



PLE INTEGRATED SCIENCE MARKING GUIDE 2023

Section A (40 Marks)

1. Molar teeth
2. It reduces the hiding places for pests/ it destroys the life cycle of pests.
3. Sunshine/rainfall
4. To remove water from the lungs and stomach.
5. They have gills for breathing in water/ they have fins for swimming in water.
6. Vaccination/drenching/dosing/castration/dehorning/artificial insemination.
7. It restricts the movement of the animal/ it prevents the movement of the animal.
8. The lungs
9. Both fungi and animals feed on food made by other organisms/ both feed on other organisms.
10. The screen traps houseflies to death.
11. To chew food properly/ to eat small lumps of food/to avoid over eating.
12. By making right decisions/ by making your self busy/ by avoiding bad peer groups.
13. Aluminium is light/ aluminium is a good conductor of heat/aluminium does not rust.
14. Soap removes stains from clothes/it removes dirt from clothes/it weakens stains.
15. Swamp drainage/construction in wetlands.
16. Anaemia/vomiting/skin rash/fatigue/weakness/loss of appetite/diarrhoea.
17. To let in air that supports burning/for removing ash.
18. To retain heat/to conserve heat.

19. It leads to bad smell in the house/ animals contaminate utensils/it leads to easy spread of diseases.
20. The use of biogas reduces deforestation/ the use of biogas does not pollute the environment.
21. Shadows are formed/ light is obstructed and shadows are formed.
22. For making wax crayons/ for making varnish/for making shoe polish/for making paint.
23. For future use/To promote food security
24. Gravity force
25. The mask prevents air borne disease/it prevents dust from entering the lungs/it prevents smoke from damaging the lungs.
26. Good scent
27. By cleaning them after use/ by keeping them in dry places/ by repainting them/by oiling them.
28. It helps to know the next date of immunization/ it helps to monitor the growth of the child.
29. Frequency/tension/size of the vibrating surface/length of the vibrating string.
30. The teeth/mouth/hair/fingernails
31. They are used to fix things together/they are used to fasten wood and metals/used to hold things together/lids are used for closing tins and bottles.
32. To prevent boredom in poultry/ to keep poultry busy.
33. Bad smell/change in taste/change in colour/ growth of moulds on food.
34. The pen will pick the pieces of paper.
35. To produce electricity in a circuit.
36. A glass is an insulator/ a glass does not allow electricity to flow through it.
37. Ankle/wrist
38. It reduces hiding places for pests/ it reduces the weight of trees.

39. By fencing an open water source/by sensitizing learners about the dangers of polluting water sources/by enforcing strict laws about water pollution/by cleaning the water source.
40. Their immune system is weak/HIV weakens their immune system/HIV damages white blood cells.

SECTION B (60 Marks)

41. a) Rusting weakens iron sheets/rusting tears iron sheets/rusting changes the colour of iron sheets/it reduces the strength of the iron sheets/reduces the life span of iron sheets.
- b) By painting iron sheets/By removing leaves from iron sheets/keeping away moisture(water) from the iron sheets/galvanizing/by oiling.
42. a) Health record
- b) Brucellosis/ Mastitis/tuberculosis/rinder pest/foot and mouth disease.
- c) It enables a farmer to get loans/ It helps a farmer to plan for his farm/ For future reference.
43. a) Gulley/gully erosion
- b) Soil erosion causes soil exhaustion(infertility)/Soil erosion destroys crops.
- c) Deforestation leaves the land bare and hence exposing it to agents of soil erosion/ Deforestation involves cutting down trees which leaves the land bare and exposing it to agents of soil erosion.
44. a) Node
- b) Stem cutting
- c) Both develop into a new leaf/plant.
- d) The tuber stores food for the new plant.
45. a) Vulnerable group of people are people who are easily harmed due to poor feeding and need special care and diet.

- b) Convalescent/babies/pregnant women/breast feeding women
 - c) By escorting them for medical care/by bathing them/by feeding them on a balanced diet/
46. a) Measuring cylinder
- b) To hold the irregular object/For immersing the irregular object in water/for lowering the irregular object in an overflow can.
 - c) By pouring water in an overflow can and then lowering in the irregular object. The volume can be then read from the displaced water collected in a measuring cylinder.
47. a) Menstruation/ovulation/sweat glands become more active/growth of breasts/enlargement of hips.
- b) By abstaining from sex/By encouraging girls to abstain.
 - c) By shaving/by performing physical exercise/by abstaining from sexual acts.
48. a) Swimming birds
- b) Foot: It is webbed for paddling(swimming) in water.
Beak: It is spoon shaped for sieving food from water/It is flat and broad Shape for filtering food from water.
 - c) Duck/goose
49. a) **Food and nutrition:** It helps to prevent malnutritional diseases/Its encourages people to feed well.
Maternal and child health: It helps to reduce infant death/It reduces maternal death/It encourages pregnant women to go for antenatal care.
- b) Through health fairs/Through music/through radios/through talk shows on televisions/through drama/through village health meetings/through school health programs/through community workshops and seminars.
50. a) Broad casting method
- b) It creates space for crops to grow well/ It eases the harvesting of crops/It eases the spraying of crops.

- c) Chemicals damage the lungs of a farmer/they can also cause skin irritations/Chemicals lower the market of crops.
51. a) R: Evaporation
S: Condensation
- b) To prevent the alcohol from evaporating /It maintains the purity of alcohol/It prevents contamination of alcohol.
- c) For transporting alcohol vapour to be condensed and condensed alcohol to the collecting container.
52. a) Spread of diarrhoeal diseases/poor water supply/inadequate food/poor sanitation.
- b) It helps the government to know the diseases affecting people/It helps the government to know the immunization coverage/It helps the government to provide medicine and vaccines to hospitals.
53. a) Plants are sources of food/they are sources of herbal medicine/they are sources of timber, wood fuel, fibre.
- b) Through agroforestry/Through afforestation/through reafforestation/using energy saving stoves
54. a) It feeds on blood/ It has a proboscis for sucking blood.
- b) i) It blocks oxygen supply to the larvae.
ii) It prevents mosquito bites.
55. a) X: White blood cells
- b) W: To transport oxygen around the body.
X: To fight against disease causing germs.
- c) Sickle cell anaemia/anaemia/malaria