

P.7 PRE-MOCK EXAMINATIONS 2023

SET TWO

INTEGRATED SCIENCE

MARKING GUIDE

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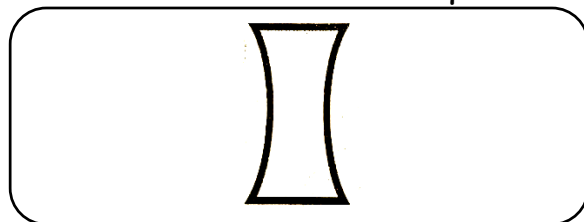
SECTION A (40 MARKS)

1. Name any one mineral salt deficiency disease in children.
✓ Goitre/anaemia/rickets
2. Write down any one effect of tobacco smoking to a pregnant woman.
✓ It leads to stillbirth/premature birth/miscarriage/low birth weight
3. Give any one condition which is necessary for the formation of reddish brown substance on iron tools left outside at night.
✓ Presence of oxygen/moisture (water)
4. Name the method of harvesting trees which involves cutting of the whole tree at stump level.
✓ Coppicing
5. Why does an inflated balloon burst when put under too much sunshine for a long time?
✓ Due to expansion of gases (air) inside the balloon
6. Write down any one adaptation of a cactus plant to its life in desert.
✓ Its leaves are modified into spines to reduce water loss/has a fleshy stem to store water/has long roots to absorb water from underground/ has sunken stomata to reduce water loss/has a thick cuticle to reduce water loss.

7. In which state of matter is carbon dioxide filled in a fire extinguisher?

✓ Liquid state

Below is a diagram of a lens. Use it to answer questions 8 and 9.



8. Name the eye disorder corrected using the lens shown above.

✓ Short sightedness (myopia/nearsightedness)

9. How does the lens shown above affect a parallel beam of light?

✓ It diverges light rays/spreads out light rays

10. Give any one reason why water is not used as a thermometric liquid.

✓ Water is a poor conductor of heat/sticks on (wets) the glass walls of the thermometer/does not have uniform expansion/is not seen easily since it is colourless

11. Identify the routine practice on a poultry farm that enables a farmer to have easy and quick access to loans from banks.

✓ Record keeping

12. What advice can you give to a mother whose children are suffering from diarrhoea?

✓ To give them ORS/take them for treatment

13. Of what importance is a dynamo in a car?

✓ It recharges the car battery/changes electrical energy into mechanical (kinetic) energy for the car to move.

14. Name the gas which accumulates in the atmosphere during decomposition.

✓ Carbon dioxide

15. Which sense enables a person to identify colours of objects?

✓ Sense of sight (sight)

16. Name any one sexually transmitted disease which can cause blindness in new born babies.

✓ Gonorrhoea/chlamydia

17. Shafikah cut herself while peeling potatoes and dark red blood oozed out. What type of blood vessel did she cut?

✓ Vein

The diagram below shows a mother washing clothes. Study it and answer questions **18** and **19**.



18. State one problem a mother is likely to face as a result of washing clothes with hard water.
- ✓ Hard water wastes soap/stains clothes
19. Name any one step in laundry a mother must have done before washing?
- ✓ Sorting/soaking
20. Give any one function of veins in leaves.
- ✓ They transport water and mineral salts in the leaf/transport food from the lamina to the midrib
21. Why should a person with sickle cell anaemia be advised to wear a sweater on a cold day?
- ✓ Sickle cell anaemia worsens on a cold day
22. Write down any one advantage of keeping crossbreeds over exotic breeds of chicken.
- ✓ Crossbreeds are more resistant to diseases/bad weather conditions/need less care and attention than exotic breeds of chicken
23. Why is biceps muscle grouped under voluntary muscles?
- ✓ Its movement is controlled is controlled by the brain/controlled at one's will/its movement can be consciously controlled
24. To which group of mammals does an elephant shrew belong?
- ✓ Insectivorous (insect eating) mammals (insectivores)
25. How does a chameleon benefit from its long sticky tongues?
- ✓ It enables a chameleon to trap (catch) its prey (insects for food)
26. Give a reason why athletes always breathe heavily after an event?
- ✓ To pay the oxygen debt
27. State the reason why people are discouraged from putting potted plants inside their bedrooms at night.
- ✓ To prevent competition for oxygen during respiration at night

28. Mention any one use of a veranda on a dwelling house.
- ✓ It prevents flowing water from entering the house/prevents dampness in the house
29. How do fish protect their eggs from aquatic predators?
- ✓ Some fish carry their eggs in mouth until they hatch/scatter their eggs/build nests for their eggs
30. Give a reason why a kitchen should be ventilated properly.
- ✓ To allow free air circulation/to allow in fresh air/to allow out smoke/to prevent suffocation of people inside the kitchen
31. Write down any one way of preventing obesity among children.
- ✓ Encouraging them to perform regular body exercises/feeding children on a balanced diet/limiting the amount of time children watch television/avoid giving children a lot of animal fats/avoid giving them excess fruit juices and snacks
32. Name the blood-sucking insect that bites school children at night when they fail to keep their beddings clean.
- ✓ Bedbug
33. Which property of air enables wind to remove husks from seeds?
- ✓ Air exerts pressure
34. Name the type of curved mirrors that provide a wider field of view.
- ✓ Convex mirror (diverging mirror)
35. Give a reason why cattle are always given enough drinking water before dipping them in acaricides.
- ✓ To prevent cattle from drinking acaricides

The diagram below shows a common method of harvesting tuber crops. Study it carefully and answer questions **36** and **37**.



36. Name the method of harvesting tuber crops shown above.
- ✓ Uprooting

37. Why is the above method of harvesting tuber crops not recommendable for commercial purpose?

✓ It is tiring/time consuming/some tubers remain in the ground

38. Name any one vector that spreads relapsing fever.

Louse/Tick

39. State any one importance of charcoal when cleaning our teeth.

✓ It whitens teeth/removes stains/removes toxins

40. Name the method of milking that should be used by dairy farmers with large herds of dairy cattle.

✓ Machine milking

SECTION B (60 MARKS)

41. (a) Name any one part of the bird's egg which provides food nutrients to the growing embryo.

✓ Egg yolk/Albumen (egg white)

(b) How is an egg shell adapted to protection of the inner parts of an egg?

✓ It is hard

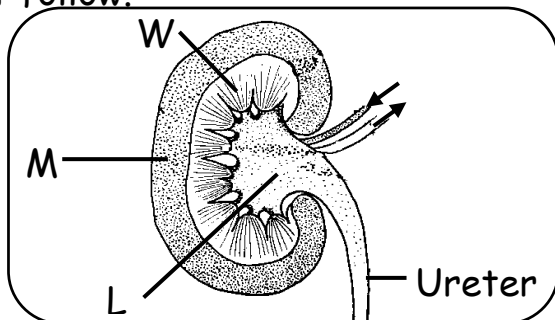
(c) Mention any one abnormality in bird's eggs.

✓ Yolkless eggs (wind eggs)/double yolked eggs/blood stained eggs/soft shelled eggs

(d) What type of change occurs when an egg breaks?

✓ Physical change

42. The diagram below is of a human kidney. Study it carefully and answer questions that follow.



(a) Name the part marked W.

✓ Medulla (Renal medulla)

(b) Give any one adaptation of the part marked M to its function.

✓ It has nephrons/has glomeruli (network of blood capillaries)

(c) State the function of part L in the kidney.

✓ It collects urine before it flows to the ureter

(d) Name the waterborne disease that affects the kidneys.

✓ Bilharziasis

43. (a) Give a reason why drone bees are not commonly found in bee hives.

✓ They are killed by worker bees during food shortage (drought)

(b) Name the structures used by worker bees to carry the following substances from plants to the bee hive.

✓ Pollen: Pollen basket

✓ Nectar: Honey sac (honey stomach)

(c) Why is it not a wise idea to harvest honey during day time?

✓ It can lead to bee stings

44. (a) Name any one agent of soil erosion.

Moving animals/strong wind (wind)/flowing water

(b) In which way do the following farming practices cause soil erosion?

✓ Bush burning: It leaves the soil bare exposing it to the agents of erosion

✓ Over cultivation: It loosens soil particles for easy removal by the agents of agents

(c) Give any one way in which soil erosion affects crop growing.

✓ It causes soil exhaustion (soil infertility)/destroys crops

45. (a) Why is burning regarded as a chemical change?

✓ It is irreversible/forms a new permanent substance

(b) Write down any one condition necessary for burning.

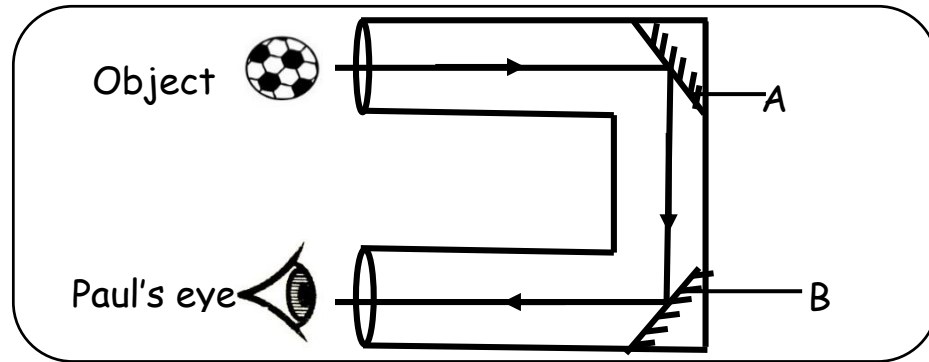
✓ Presence of oxygen/fuel (combustible substance)/ignition temperature

(c) How do the following substances put out fire?

✓ Sand: It cuts off (blocks) oxygen supply

✓ Water: It cools the fuel until it stops burning/lowers temperature of the fuel below the ignition temperature

46. The diagram below shows an optical instrument. Study and use it to answer questions that follow.



(a) Name the optical instrument shown above.

✓ Periscope

(b) Give any one characteristic of an image seen by the Paul's eye.

✓ It is virtual (virtual without lateral inversion)/upright (erect)

(c) State the use of the optical instrument above to a night watchman.

✓ It helps a night watchman to see (watch) over tall fences

(d) What is the value of the angle of incidence when the incident ray strikes plane mirror at a right angle?

✓ 0°

47. (a) Which type of teeth grows first in the jaws of a baby?

✓ Incisor teeth

(b) Name the removable devices used to replace missing teeth in the jaws.

✓ Dentures

(c) How does calcium deficiency affect the human teeth?

✓ It weakens the teeth/increases the risks of broken teeth

(d) Give any one way of caring for the teeth.

✓ Brushing teeth after meals/Dental flossing/rinsing the mouth after meals/feeding on food rich in calcium and vitamin D/avoid eating a lot of sweets (sugary food)/avoid opening soda bottles using teeth/avoid biting hard objects

48. (a) Name the fluid that reduces friction during heart movements.

✓ Pericardial fluid

(b) Write down any two conditions that can increase heartbeat.

✓ Fright/excitement/physical exercises/high temperature/sickness/increased level of adrenaline hormone

(c) How does regular making of physical exercises benefit the heart?

- ✓ It strengthens heart (cardiac) muscles/reduces the risks of heart attack

49. (a) Write down the function of each of the fins listed below to a fish when swimming in water.

- ✓ Caudal fin: For turning (changing) direction/increasing speed/forward movement
- ✓ Pectoral fin: For braking (stopping or reducing speed)/maintaining balance

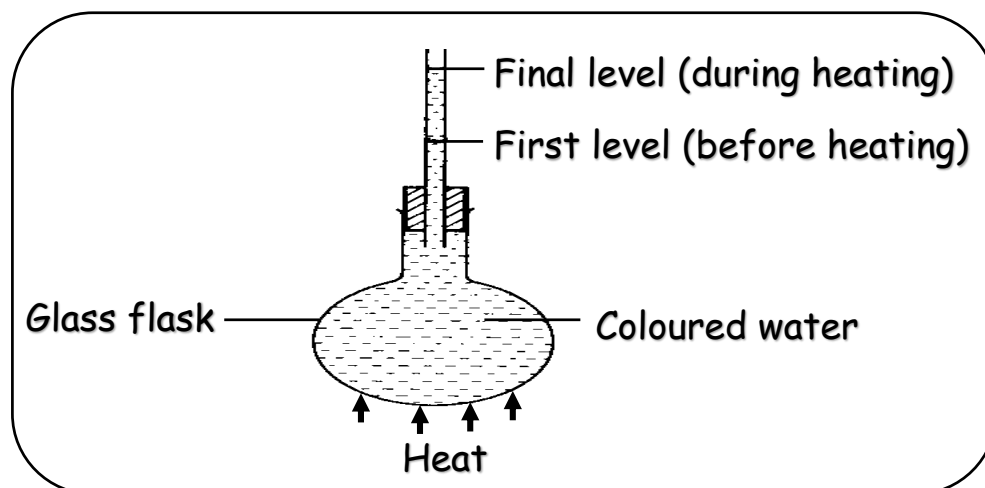
(b) Why does a lungfish take long to die when removed from water?

- ✓ Its swim bladder is modified into lungs for breathing/It has lungs for breathing on land

(c) In which way does fish keeping help in control of malaria?

- ✓ Fish in ponds eat mosquito larvae

50. P.5 pupils carried out the experiment below. Study it carefully and answer the questions that follow.



(a) What was the experiment about?

- ✓ Expansion in liquids (Liquids expand when heated)

(b) Why did the level of coloured water in the narrow glass tube rise during heating?

- ✓ Due to expansion of the coloured water/the coloured water expanded on heating

(c) How does heat pass through the flask to reach the coloured water put inside it?

- ✓ By conduction

(d) By what process do liquids move up through narrow tubes?

- ✓ Capillary action/capillarity/capillary effect

51. (a) How is an echo formed?

✓ By obstruction of sound waves

(b) Why do music producers always put soft porous materials in their music recording studios?

✓ To prevent echoes/to absorb sound waves which would cause echoes

(c) Give any one way in which echoes are useful to people on water bodies.

✓ They help sailors and fishermen to detect the depth of water bodies/ help fishermen to locate shoals of fish

(d) What do we call the highest point of a sound wave?

✓ Crest

52. Rearrange the steps below to show how the water cycle occurs.

(i) Nimbus clouds become heavy and fall as rain.

(ii) Water vapour rises to the atmosphere.

(iii) Sun's heat causes evaporation and transpiration.

(iv) Water vapour condenses into nimbus clouds.

✓ Sun's heat causes evaporation and transpiration.

✓ Water vapour rises to the atmosphere.

✓ Water vapour condenses into nimbus clouds.

✓ Nimbus clouds become heavy and fall as rain.

53. (a) Name the vaccine which is injected in the baby's body at birth.

✓ BCG vaccine

(b) At what age does a baby receive the first dose of DPT vaccine?

✓ 6 weeks ($1\frac{1}{2}$ months)

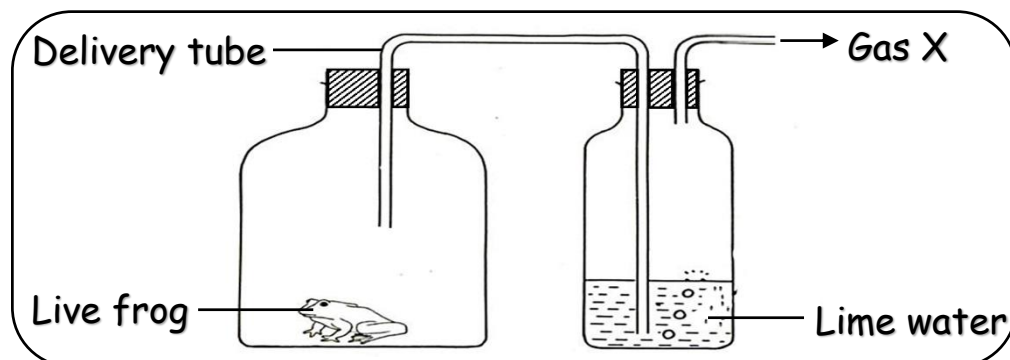
(c) Name any one viral childhood immunizable disease.

✓ Poliomyelitis (polio)/measles/hepatitis B/diarrhoea

(d) Write down any one importance of a child health card to a mother.

✓ It enables the mother to monitor the child's growth/to know the next date for immunization/know the diseases which were immunized.

54. The experiment below is about respiration. Study it carefully and answer questions about it.



(a) What does the experiment above prove about respiration?

✓ Respiration produces carbon dioxide/Carbon dioxide is produced during respiration

(b) Name the gas marked X.

✓ Carbon dioxide

(c) What will happen to lime water after some time?

✓ It will become milky/it will turn colourless to milky

(d) How does a frog benefit from respiration?

✓ A frog gets energy

55. (a) List down any two exotic breeds of dairy cattle.

✓ Friesian/Ayrshire/Brown Swiss/jersey/Guernsey/Jamaica Hope/Danish Red

(b) Name the special hydrometer commonly used on a dairy farm to check the purity of milk.

✓ Lactometer

(c) Why should a dairy farmer wash the udders of dairy cows with warm water before milking?

✓ To stimulate milk let-down/to prevent milk contamination

END

