

## **PLE INTEGRATED SCIENCE MARKING GUIDE 2024**

**BY TR PRECIOUS 0788220069/0707776316 FOR DISCUSSIONS**

1. *Flush toilet//VIP latrine//Ordinary pit latrine//ECOSAN*
2. *Trees attract lightning which strikes people//it encourages lightning shocks*
3. *It expands and flattens to allow lung expansion//it relaxes to force air out of lungs*
4. *Strong wind//flowing water//moving animals//moving machines//human activities*
5. *Freshwater snail//garden snail//snail*
6. *Mollusks// molluscs*
7. *Refrigeration // storing vegetables in cool conditions*
8. *They help in decomposition of organic matter to form humus/manure*
9. *Schistosomes/bilharzia blood flukes that cause bilharziasis/bilharzia feed on blood leading to anaemia*
10. *Improving the hutch ventilation//constructing the hutch using wire mesh*
11. *To prevent heat loss from the body//to keep the body warm*
12. *Planting flowers in them//using them to make playing materials//planting vegetables in them*
13. *To cover fresh cuts and wounds//holding splints around the injured part*
14. *Helps to make alcohol//helps in preservation of milk products//helps in making biogas*
15. *A pulley needs less effort than an inclined plane in lifting sand//a pulley is faster than an inclined plane in lifting sand*
16. *Right kidney//the right kidney//kidney//the kidney*
17. *Part N takes urine out of the kidney to the urinary bladder*
18. *Root damages//curling of leaves//rotting of roots//drying of the plant shoots*
19. *It increases poisoning cases in the family*
20. *Prevents honey contamination by smoke at night//prevents total honeycomb destruction at night due to darkness//prevents beestings since most of worker bees are busy during the day*
21. *Dislocation*
22. *Due to less density of a cubic unit of wool than that of a stone//due to greater density of a unit cubic of a stone than that of wool*
23. *Cattle are changed from one paddock to another paddock before the lifecycle of ticks completes//cattle are shifted before the lifecycle of ticks completes*
24. *It reduces metallic wastes in the environment//rust adds iron in the soil improving the quality of them soil*
25. *Personal hygiene*
26. *Organizing health parades//sensitizing school people about importance/dangers of good health//forming health clubs to create awareness on good health in a school//providing guidance to school people about some of their health body changes mostly adolescents etc*
27. *Air occupies space//air exerts pressure (Both are involved)*

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28. *Treeroots hold soil particles together preventing soil erosion//treeshoots dry fall and decay into humus improving the quality of soil//treeshoots cover the top soil preventing direct strong raindrops that would cause splash erosion*
29. *To kill and remove germs in our hands//to prevent the easy spread of some contagious diseases that spread through hands*
30. *Both are used for feeling// the antennae in insects and the human skin in man are feeling organs*
31. *The vacuum lacks matter that conducts heat by conduction and convection//the vacuum lacks the medium of transmission of heat*
32. *Row planting*
33. *Eases weeding/harvesting/manuring/spraying/mechanization/gap filling //doesn't waste seeds*
34. *Quick reaction towards discussions//need of much freedom//tendance of being greater than fellows//too talkative//tends to be superior than fellows//becomes annoyed easily//tends to be truant//failure to follow instructions*
35. *Polio (through contaminated water with poliovirus)*
36. *due to greater density of the glass block. NOTE; difference in density changes the speed of the light ray hence bending*
37. *Afforestation//protecting water sources//having controlled use of agrochemicals//forest conservation //setting and implementing laws against water pollution//proper disposal of animal wastes that pollute water etc*
38. *To promote proper oral hygiene//to prevent smell from the mouth//to prevent tongue diseases*
39. *Switching off electric appliances when not in use//switching off power if not in use//regular checkups in wiring system by experts//insulating handles electric appliances*
40. *Carrying out seed selection//soaking of seeds//proper storage of seeds*

## SECTION B

### 41a. Proteins

- b. Buying already expired good//poor market hygiene//high price*
- c. Proper disposal of wastes in the market//regular cleaning of the market//covering of food in markets*

### 42a. Vibrio cholerae

- b. High population leads to improper disposal of feces that attract house flies which spread vibrio cholerae that cause cholera to man. NOTE; must include the bad effect of high population, it's effect and how the effect contributes to the spread of cholera*

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*c. Construction of more public latrines//proper disposal of wastes//digging of more rubbish pits//water protection// etc*

**43a.Garden trowel**

*b. There isn't much sunshine that may cause wilting//it prevents seedlings from wilting*

*c. It keeps moisture in the soil needed by seedlings to grow//mulches control water erosion that would erode seedlings//mulches decay into humus needed by seedlings for proper growth*

**44a.(i)X—Liver**

*(ii)W- Appendix*

*b.(i)Y—It allows food absorption*

*(ii)Z—It allows water absorption*

**45.**

<b>Step</b>	<b>Purpose</b>
<u>Sorting</u>	<u>Separating clothes according to washing needs</u>
<u>Soaking</u>	<u>Softens dirt in clothes//eases washing</u>
<u>Rinsing</u>	<u>Removing dirty soapy water from clothes</u>
<u>Ironing</u>	<u>Drying wet clothes//killing external parasites in clothes</u>

**46a.Electromagnet is a temporary magnet made by the use of electricity/current**

**b.**

- *Wrap the copper wire around the iron nail to form a solenoid*
- *Connect the solenoid to the dry cell to enable current flow through it*
- *Bring the pins close to the solenoid and observe their behaviour*

**47a.Goat/sheep/pig/poultry/droppings//cow dung//banana peelings//sweet potato peelings**

*b. To limit the supply of oxygen to the digester//to prevent biogas from escaping from the digester*

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*c. It doesn't produce smoke that pollutes the environment//it is environment friendly//it is used for cooking reducing the trees cut for wood fuel*

**48a.Nose/face mask//mask**

*b. Tuberculosis//pertussis//flue//COVID-19*

*c. Replacing it after use//disposing it properly after use//washing it after use//tightening/fixing it to cover the mouth and the nose*

**49a.(i) Bow harp//tube fiddle//lyre//guitar etc**

*(ii). Drum//xylophone//cymbals //bass drum//thumb piano etc*

*b. Recording//notation/staff notation/solfa notation*

**50a.Social insects**

*b. Some are eaten as food//some are sold for money//some are sources of traditional medicine//traditional prestige*

*c. Bush burning// deforestation//swamp drainage//spraying using insecticides*

**51a. Cloudy weather**

*b. Weather A heats the waterbody causing its evaporation// weather A heats plants causing transpiration//weather A heats the waterbody and plants causing evapotranspiration*

*c. Wearing heavy and thick clothes during coldness //wearing helmet to protect eyes when riding//wearing spectacles to protect eyes*

*d. It destroys premature crops//it dries pasture for animals//leads to drought//dries water bodies/sources //limits the water cycle*

**52a. Vaccine is a special drug introduced into the body to make it produce antibodies that fight against disease causing germs/pathogens**

*b. Orally//drops in the mouth*

*c. To keep them strong//to keep their strength*

*d. Creating awareness on immunization programs//cleaning immunization centers//reminding members immunization days//sensitizing members about the importance of immunization etc*

**53a.(i) Ice--- freezing**

*(ii) Rainfall—condensation //evaporation*

*b. Soil exhaustion//destroys premature crops in the garden//destroys man's property//leads to formation of gullies/gulleys etc*

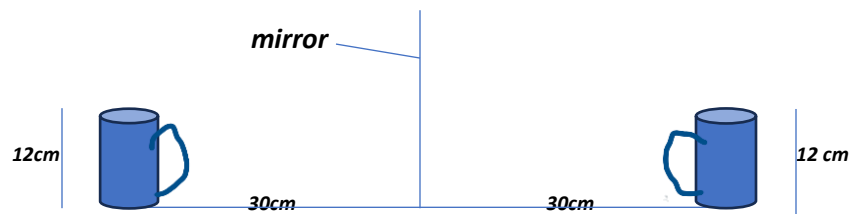
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**54a. Biceps//Triceps**

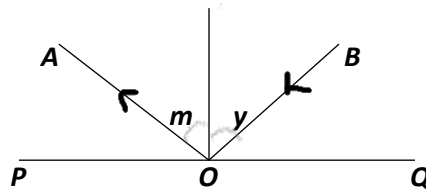
***b. Helps in production of heat in the body//helps in body movement//some protect inside delicate body organs//cardiac muscles help to pump blood in the body//some ease mechanical digestion of food***

***c. Promotes proper bone formation//prevents bone deformation//strengthens muscles//eases blood circulation in the body//promotes proper working of some body systems etc***

**55a.**



**b.**



**(i). A--- Reflected ray**

**(ii). Angle M and Y are equal//both lie in the plane**