



**VICTORY STEP EDUCATION SERVICES – KAMPALA  
PRIMARY SEVEN QUALITY CHECK ONE**

**2024**

**INTEGRATED SCIENCE**

**MARKING GUIDE**

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**VSES 2024**

**TEACHER'S NAME .....**

**SCHOOL NAME: .....**

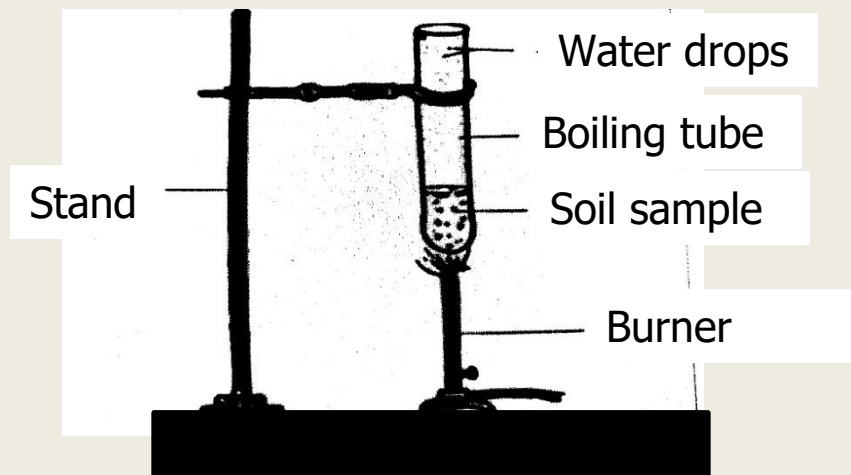
**COMMENT FROM THE HEAD OF DEPARTMENT:**

*Ensure that as you make corrections of this paper you revise exhaustively to make sure that children / learners get what meant to be given. accept to learn , re – learn and unlearn on new changes you might find in the marking guide*

## SECTION A: 40 MARKS

Questions 1 to 40 carry one mark each.

1. Give a reason why coco yams are regarded as stem tubers.
  - ✓ **A cocoyam stores its food in swollen underground stem.**
  - ✓ **A cocoyam has a swollen underground stem for food storage.**
  - ✓ **Note: A cocoyam is a stem tuber not a root tuber as stated by different books.**
  - ✓ **Irish potatoes and cocoyam are the stem tubers we have.**
2. Which juice is produced by stomach walls during digestion of food?
  - ✓ **Gastric juice reject hydrochloric acid.**
3. How is a fish adapted to live in water?
  - ✓ **Has gills for breathing while in water**
  - ✓ **Breathes dissolved oxygen while in water.**
4. What does the experiment below show about soil?



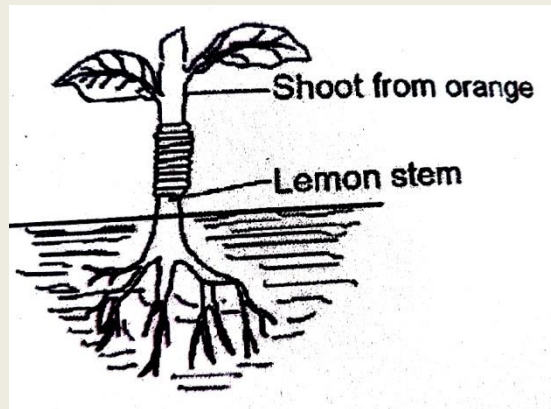
- ✓ **Soil has water//soil contains water.**
5. How do living organisms help in soil aeration?
    - ✓ **By creating tunnels in the soil.**
    - ✓ **By creating more air spaces in the soil.**
  6. Why is it not good to plant pest affected cuttings?
    - ✓ **To ensure good quality of plants**
    - ✓ **Pest affected plant cuttings cannot germinate.**

7. Give one reason why transplanting of seedlings is done in the evening.
- ✓ **To prevent wilting of seedlings.**
  - ✓ **To prevent excessive transpiration which may lead to wilting.**
8. Why are laying nests put in dark corners?
- ✓ **To prevent egg eating.**
  - ✓ **To prevent eggs from being eaten by poultry birds.**
9. Write down one disadvantage of tethering method of grazing goats.
- ✓ **Goats do not do physical exercises.**
  - ✓ **Leads to over grazing in an area where the animal is tied.**
  - ✓ **The goat may get injured by the goat.**
  - ✓ **The goat might be attacked by predators like lions and leopards.**
  - ✓ **Only few goats can be kept.**
10. Mention one garden tool used for pruning.
- ✓ **Secateurs**
  - ✓ **Pruner**
  - ✓ **Panga**
  - ✓ **Pruning saw**
  - ✓ **shears**
11. State one way in which trees are able to reduce air pollution.
- ✓ **They extract /absorb carbon dioxide from polluted air for photosynthesis**
12. What germ causes mastitis in cattle?
- ✓ **Bacteria**
13. Mention one reason why drugs should be kept away from moisture and sunlight.
- ✓ **To prevent them from getting spoilt.**
  - ✓ **Moisture and sunlight cause chemical reactions that degrade drugs.**

14. How are arteries able to withstand blood pressure from the heart?
- ✓ **They have thick walls to withstand high blood pressure from the heart.**
15. Why should udders and teats be washed with warm water before milking?
- ✓ **To remove dirt from teats.**
  - ✓ **To stimulate milk letdown.**
16. Which part of a maize grain has the similar function as that of a cotyledon in a bean seed?
- ✓ **Endosperm.**
17. Which agent of soil erosion causes gullies?
- ✓ **Fast flowing water.**
  - ✓ **Flowing water**
18. State any one sign of disease on plant leaves.
- ✓ **Holes on the leaves.**
  - ✓ **Leaves turn yellow**
  - ✓ **Curling of leaves**
19. Why are the legs of a person who has fainted raised slightly higher than the head when giving first aid?
- ✓ **To allow flow of oxygenated blood to the brain reject to prevent fainting .**
20. Which property of air makes lungs to expand when we breathe in?
- ✓ **Air occupies space.**
21. How is the reproduction of ferns similar to that of liverworts?
- ✓ **Both reproduce by means of spores.**
22. To which group of invertebrates does a slug belong?
- ✓ **Molluscs**
23. Name the fungi which normally grows on left over foods?
- ✓ **Mould//moulds**
24. Apart from feeding on a balanced diet, give any one other way of controlling common diseases at home.
- ✓ **Avoid smoking**
  - ✓ **Going for medical check up**
  - ✓ **Taking children for immunization**

- ✓ **Food hygiene**
- ✓ **Maintaining good personal hygiene**
- ✓ **Promoting good sanitation**
- ✓ **Vector control.**

The diagram below shows a method of plant propagation. Use it to answer the questions that follow.



25. Name the method of plant propagation shown above.

- ✓ **Grafting method.**

26. Apart from lemon and orange, mention one other plant propagated by the method shown above.

- ✓ **Mangoes**
- ✓ **Guavas**
- ✓ **Ovacado**

27. Name the change of state which takes place when a solid changes directly to gas.

- ✓ **Sublimation**

28. State one way in which the jelly around the eggs of toads is important.

- ✓ **Prevents the eggs from predators.**
- ✓ **Prevents the eggs from bacteria and fungi.**
- ✓ **Keeps the eggs floating on water**
- ✓ **Stops the eggs from drying up**
- ✓ **Keeps/holds the eggs together.**

29. What is the use of a rain gauge at a weather station?

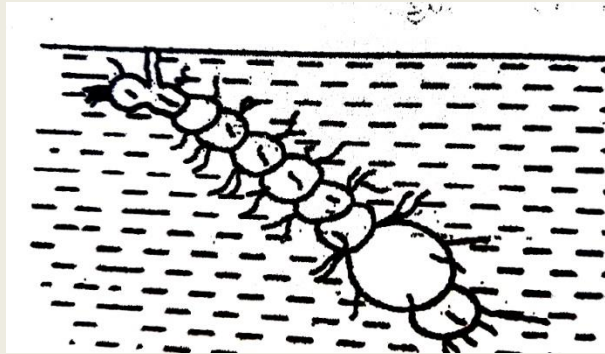
- ✓ **To measure the amount of water received in an area. The rain gauge is calibrated/labeled in mm not cm because they want to measure how deep the rain water has entered into the soil.**

30. Give any one reason why breast feeding is encouraged for at least two years
- ✓ **To strengthen the baby's immunity**
  - ✓ **To create love between the mother and the baby**
  - ✓ **To delay the next pregnancy**
  - ✓ **To improve on the health of the baby.**
31. Why can't a male anopheles mosquito spread malaria to people?
- ✓ **It does not feed on human blood**
  - ✓ **It feeds on plant juices.**
- Reject it lacks the proboscis.**
32. Name the respiratory organs protected by the ribcage.
- ✓ **The lungs/human lungs/lungs.**
33. Give the function of the brood chamber in a modern bee hive.
- ✓ **It is where the queen bee lays eggs**
  - ✓ **It is where grub grows**
  - ✓ **It is where food for the grub is stored.**
34. Which disease causing germ attacks white blood cells?
- ✓ **HIV/Human Immune-deficiency Virus.**
35. State one reason why farmers stake tomato plants.
- ✓ **To provide extra support**
  - ✓ **For easy weeding**
  - ✓ **To ensure proper growth of tomato**
  - ✓ **To prevent tomato plants from rotting.**
36. State one role played by the school health committee.
- ✓ **Organizes health parades**
  - ✓ **Sensitizes children about personal hygiene**
  - ✓ **Raises funds for the school**
  - ✓ **Provides hand washing facilities**
  - ✓ **Encourages immunization programs**
  - ✓ **Identifies and reports health problems in the school.**
37. Where in the female reproductive system are female hormones for reproduction produced?
- ✓ **Ovary**
  - ✓ **Ovaries**

38. In which state of matter does heat travel slowest?

✓ **Solid state // solid state of matter// in solid.**

39. Name the mosquito which develops from such a larva drawn below.



✓ **Culex mosquito//tiger mosquito.**

40. How do silvery walls of a vacuum flask reduce heat loss?

✓ **By radiation//by radiating heat//by reflecting radiant heat.**

### **SECTION B (60MARKS).**

41a) State the mode of reproduction in molluscs.

✓ **Sexual reproduction.**

b) Give any two ways in which molluscs are important to people.

✓ **Source of food to some people**

✓ **Shells of molluscs are used in jewellery**

✓ **Crushed shells of shelled molluscs are mixed with poultry feeds to provide birds with calcium.**

c) How are water snails dangerous to people in the environment?

✓ **They spread bilharziasis to people.**

42a) Which form of energy is produced by a vibrating surface?

✓ **Sound energy.**

b) State the difference between pitch and volume of sound.

✓ **Pitch of sound is the how high or low sound is while volume of sound is how loud or soft sound is.**

✓ **Pitch of sound is the highness or lowness of sound while volume of sound is the loudness or softness of sound.**

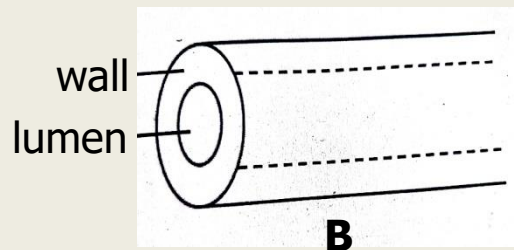
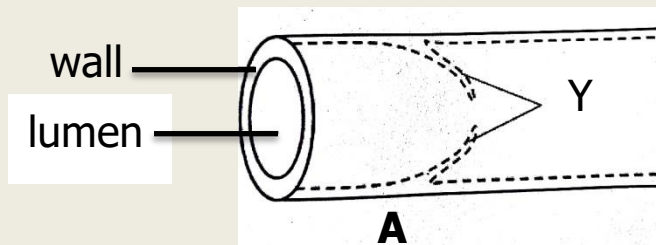
c) State one factor that affect the pitch of sound.

- ✓ **Frequency**
- ✓ **Size of the object**
- ✓ **Tension**
- ✓ **Nature of the material**

d) Which property of sound enables bats to locate places?

- ✓ **Sound can be reflected.**

43. Study the blood vessels A and B below and use them to answer the questions that follow.



a) Name the blood vessel marked.

- ✓ **A -Vein**
- ✓ **B -Artery**

b) How are structures marked Y similar to the kink of a clinical thermometer ?

- ✓ **Both reduce the back flow of liquids.**

c) Mention two ways how blood vessel A is different from blood vessel B in terms of their structures.

- ✓ **A has valves to prevent the back flow of blood while B has thick walls which help in preventing the back flow of blood**
- ✓ **A has a wide lumen while B has a narrow lumen**
- ✓ **A has thin walls while B has thick walls.**

44a) List any one disorder of the reproductive system in;

i) females

- ✓ **Ectopic pregnancy**
- ✓ **Blockage of the oviduct**
- ✓ **Misplaced uterus**
- ✓ **Infertility**
- ✓ **Vaginal dryness**



ii) males

- ✓ **Impotence**
- ✓ **Premature ejaculation**
- ✓ **Low sperm count**
- ✓ **Malformed sperms.**
- ✓ **Sterility.**

b) State any two ways in which the reproductive system can be maintained in a proper working condition.

- ✓ **Observing personal hygiene**
- ✓ **Feeding on a balanced diet**
- ✓ **Avoid from masturbation**
- ✓ **Having regular physical exercises**
- ✓ **Going for medical check up.**

45a) Describe an experiment to show that water can exist in three states of matter.

- ✓ **Heat liquid water until it turns vapour(gaseous state)**
- ✓ **Cool the vapour in the container to become water again(liquid state)**
- ✓ **Keep the water in a regeator to make freeze and become ice(solid state)**

b) Why does water exist in all three states of matter.

- ✓ **The physical properties of water changes with the change in temperature.**

46a) Which part of the body is affected by the following diseases?

i) scabies – **Skin / the skin/the human skin.**

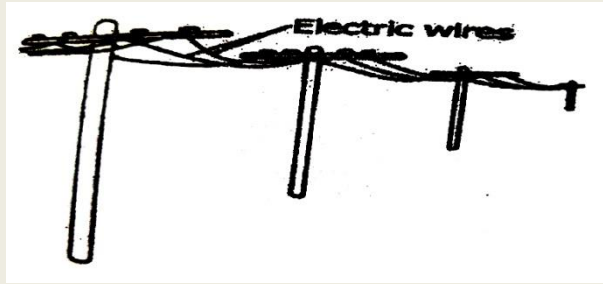
ii) Trachoma – **the eye/human eye/eye.**

b) State the vector which spreads each of the following diseases.

i) Bilharziasis – **water snail/snails reject fresh water snail.**

ii) Rabies - **rabid dog /infected dog.**

47. Use the diagram below to answer the questions that follow.



a) Why do wires appear loosely fixed as shown in the diagram above?

✓ **Due to expansion of the wires.**

**Reject to leave room for contraction and expansion because expansion is the one that makes the wires to become loose.**

b) In which type of weather do wires appear loosely fixed as shown above?

✓ **Sunny weather reject sunshine.**

c) Give a reason why electric wires are placed high up.

✓ **To prevent risk of electric shock**

✓ **To prevent theft of wires**

d) Give any one reason why wooden poles are used to carry electricity.

✓ **Wood is a bad conductor of heat/insulator.**

48a) Name one disease in cattle caused by a virus.

✓ **Rinder pest**

✓ **Foot and mouth disease**

**Reject pneumonia/Nairobi disease**

➤ **Pneumonia is caused by both a virus and a bacteria which does not match with the stem of the question which needs a viral disease.**

➤ **Nairobi disease is caused by a virus but it does not affect cattle.**

b) Give any two signs /symptoms of anthrax in cattle.

✓ **High fever**

✓ **Loss of appetite**

✓ **Blood stained diarrhea**

✓ **Bleeding from body openings.**

c) State any one way of controlling the spread of anthrax among cattle.

✓ **Vaccinate animals regularly**

✓ **Impose quarantine/burn or bury dead animals deep in the soil.**

49a) Mention any two ways of conserving animals in the environment.

- ✓ **Feeding animals properly**
- ✓ **Treating sick animals**
- ✓ **Establishing game parks/zoos/game reserves to protect wild animals**
- ✓ **Enforcing strict laws against poaching**

b) Mention any two examples of plant fibres.

- ✓ **Cotton wool**
- ✓ **Sisal**
- ✓ **Jute**
- ✓ **Flax**
- ✓ **Hemp.**

50. Use the organisms drawn below and use them to answer the questions that follow.



a) How is animal B similar to animal C in terms of reproduction?

- ✓ **Both reproduce by laying eggs**
- ✓ **Both lay eggs .**

**Reject any other response that does not match with reproduction.**

b) Give one way how animal D is important to a poultry farmer.

- ✓ **Crushed shells of animal D are mixed with animal feeds to provide birds with calcium.**

c) To which class of vertebrates do animals A and B belong?

- ✓ **Mammals //mammalia**

d) Why is animal C able to live both on land and in water ?

- ✓ **Has the moist skin for breathing while in water and the lungs for breathing while on land.**

51a) Give the role of each of the following during seed germination.

- i) Oxygen - **For respiration.**

ii) Moisture

✓ **Softens the seed testa**

✓ **Dissolves the food needed by the embryo**

b) Which condition of germination is also useful in the formation of starch in plants?

✓ **Water reject sunlight.**

c) Give the role of plumule to a germinating seed.

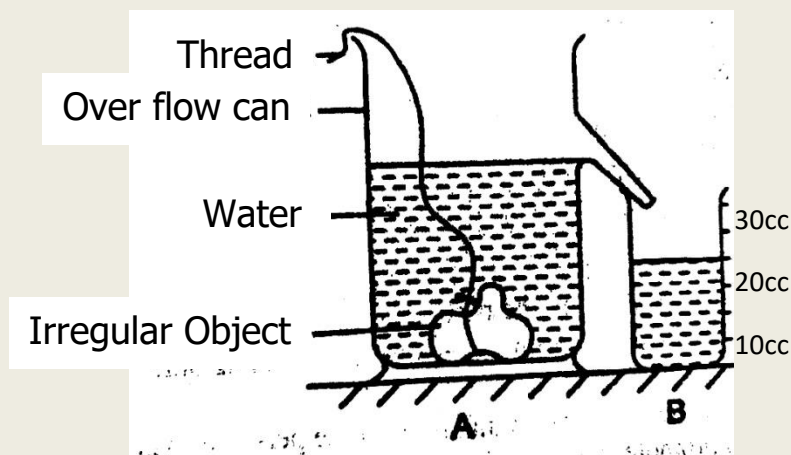
✓ **Grows into a shoot system.**

52a) Why is a string used for holding an irregular object when measuring its volume.

✓ **To prevent water from splashing**

✓ **To prevent the glass from breaking**

b) Find the volume of the irregular object below.



Volume = 25cc ✓ **1mark**

c) If the density of the irregular object is 10g/cc . find the mass of the irregular object.

Mass = Density x Volume

Mass =  $\frac{25\cancel{\text{cc}} \times 10\text{g}/\cancel{\text{cc}}}{\cancel{\text{cc}}}$  ✓ **1mark**

Mass = 25g ✓ **1mark**

53a) Which immunisable disease leads to stiff muscles all over the body?

✓ **Tetanus.**

b) Name the vaccine given to a child with the disease mentioned in 53(a) above.

✓ **DPT Vaccine//DPT – Hep B + Hib 1 // Pentavalent vaccine**

c) Where on the body is the above vaccine in 53(b) above administered?

✓ **Left upper thigh.**

d) How is the above vaccine in 53(b) above administered?

✓ **Through injection**

✓ **By injection on the left upper thigh.**

54a) Which type soil is sticky when wet?

✓ **Clay soil.**

b) Which characteristic of loam soil makes it the best for crop growing?

✓ **Having a lot of humus.**

c) Mention two living components of the environment.

✓ **Fungi**

✓ **Bacteria**

✓ **Insects**

✓ **Mice**

✓ **Rats**

✓ **Squirrels**

✓ **Termites**

✓ **Nematodes**

**Reject humus/air/mineral salts and rock particles these are non – living components of the environment.**

55a) How do most fungi reproduce?

✓ **By means of spores.**

b) How are hyphae important to a mushroom?

✓ **Absorb nutrients from decaying matter.**

c) Name the fungi used in making penicillin.

✓ **Penicillium moulds//moulds**

d) Which fungi reproduces by means of budding?

✓ **Yeast**