



# SUREKEY EXAMINATIONS BOARD

## PRIMARY SEVEN PLE PREPARATION SET ONE

2025

## INTEGRATED SCIENCE

# OFFICIAL MARKING GUIDE

Read the following instruction carefully:

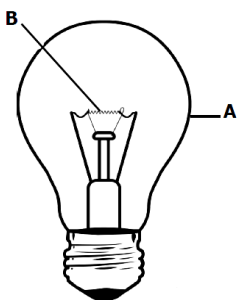
1. Do not forget to write your **school** or **district name** anywhere on this paper.
2. This paper has **two** sections: **A** and **B**  
Section **A** has **40** questions and section **B** has **15** questions. The paper has **15 printed pages** altogether.
3. Answer **all** the questions. **All** 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** agent of seed dispersal.  
**Wind//Animals//Water**
2. Give any **one** way in which honey is useful in industries.  
**Honey is used in making biscuits, sweets and bread//Honey is used in making skincare products//Honey is used in making cough syrup**
3. Give any **one** method used to prepare a local dish at home.  
**Boiling//Steaming//Roasting//Frying**
4. Give any **one** way in which condensation is important in the environment.  
**Condensation helps in water cycle (rain formation)//It helps in formation of nimbus clouds which bring rain//regulates temperature in the environment**
5. State **one** way in which roughages help to prevent constipation in children.  
**Roughages add bulk to food//Roughages stimulate peristalsis//Roughages help in water absorption which softens stool**
6. Mention any **one** way in which the spread of ringworm infection can be controlled among school children.  
**By advising them to bathe regularly//advising them to avoid sharing clothes//by ironing their clothes//By encouraging them to wear clean and dry clothes//By treating infected school children**
7. Give any **one** role of the School Health Committee in the promotion of personal hygiene at school.  
**It puts up tippy taps for hand washing at school//It educates children on proper personal hygiene practices//It displays posters about proper personal hygiene practices in the school compound//It organizes health talks about personal hygiene**
8. Name the largest type of teeth in the mouth.  
**Molar teeth**
9. State the reason why the piece of chalk reaches the ground faster than a piece of paper when dropped from the same height.  
**The piece of chalk has less air resistance than a piece of paper**
10. Name the substance in tobacco smoke that leads to addiction.  
**Nicotin**

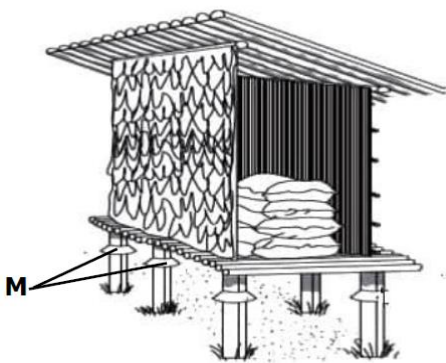
The diagram below shows an electric bulb. Use it to answer questions **11** and **12**.



11. Name the part marked **A**.  
**Glass envelope**
12. State **one** reason why the part marked **B** is coiled.  
**To increase electrical resistance//To fit long filament into a small space**

13. State any **one** example of a suitable health lifestyle that people are encouraged to practice.  
**Regular bathing//Brushing teeth every after a meal//Feeding on a balanced diet//Performing regular physical exercises//Having enough rest and sleep//Observing correct posture//Drinking enough safe water**
14. State any **one** advantage of growing annual crops over perennial crops.  
**Annual crops mature faster than perennial crops//Annual crops allow crop rotation which improves soil fertility while perennial crops do not**
15. State any **one** way of using wood fuel sparingly.  
**By using energy saving stoves//By using alternative sources of energy//By drying firewood properly before use//By covering food when cooking**

The diagram below shows a farm storage facility. Use it to answer questions **16** and **17**.



16. Name the farm storage facility shown above.  
**Granary**
17. Give **one** reason why the structure marked **M** is able to prevent rats from entering the storage facility above.  
**It has a smooth surface to prevent rats from getting a grip to climb up the granary**
18. State the importance of putting notches on the ears of a sheep.  
**Notches enable a sheep to be identified easily in case it gets lost (help in tracking a sheep in case lost or stolen)//Notches help in proper record keeping**
19. Identify the weather instrument that helps in the management of floods in an area.  
**Rain gauge**
20. Give any **one** way in which school children can protect their young brothers and sisters from being poisoned by chemicals.  
**By keeping chemicals away from reach of their young brothers and sisters//By keeping chemicals in well labelled and sealed containers//by keeping chemicals in lockable facilities//by avoiding keeping chemicals in juice or soda bottles**
21. Name any **one** substance that reduces friction at the joint.  
**Rollers//Ball bearings//Lubricating oil//Grease//Graphite**

22. Give any **one** factor that can reduce the pitch of sound produced by a string musical instrument.  
**Loosening the string // Increasing length of the string // Using a thicker string**
23. State any **one** responsibility of a family in the promotion of health.  
**Ensuring that all young children in the family are immunized // Constructing latrine for family members // Ensuring proper feeding at home // Constructing a rubbish pit at home**
24. Mention any **one** way in which filtration can be applied at home.  
**For obtaining clean water from dirty water // For removing seeds from fruit juice For removing husks from local brew // For removing tea leaves from tea**

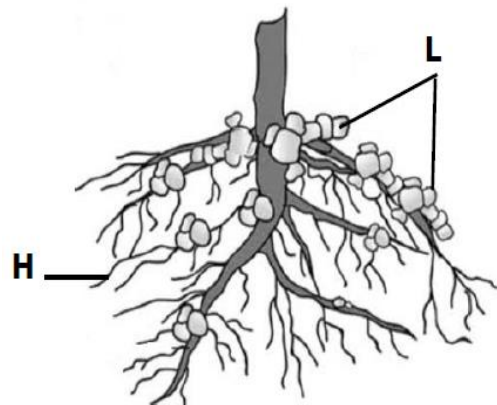
Use the diagram of the mammal below to answer questions **25** and **26**.



25. Identify the group of mammals to which the animal above belongs.  
**Flying mammals**
26. Give any **one** reason why you would group the above animal under mammals.  
**It has mammary glands // It has fur on its body (has a hairy body) // It feeds its young on milk produced by mother's mammary glands // It gives birth to live young**
27. Mention any **one** way in which the spread of COVID 19 can be controlled.  
**By wearing clean face masks // By washing hands with clean water and soap // By maintaining social distance // Through hand sanitizing // By avoiding touching the mouth, eyes and nose with dirty hands // By covering the nose and mouth when sneezing**
28. State any **one** way in which poor sanitation in a school compound can be identified.  
**Rubbish in the school compound // Tall grass in the school compound // Stagnant water in the school compound // Faeces in the school compound**
29. State **one** way in which the function of antennae of a grasshopper are similar to the ears of a person.  
**Both help in hearing**

30. Apart from using a thermos flask, state any **one** other way of conserving heat energy at home.  
**By using energy saving stoves/ /By covering food when cooking**  
**By putting lids on saucepans when boiling water**
31. Give any **one** in which feeding on a balanced diet is important to the muscular skeleton system.  
**It strengthens bones/ /It strengthens muscles**

The diagram below shows the stem of a bean plant. Use it to answer questions **32** and **33**.

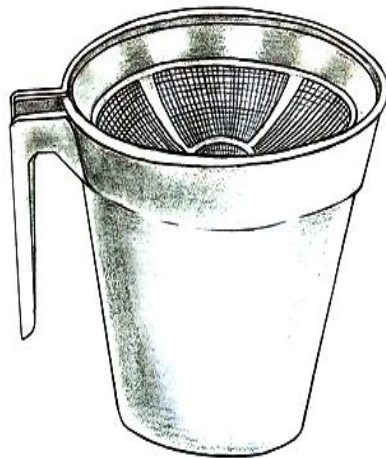


32. Name the root structure marked **H**.  
**Root hair**
33. Give any **one** function of the root structures marked **L**.  
**They store nitrogen fixing bacteria**
34. Name any **one** by product removed from the human body during respiration.  
**Carbon dioxide/ /Water vapour**
35. Write down any **one** activity done by the Young Farmers' Club at school.  
**It teaches farming skills to young farmers/ /It promotes food production in the school/ /It organizes study tours to farm schools**
36. State any **one** way in which white blood cells help to fight against disease germs.  
**By producing antibodies/ /By engulfing and digesting disease germs**
37. State any **one** way in which sunlight is useful during photosynthesis.  
**Sunlight provides energy needed by plants to make food**
38. State any **one** function of the segments to a tapeworm.  
**Segments store eggs**
39. Give any **one** cause of soil exhaustion in the garden.  
**Soil erosion/ /Mono-cropping/ /Leaching/ /Over cultivation**
40. State the difference between atmosphere and sky.  
**Atmosphere is a layer of gases surrounding the earth while sky is the visible part of the atmosphere**

## **SECTION B: 60 MARKS**

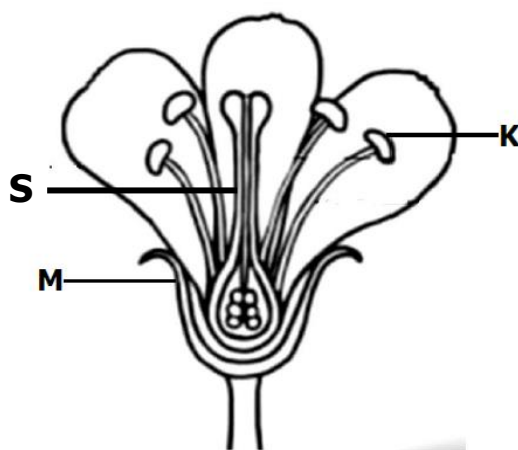
41. (a) State the chemical change that;
- |  |                      |
|--|----------------------|
| (i) Produces alcohol                     | <b>Fermentation</b>  |
| (ii) Makes charcoal                      | <b>Burning</b>       |
| (iii) Enables the Body to Produce Energy | <b>Respiration</b>   |
| (iv) Forms of humus in the soil          | <b>Decomposition</b> |

42. The diagram below shows an equipment found on a cattle farm. Study and use it to answer the questions that follow.



- (a) Name the equipment shown above.  
**Strip cup**
- (b) Give any **two** exotic breeds of cattle on which the equipment above can be used  
**Friesian//Guernsey//Ayshire//Jersey**
- (b) State any **one** sign of the disease that requires the use of the cattle equipment above.  
**Swollen udder and teats//pus in milk//blood stains in milk**
43. (a) Name the process in plants that enables plants to purify air.  
**Photosynthesis**
- (b) Explain how plants help to purify air in the environment. (2 marks)  
**Plants absorb carbon dioxide and release oxygen in the atmosphere.**
- (c) Apart from purifying air, state any **one** other way in which plants are important in the environment.  
**They help in rain formation//they control soil erosion//  
They provide fruits//they provide shelter to animals**

44. (a) Name the non-metallic conductor found in the dry cell.  
**Carbon**
- (b) A torch uses 4 dry cells. Calculate the voltage of the torch. (3marks)  
**1 dry cell = 1.5 volts**  
**4 dry cells = (1.5 x 4) volts**  
**4 dry cells = 6 volts**
45. (a) Write down any **two** disorders of the human respiratory system.  
**Choking//hiccups//cough//sneezing**
- (b) Give any **two** ways of keeping the respiratory system in a healthy working condition.  
**Feeding on a balanced diet//doing regular physical exercises//going for regular medical checkups//avoid smoking**
46. (a) Name the group of arthropods to which the following belong;
- Termite **insects**
  - Lobster **crustaceans**
- (b) Apart from having jointed legs, state any **two** other ways in which arthropods can be identified.  
**They have segmented bodies//they moult to grow//**  
**They have exoskeleton**
47. The diagram below shows a flower. Use it to answer the following questions.



- (a) Name the parts marked **K** and **N**.
- K : anther**
  - M : sepal**
- (b) State the function of the part marked **M** to a flower.  
**It protects the flower when still at bud stage**
- (c) On the diagram above, label the style.  
**Done on the diagram (S)**

48. (a) Name any **two** examples of foreign bodies in the ear.  
**Small insects//small seed//dust particles**
- (b) State any **one** effect of foreign bodies in the ears.  
**They block ear canal//they cause injuries in the ear//  
 They affect hearing mechanisms**
- (c) Give any **one** way in which you can give first aid to a victim with a foreign body in the ear.  
**Flush the ear with plenty of clean water.**

49. The table below shows the systems used in keeping poultry in part **A** and their description in part **B**.

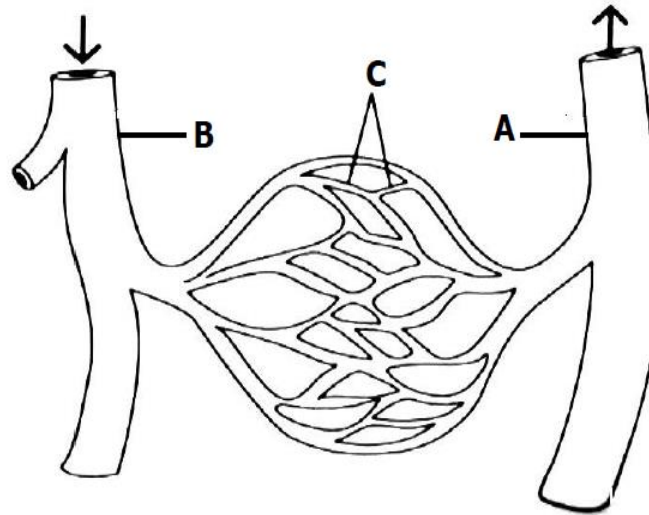
<b>A: System</b>	<b>B: Description of the system</b>
Free range system	Birds are kept in the house all the time.
Deep litter system	Birds are kept in a small movable structure.
Fold system	Birds are kept in separate cages in the house.
Battery system	Birds are left to move on their own and look for food

Match correctly the systems of keeping poultry with their description in the spaces provided below.

- (i) Free range system. **Birds are left to move on their own and look for food.**
- (ii) Deep litter system. **Birds are kept in the house all the time.**
- (iii) Fold system. **Birds are kept in a small movable structure.**
- (iv) Battery system. **Birds are kept in separate cages in the house.**
50. (a) Name the fungus that;
- (i) Feeds on sugar. **Yeast**
- (ii) Has a fruiting body. **puffball**
- (b) Give any **two** ways in which fungi are useful to people.  
**Source of food//used in fermentation//used in baking**
51. (a) Give the meaning of the following terms:
- (i) Recycling.  
**-The making of re-usable materials from wastes  
 -Making of new products from waste materials.**
- (ii) Pollution.  
**Pollution is the release of harmful substances to the surroundings.**

- (b) State any **two** ways in which pollution affects the environment.  
**Leads to the spread of airborne and waterborne diseases**  
**Leads to global warming**  
**Leads to death of aquatic animals.**  
**Leads to loss of soil fertility.**

52. The diagram below is of blood vessels. Study and use it to answer the questions that follow.



- (a) Name the blood vessels marked **B** and **C**.  
 (i) **B : vein**  
 (ii) **C : blood capillaries**
- (b) State any **one** way in which the blood vessel marked **A** is able to transport blood with high pressure.  
**It has thick walls/it is thick-walled**
- (c) Give any **one** function of blood vessel marked **C** during blood circulation.  
**It allows the exchange of body materials.**
53. (a) Name the **two** changes of state of matter that cause the formation of rain  
**Evaporation//condensation**
- (b) State any **two** physical properties of solids.  
**They have definite shape//they have closely packed particles//they allow heat transfer by conduction//**  
**They have fixed volume**

54. You are provided with the following materials:

**Two balloons, a straw, rubber sheet and a big plastic bottle**

Write **four** steps you will take to show the action of the human lungs during breathing in.

- (i) **Cut the bottom of a big plastic bottle to make one end open.**
- (ii) **Insert two straws having inflated balloons on either side into the bottle through the bottom open end.**
- (iii) **Place the rubber sheet at the open end then tie it firmly onto the bottle.**
- (iv) **When the rubber sheet is pulled down, the balloons swell up with air.**

55. (a) Name any **two** root tuber crops that are propagated by the use of seeds.  
**Carrots//turnips//beetroots//parsnips**

(b) Give any **two** factors to consider when choosing the variety of tuber crops to grow.

**Resistance to diseases//ability to give high yields//  
fast growth rate//resistance to drought//  
the market value//good taste of the tubers**

**END**



