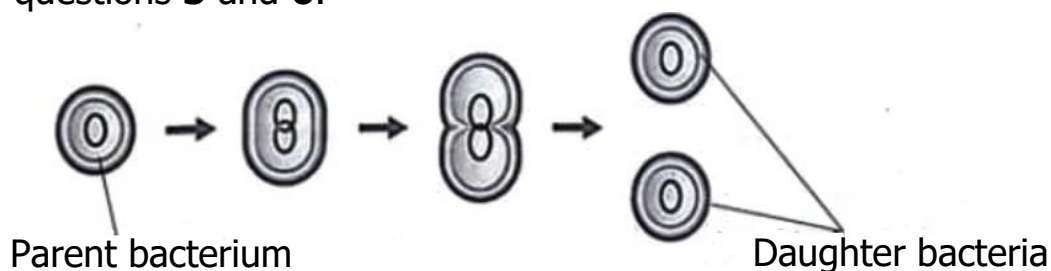
1. Do not forget to write your **school** or **district name** anywhere on this paper.
2. This paper has **two** sections: **A** and **B**. Section **A** has **40** questions and section **B** has **15** questions. The paper has **15 printed pages** altogether.
3. Answer **all** the questions. **All** 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		
<b>TOTAL</b>		

## **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.**

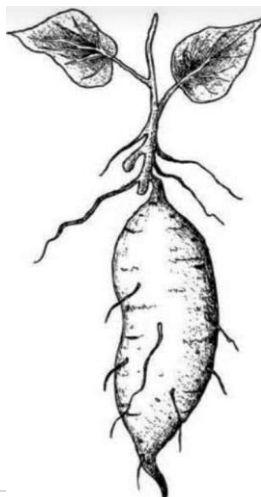
The diagram below shows the structure of a human tooth. Use it to answer questions **16** and **17**.



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**.

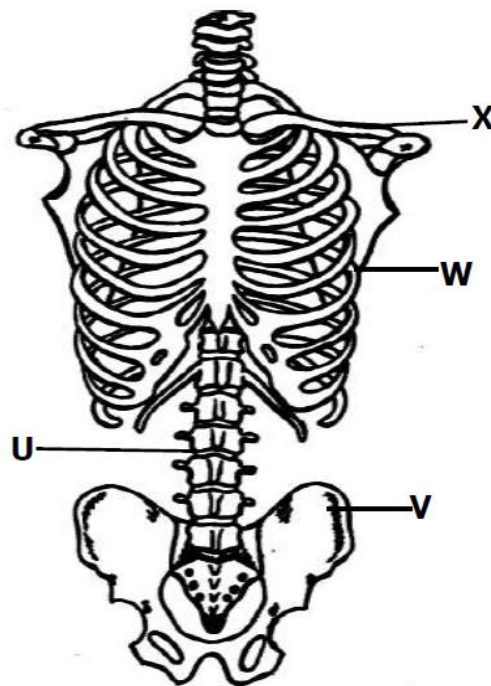


32. Name the tuber crop shown above.  
**Sweet potato**
33. State any **one** way in which people process the tuber crop shown in the diagram above.  
**Peeling//sun-drying//grating//pounding//slicing//roasting//washing**
34. Give any **one** way in which doing regular physical exercises is useful to 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**

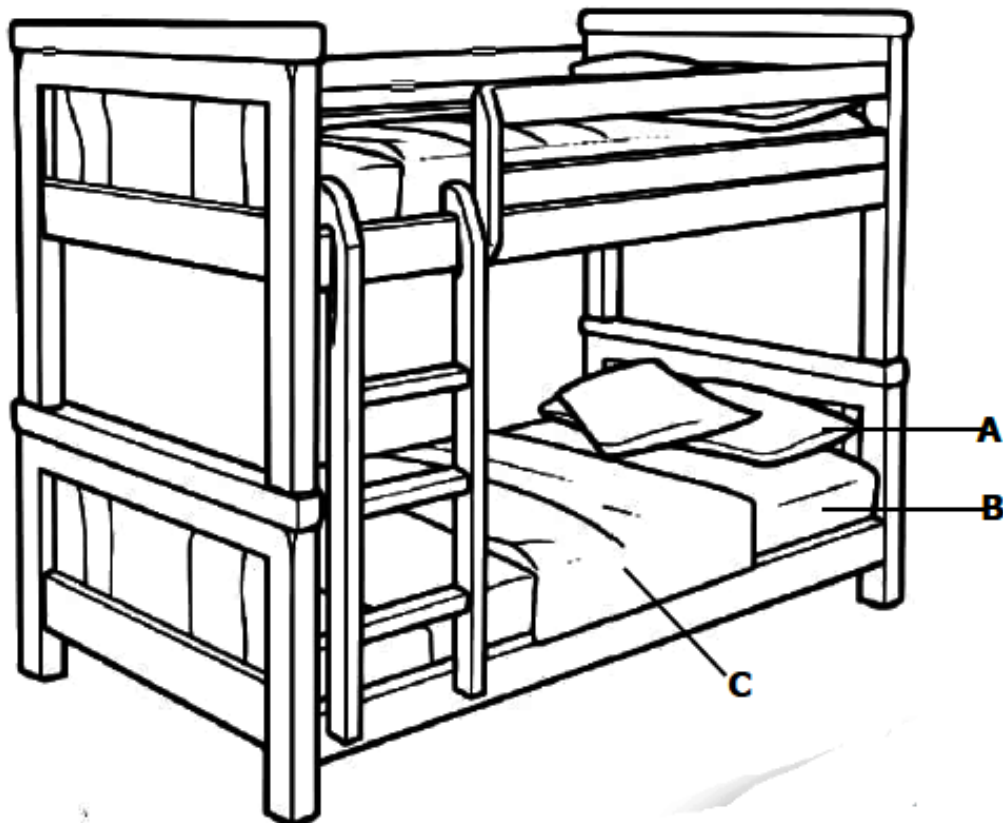
- (b) Give the protective function of the bone marked **W** on the human skeleton. **It protects the heart and the lungs.**
- (c) Identify the type of bones to which the bone marked **X** belongs.  
**Long bones**

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

Part	Function
Sepal	<b>Protects the flower at the bud stage</b>
<b>Petal</b>	Attracts pollinators
Stigma	<b>Receives pollen grains during pollination.</b>
<b>Anther</b>	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.**

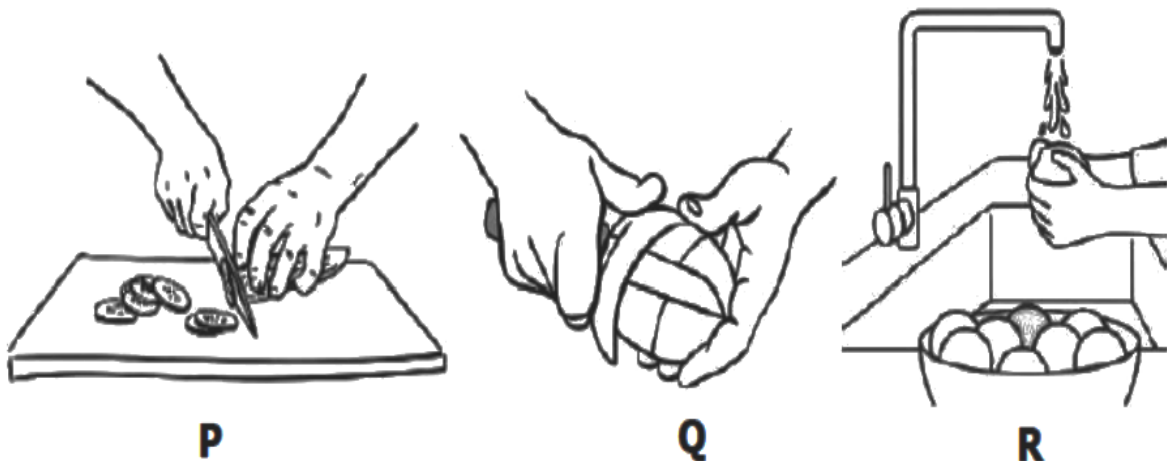
47. The diagram below shows a school decker. Use it to answer the following questions.



- (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.**



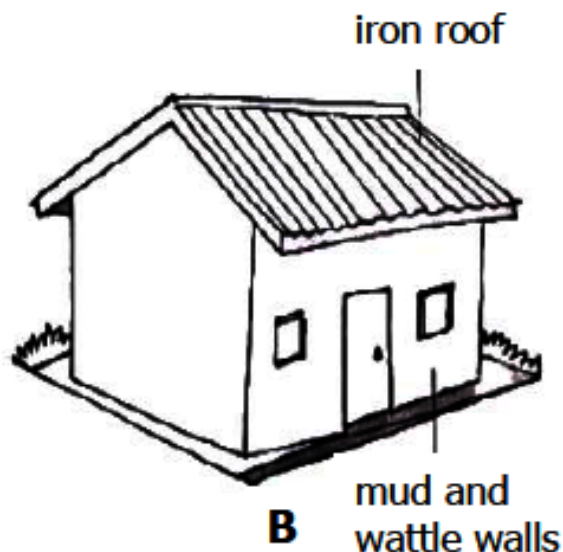
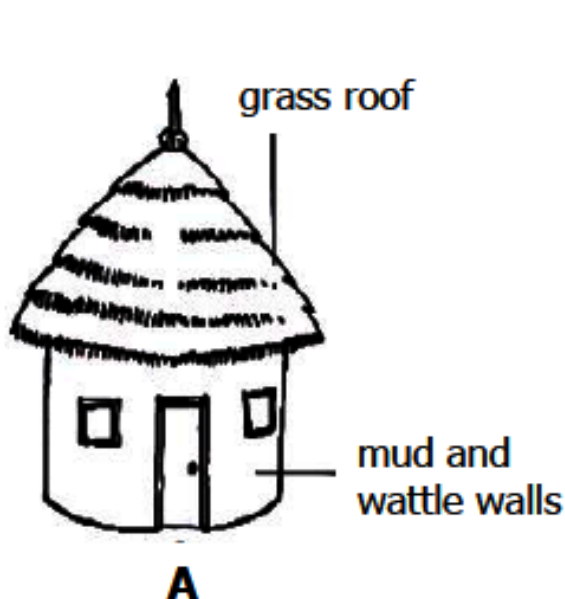
49. (a) Give the function of each of the following parts in an electric bulb.
- (i) Coiled filament : **Produces light in the bulb.**
  - (ii) Contact terminal : **It conducts electricity into the bulb when the circuit is complete.**
- (c) Name any **two** methods of making temporary magnets.  
**Electrical 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.



- (a) Name the steps of preparing a meal marked **P** and **Q**.
- (i) **P : slicing food**
  - (ii) **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**

