

SURVEY EXAMINATIONS BOARD



"WHAT SPEAKS FOR QUALITY, LET QUALITY SPEAK FOR ITSELF"

2024



INTEGRATED SCIENCE UNIQUE SERIES
OFFICIAL MARKING GUIDE

ANSWERS AT 40 MARKS

~~1) Name three diseases which carry one mark each~~

~~2) Name two diseases which pass through the bare skin of the feet.~~

~~3) Name three diseases which consider when planning to start crop rotation.~~

~~4) Name the best manure of legumes~~

~~5) Name the resting period for the soil~~

~~6) Name one other function of the cotyledon in a seed~~

~~7) Name the growing embryo during germination.~~

~~8) Name the class of information found on prescribed drugs.~~

~~9) Name the children's medicine~~

~~10) Name the name of the drug~~

~~11) Name the medicine given to the patient~~

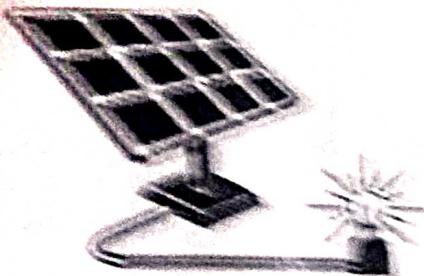
~~12) Name the medicine~~

~~13) Name the importance of mycelium to a mushroom~~

~~14) Name the food from organic decaying matter~~

~~15) Name the device used in the production of an energy resource~~

~~16) Use it to answer questions 6 and 7.~~



~~17) Name the energy resource produced using the device shown above.~~

~~18) Name the energy~~

~~19) Why is the device above usually put on the top of roof of the building?~~

~~To easily access sunlight/sunshine~~

~~20) Name any one class of food that is directly absorbed into the bloodstream of the human body.~~

~~vitamins~~

~~minerals~~

do below to show

- Give any one reason why plants and animals cannot be grouped together as living things.
- Plants have chlorophyll unlike animals
- Plants make their own food while animals feed on ready made food
- State any one way in which washing clothes is important to human health.
- It helps to prevent some skin diseases
- It helps to kill some parasites in clothes
- State any one characteristic of rib cages during breathing in humans.
- Rib cages move upwards
- Rib cages move outwards
- State any one way in which the spread of communicable intestinal diseases can be minimized at school.
- Eating well cooked meat
- Washing all foods eaten raw
- Proper disposal rubbish
- Give any one reason why mercury is used in a clinical thermometer.
- Mercury expands uniformly
- Mercury can be visible easily/it is opaque
- Mercury is a good conductor of heat
- Mercury does not wet the glass tube
- Write down any one method of grazing cattle where pasture land is divided into portions.
- Paddock grazing/ paddocking
- Strip grazing
- Apart from blocking water drainage, mention any one other way in which plastic materials affect the soil.
- Plastic materials kill useful soil organisms
- Plastic materials lead to poor soil aeration
- Plastics pollute the soil
- Give any one way in which claws are useful to birds.
- For protection
- For climbing trees
- For perching on tree branches
- For scratching the ground to get food
- For firm gripping when the bird is mating

- Q1.** State any two ways in which the following can be used to control the spread of disease causing organisms in animals.
- Spraying with insecticides
 - Spreading droppings in sunlight
 - Regular washing of the bedding and clothes in hot water
 - Pouring hot water in the joints of bed
- Q2.** Name any two features of the soil which are beneficial for the growth of plants.
- The soil contains the remains of the dead plants
 - The soil contains the remains of the dead animals
- Q3.** Why should the animals marked by the farmer in early summer be examined again during?
- Physical exercises makes them healthy in the winter months
 - Physical exercises builds the body / the muscle and with healthy in the winter
 - Physical exercises improves blood circulation
 - Physical exercises prevent constipation during winter
 - Physical exercises reduce the weight in the body
- Q4.** State any one feature used to protect / the types of oil used for protection.
- Inter particle spaces
 - The texture of soil particles
 - Soil colour
- Q5.** It is white in colour / is the glass envelope of the skeletal parts after its removal from the surroundings?
- Amniotic fluid / organic matter outside
 - It is transparent
- Q6.** Apart from eating the food timbers, materials like dried grass / straw, pebbles destroy crops in the garden.
- Through eating plants
 - Through sucking plant sap
- Q7.** State any one way in which the breeding of bed bugs can be controlled in houses.
- Spraying with insecticides
 - Burning clothes
 - Filling crevices with

- Q1. State the name of the diagram shown
and label it on the below given answer
space.

Q2. State any two ways in which plants
contribute to water loss through leaves.

Q3. Name the group of simple machines that perform the same role as the
wheel.

Q4. Give any one activity carried out by the school health club.
1. Organising school health meetups
2. Conducting school health awareness
3. Maintaining the health of children at school
4. Promoting good proportion of the healthy
5. Maintaining school hand washing facilities
6. Setting up school rules

Q5. State any one reason why you would advise a farmer to use a top bar
hive when planning to start a bee keeping project.
1. It is easy to inspect honey comb
2. Honey is harvested
3. It is durable/It is long lasting
4. Swarming is less
5. It is not damaged during honey harvesting
6. The colony develops uniformly

Q6. Give any one way in which the strength of an electromagnet can be increased.
1. Increasing the number of turns of wire in the coil
2. Increasing the current flowing through the coil

31. Give any one way in which the spider benefits from its web.
-It traps the prey for the spider
-It provides shelter to the spider
-It helps a spider to defend itself
32. Apart from being cheap, state any one other reason why most farmers in rural areas use free range system of keeping poultry.
Birds need less attention **Reduces poultry vice**
Birds get to feed on the variety of food
33. State any one way in which you can help a casualty who has got a fracture.
Wing splints around the injured part
Carrying the casualty using a stretcher
Give the casualty crutches/couch **Give the casualty arm sling**
34. State any one energy change that takes place in a complete electric circuit.
Chemical energy changes to electrical energy
Electrical energy changes to heat and then light energy
35. Mention any one process that enables the human body to work.
Digestion **Respiration** **Excretion**
36. State any one reason why gap filling is important in crop growing.
It ensures correct crop population
It prevents the wastage of space in the garden
37. Name any one method that school children can use to put out petrol fire in case it breaks out at school.
Using sand to put out petrol fire **Using fire blankets**
Using fire extinguisher to put out petrol fire

The diagram below shows the step taken when cleaning clothes at home. Use it to answer questions 38 and 39.



38. Identify the step of cleaning clothes shown in the diagram above.
Wringing
39. Give any one way in which the step shown is important in the washing of clothes at home.
It removes excess water from clothes to ease drying

THE BIRDS OF BRITAIN

*Author of this Book is dead in prison.
He was a man of talents & virtue.*

DRINKS TO NEWLY BORN BABIES

— 1 —

Whitman of the Indians

SECTION B: NO MAMMALS

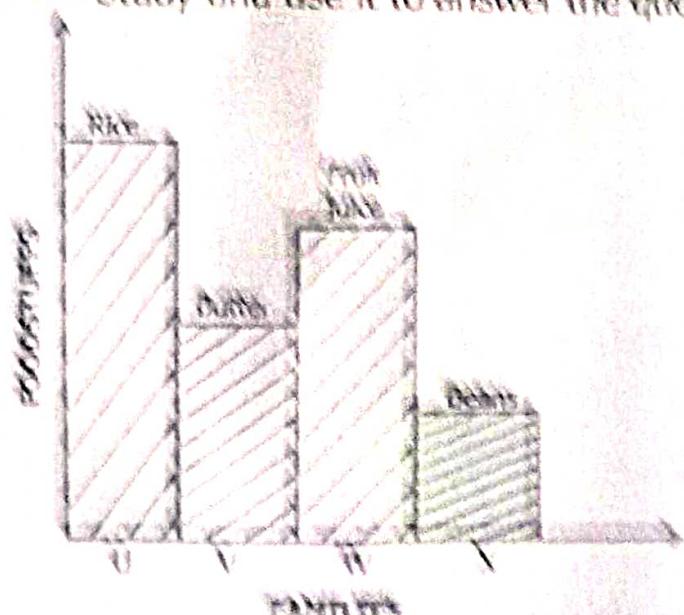
- SECTION B: MCQs**

(a) Name the digestive juice produced in the stomach.
Gastric juice

(b) Apart from producing digestive juices, give any two other functions of the stomach during digestion.
It receives hydrochloric acid
It churns food / It aids mechanical digestion
It stores food for a short time

(c) State any three ways in which excessive drinking of alcohol affects the stomach.
It worsens peptic ulcers
It causes stomach ulcers
Inflammation of stomach wall

42. The graph below shows different students' responses by different families. Study and use it to answer the questions that follow.



- (a) Name two ways in which you can tell that the rabbit is healthy.
- (b) Name two diseases that affect the sense organs of hearing in rabbits.
- (c) State any three measures taken by farmers to safeguard their rabbits from catching disease.
- Regular ventilation
 - Spraying with antiseptics
 - Regular cleaning of the hutch
 - Regular ventilation of the rabbit hutch
 - Providing clean water and feeds to rabbits

(d) The list below shows objects with different densities. Study and use it to answer the questions that follow.

stone boat caravans tube ship ring leaf

- (a) Identify any one object from the list above that displaces water.
- (i) Equal to its weight
 - (ii) Less than its weight
 - (iii) Equal to its volume
- (b) A caravans tube and a leaf on the list above were thrown from the same height. Which object reached the ground first?
- A caravans tube
- (c) Why did the object above reach the ground first?
- A caravans tube has less air resistance than a leaf
(greater inertia mass of greater)

The document below shows the kind of information gathered during a health survey in Magere Village. The items found out in the village were; Malaria, chlorine, health centre which is located 5 km away, and pit latrines.

Study the information above carefully and fill in the spaces provided in the table below correctly.

Health Survey Report:

Name: Attambo Chico Village: Magere

Date: 25/05/2024

Areas Surveyed:

- ANSWER SURVEYED:**

 1. The most types of latrine used in this village are **Pit latrines**.
 2. Matoke and ground nut paste is the kind of food people commonly eat in Magere village.
 3. **Malaria** is the common disease affecting children in this village.
 4. The main source of drinking water in this village is well.
 5. Most of the children in this village were immunized.
 6. People use **chlorine** to treat water from wells to make it safe for drinking.
 7. The population in the village is big compared to the available resources. This has affected the economic status of people due to lack of jobs.
 8. The nearest health centre is located **5kilometres** away from most of people's homes.

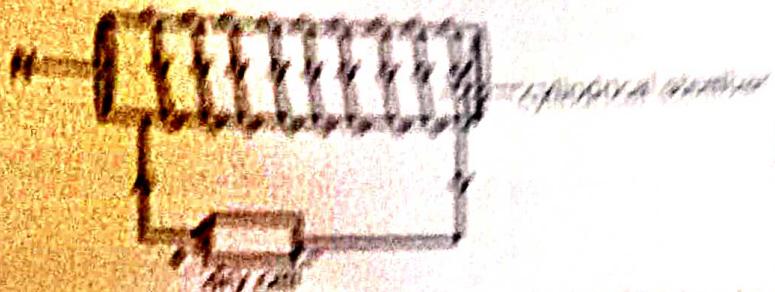
Thank you for your participation! Your input is invaluable in improving health outcomes in our community.

Checked by:

Nantongo Lillian

V.H.T Member

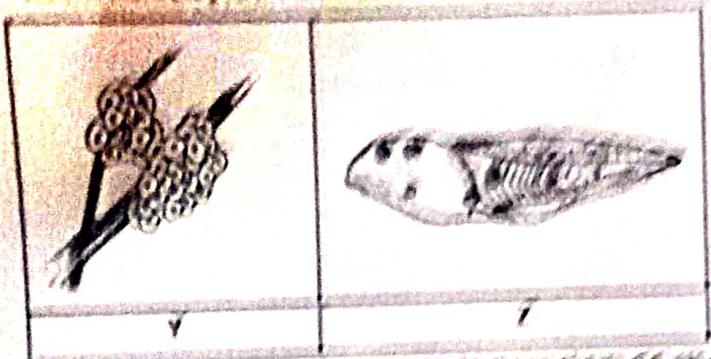
46. The diagram below shows a model of a simple pulley system. State two disadvantages of this system.



- (a) ~~Mechanical advantage of this system is very less than 10 times.~~
~~Only one load can be lifted at a time.~~
- (b) ~~Wear and tear of the cylindrical pulley is considerable.~~
~~It is heavy.~~
- (c) ~~Wear and tear of the pulley is caused by the cylindrical pulley.~~
~~It is inconvenient.~~
47. (a) Give two uses of the following components in a food chain.
(i) Plants; ~~primary producers~~ to primary consumers
(Project: plants act as producers)
(ii) Primary consumers; ~~producers~~ to secondary consumers
(iii) ~~Major food source of energy for the consumers in a food chain.~~
that man/bird
- (b) State why a cheetah is known as a prey and a predator in a food chain.
A cheetah is an animal which is hunted and killed by another animal for its meat while a producer is an animal which finds and kills another animal for food.
48. (a) Name three members of the family, give any one other physical feature that gives them the capacity of heat gain.
Thermogenesis
- (b) State what happens in the following when a block of ice melts;
(i) ~~reduced~~ ~~reduces~~ / ~~consumes~~
(ii) ~~increases~~ ~~increases~~
- (c) Give any four ways in which ice is useful to people.
Used to preserve ~~store~~ ~~keep~~ food
Cools the body
Helps people to obtain water
Helps to keep food and clothes cool
Ice reduces swelling of the injured part

- (a) Apart from protecting our body and our body, it also
provides many other functions
- The skin regulates the body temperature
 - It protects the body against strong radiations
 - The skin produces vitamin D when exposed to sunlight
- (b) In which two ways is sweat produced by the human skin
and what are its primary seven functions?
- It helps to cool the body
 - It helps to remove metabolic wastes from the body
- (c) State any one practice that can damage the skin or a human's
body. Skin problems
- Skin bleaching
 - Exposing the skin to strong radiations
 - Failure to bathe regularly
 - Failure to carry out physical exercises

52. The diagram below shows the stages in the growth of an amphibian.
Study and use it to answer the questions that follow.



- (a) Identify the important structures in the eggs that help the eggs to hatch.
- Frogs
- (b) Which class of vertebrates breathes through gills as they move to land? Amphibians
- Fish
- (c) What type of fertilization do the eggs undergo? External fertilization
- (d) State anyone characteristic of an amphibian that lays the eggs shown in the diagram.
- It moves by leaping It has strong muscles
 - It has a smooth slippery skin
 - It breathes through lungs and moist skin
 - It has fully webbed feet It has long hind legs
53. The sentences below show the process of hearing in vertebrates.
- (a) The cochlea converts vibrations into the nerve impulses.
 - (b) The pinna picks the sound waves and the ear canal conducts them to the eardrum.
 - (c) The nerve impulses are later sent to the brain for interpretation through the auditory canal.
 - (d) The eardrum changes sound waves into sound vibrations and sends it to the ossicles to be amplified.

Write the sentences above correctly in the spaces provided below them
in the process of hearing in human beings.

- (a) The pinna picks
- (b) The eardrum changes sound waves
- (c) The cochlea converts vibrations into
- (d) The nerve impulses are later

- (a) Write down any two causes of poisoning at home.

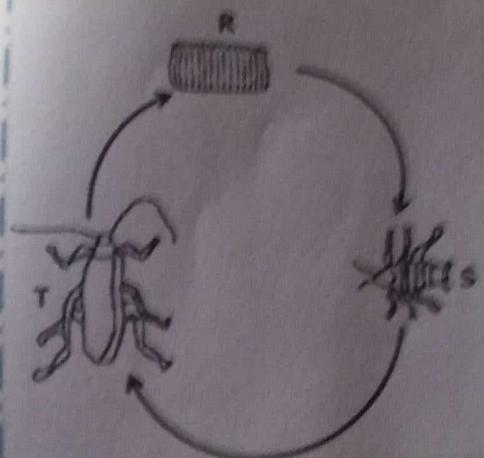
- Eating expired food
- Taking overdose
- Keeping drugs in reach of children
- Keeping chemicals in containers which are commonly used
- Keeping unlabeled drugs
- Ignorance

- (b) Why is it not advisable to make a casualty who has drunk alcohol vomit?
Vomiting may cause damage to the throat or gullet.

- (c) State any one way in which poisoning can be prevented at home.

- Label dangerous chemicals
- Keep chemicals out of reach of children
- Read and follow instructions on chemicals
- Provide proper storage of chemicals
- Keep chemicals in lockable cupboards

55. The diagram below shows the biological change in a vector. Study and use it to answer the questions that follow.



- (a) Identify the biological process shown in the diagram above.

Metamorphosis/lifecycle

(reject: incomplete lifecycle/incomplete metamorphosis)

- (b) Name the stages the stages marked R and S on the diagram.

- (i) R: egg stage
- (ii) S: nymph

- (c) Give any one disease transmitted by the stage marked T to people.
Polio // Cholera // Dysentery // Leprosy // Typhoid

END