

PLE 2020 MARKING GUIDE INTEGRATED SCIENCE

Section A: (40 Marks)

Each question in Section A carries 1 mark.

1. Cirrus
2. Regular washing and keeping personal items separate
3. Gully erosion
4. Red blood cells
5. Stores food for the developing embryo
6. Solid
7. Melting
8. Udder
9. Reflection of light
10. Warmth/oxygen/food
11. Fossil fuels (e.g., coal, oil)
12. Washing hands with soap
13. Radiation
14. They have pollen baskets, they have a small abdomen, they have a sting/
15. Wind instrument
16. By closing some holes.
17. Legumes have root nodules while other dicotyledonous plants do not have.
18. Displacement method
19. By organizing health fairs and talk shows/by encouraging people to perform physical exercise.
20. It protects goats from harsh weather/ it encourages free air circulation in a goat house/
21. By sweating
22. It may lead to STDs/It may lead to obstructed labour/ It leads to school dropout.

23. Right decision making/keeping themselves busy/engaging in sports activities.
24. By wearing shoes/sandals when in muddy places.
25. Stoking method
26. North pole
27. By killing germs in water.
28. Convex lens
29. Rabbits get shelter/shade from plants/ they get oxygen from plants.
30. They work at one's will/ their movements can be controlled.
31. By isolating infected birds/
32. They have strong sharp talons and beaks.
33. By contaminating food.
34. Style
35. Protects the flower before it opens.
36. Tuberculosis
37. Indigestion
38. To allow fresh air circulation.
39. Reduces soil fertility.
40. Evaporation to dryness.

Section B: (60 Marks)

Each question in Section B carries 4 marks.

41.

(a) Chemical energy

(b) Heat energy

(c) Practices to conserve wood fuel:

- Using energy-saving stoves
- Using alternative energy sources

42.

(a) Parts of the human skeleton used for protection:

- Skull
- Ribs

(b) Spinal cord

(c) Exercising regularly

43.

(a) Agents of seed dispersal:

- Wind
- Water

(b) Characteristics of seeds dispersed by animals:

- Fleshy and attractive
- Hooked or sticky

44.

(a) Drug prescription

(b) It enables a patient to take the right dose/ it prevents drug misuse.

(c) Three times a day

(d) After 8 (eight) hours.

45.

(a) Heat gain causes expansion of matter/ it causes increase in temperature/ changes states of matter.

(b) Heat is used for shaping tools/ for melting metals/for sharpening tools.

46.

(a) To pump blood to all body parts.

(b) Kidneys

(c) Digestive system

(d) To store manufactured sperms.

47.

(a) i) Inclined plane

ii) wedge

(b) By reducing the distance to be covered/by increasing the speed of working/by changing the direction of force.

48.

(a) In B

(b) They are exposed to moisture and oxygen

(c) To cut off the oxygen supply.

(d) They would not rust.

49.

(a) Recovery from illness: **Natural immunity**

(b) Immunization. **Artificial immunity**

(c) Family roles in promoting immunization:

- Ensuring children receive vaccines
- Educating others about the benefits of vaccines

50.

(a) It provides hides and skins to the leather industry.

(b) Meat processing industry

(c) Ways to improve cattle products:

- Proper feeding
- Good animal husbandry practices

51.

(a) Canine

(b) Functions of teeth:

- i. **P**: Cutting
- ii. **Q**: Tearing

(c) **Q** teeth are sharper and pointed, **R** teeth are flat and broad

52.

(a) Reasons for planting seeds in a nursery bed:

- Protects young plants from harsh conditions
- Easier to manage

(b) Advantages of planting crops in rows:

- Easier weeding
- Better sunlight exposure

53.

(a) Reptiles

(b)

- i. They are cold blooded/ they reproduce by laying eggs.
- ii. They are warm blooded

(c) Class Q lay fertilized eggs while amphibians lay unfertilized eggs.

54.

(a) Scurvy

(b) Bleeding gums/soft and sponge gums

(c) Fruits

55.

(a) Dynamo

(b) To rotate the dynamo/to provide kinetic energy that rotates the dynamo.

(c) Kinetic energy changes to electrical energy.

(d) By speeding the bicycle.