

PLE 2016 MARKING GUIDE INTEGRATED SCIENCE

1. Name the gas used in fire extinguishers.
 - **Carbon dioxide (CO₂)**
2. State the eye disease spread by houseflies.
 - **Trachoma**
3. Which part of a fish performs a similar function as the human ear?
 - **Lateral line**
4. Name the male reproductive cells in flowers.
 - **Pollen grains**
5. Give any one way in which wood fuel can be conserved.
 - **Using energy-efficient/saving stoves**
 - **covering food while cooking**
6. What is the use of this instrument at the weather station?
 - **To show the strength of wind.**
7. Which method of heat transfer enables a person to iron clothes using a flat iron?
 - **Conduction**
8. Why should cold water be poured on the part of the body which has been scalded or burnt?
 - **To reduce pain and prevent further tissue damage**
9. Apart from decomposition, in which other way is soil formed?
 - **Weathering of rocks**
10. What is the importance of smoke during the harvesting of honey?
 - **To calm the bees**

11. State the class of lever in which the effort is between the fulcrum and the load.

- **Class 3 lever/Third class levers**

12. Give a reason why male anopheles mosquitoes do not transmit malaria parasites to humans.

- **They do not feed on blood**

13. How can foot and mouth disease be controlled in cattle?

- **By vaccination**
- **By quarantine**

14. Give one way in which farmers can improve the supply of nitrogen in the soil without the use of artificial fertilizers.

- **Planting leguminous crops.**

15. Name muscle P.

- **Biceps**

16. What happens to muscle Q when the arm is raised?

- **It relaxes.**

17. Which intestinal worm enters the human body through bare feet?

- **Hookworm**

18. How do plants make use of the gas given out by animals during respiration?

- **For photosynthesis**

19. State any one use of plane mirrors to people.

- **For seeing themselves**
- **For shaving**
- **For security**

20. Apart from helping in pollination, give one other way in which wind is useful to plants.

- **Wind helps in dispersing seeds**

21. Which part of a maize grain has a similar function as the cotyledon of a bean seed?

- **Endosperm**

22. State any one characteristic which shows that a bat is a mammal.

- **Bats give birth to live young ones**

23. Which blood cells carry oxygen in the body?

- **Red blood cells**

24. Give any one reason why breastfeeding is encouraged for at least two years?

- **Provides essential nutrients and antibodies to the baby**

25. Name any one scale in which temperature is measured.

- **Celsius/Fahrenheit scale**

26. Use arrows to show what happens to the two bar magnets.

- **Opposite poles attract, like poles repel.**

27. Name the human body system to which the lungs, kidneys, and skin belong.

- **Excretory system**

28. Give any one way in which bacteria in pit latrines are useful.

- **They decompose human wastes**

29. Name one disease that affects the stomach because of alcoholism.

- **Gastritis**
- **Gastric ulcers**

30. Apart from polio vaccine, name any other vaccine administered to children at 6 weeks of age.

- **DPT (Diphtheria, Pertussis, Tetanus)**

31. In which part of the human alimentary canal is water absorbed?

- **Large intestine**

32. What is the danger of having too much wax in the human ear?

- **Can cause temporary hearing loss**

33. What form of energy is produced by dry cells?

- **Electrical energy**

34. Give any one good health habit that can improve the working of the lungs.

- **Regular exercise**

35. Apart from eating a balanced diet, give any one other way of controlling common diseases at home.

- **Maintaining hygiene**

36. Name the method of plant propagation shown in the diagram above.

- **Grafting**

37. Which organs are used by both fish and tadpoles for breathing?

- **Gills**

38. Give any one secondary sex characteristic which is common to both adolescent boys and girls.

- **Growth of pubic hair**

39. Name the fungi which normally grow on leftover foods.

- **Moulds**

40. What happens to light rays when they meet a convex lens?

- **They converge**

SECTION B

41. a) State any two ways in which vectors spread diseases to humans.

- **Through bites**
- **By contaminating food and water**

b. Give any two ways of preventing vectors from spreading diseases to humans.

- **Using insect repellent**
- **Keeping the environment clean**

42. a) Name the parts marked S and T

- S: Ureter**
- T: Urinary bladder**

b. What is the function of part marked R.

- **Filtering wastes from the blood**

c. Give any one disease that affects the above system.

- **Urinary tract infection/kidney stones/bladder infection**

43. Write the correct effect to the activity in the space provided below:

a. Irrigation

- **Allows growth of crops all seasons**

b. Afforestation

- **Promotes convectional rainfall**

c. Mulching

- **Preserves soil moisture**

d. Crop rotation

- **Leads to death of crops pests.**

44. a) Give any two examples of non-renewable resources in the environment.

- **Coal**
- **Crude oil**

b. State any two ways of conserving non-renewable resources.

- **Recycling**
- **Using alternative energy sources**

45. a) To which group of plants do ferns and liverworts belong?

- **Non-flowering plants**

b. How is the reproduction of ferns similar to that of liverworts?

- **Both reproduce by spores**

c. Give two other plants that reproduce in the same way as ferns and liverworts.

- **Mosses**
- **Hornworts**
- **Horsetails**

46. a) Name the change of state which takes place when;

- Vapour changes to liquid: **Condensation**
- A solid changes directly to gas: **Sublimation**

b. Apart from causing a change of state, give two other effects of heat on matter.

- **Expansion**
- **Increase in temperature**

47. a) Name the type of eclipse shown in the diagram above.

- **Solar eclipse**

b. Name the shadows marked P and Q.

- P: **Umbra**
- Q: **Penumbra**

c. What happens to a person who would be in part X during the eclipse?

- **They would see a total eclipse**

48. a) In which one way is each of the following elements of Primary Health Care (PHC) important to the community?

i. Water and sanitation: **Prevents waterborne diseases**

ii. Maternal and child health: **Reduces infant and maternal mortality**

b. Give any two health care services which are provided through maternal and child health.

- **Immunization**
- **Antenatal care**

49. a) Name two systems of keeping poultry that enable a farmer to keep a large number of birds.

- **Battery system**
- **Deep litter system**

b. State any two viral diseases that can spread easily in the above systems of poultry keeping.

- **Newcastle disease**
- **Avian influenza**

50. a) Give any one characteristic which is common to all invertebrates.

- **Lack of a backbone**

b. To which group of invertebrates do the following animals belong?

- i. Snail: **Molluscs**
- ii. Grasshopper: **Insects**

c. State one way in which snails may be dangerous to humans.

- **They can be carriers of parasitic worms**

51. a) Name the parts marked M and K

i. M: **Enamel**

ii. K: **Gum**

b. Which mineral salt helps to form part M?

- **Calcium**

c. Give the function of part labelled N.

- **To house blood vessels and nerves.**

52. a) State the method that can be used to separate;

i. Fruit seeds from juice: **Filtration**

ii. Millet seeds mixed with its husks: **Winnowing**

b. Give the importance of the following steps in cleaning clothes at home.

i. Sorting: **To prevent colour mixing**

ii. Soaking: **To loosen dirt**

53. a) Write down any two examples of anti-social behaviors in our community.

- **Stealing**
- **Vandalism**

b. State any two ways of controlling anti-social behaviors in our community.

- **Providing education and awareness**
- **Enforcing laws**

54. a) Apart from using solfa notation, mention any two other ways of storing sound.

- **Digital recording/recording**
- **Staff notation/Written music sheets**

b. Name two instruments used to reproduce the sound stored by solfa notation.

- **Piano**
- **Recorder**
- **Xylophone**

55. The diagram below shows the water cycle. Study and use it to answer questions that follow.

a. Name the type of clouds represented by letter A.

- **Nimbus clouds**

b. State the process taking place at B and C.

i. B: **Evaporation**

ii. C: **Condensation**

c. What is the importance of the sun in the above diagram?

- **The sun provides heat energy for evaporation, driving the water cycle.**