

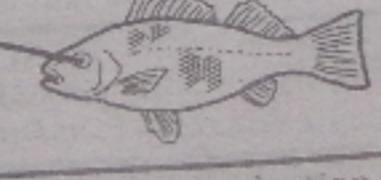
THE SIPRO PRE-MOCK INTEGRATED SCIENCE MARKING GUIDE - 2024

NO	CLASS LEVEL	CORRECT RESPONSE	WRONG RESPONSE	MARKING POINT	TECHNICAL ADVICE
1	P.2	Sight / Seeing / Sense of seeing/ Sense of sight.	Eyes / eye	Body sense done by the eyes.	Help candidates to differentiate a body sense and a body organ.
2	P.4	Spraying pesticides to kill pests / Removing diseased crops from the garden / Early planting / Pruning infected branches on a crop / Thinning infected crops	Treating crops	Control of crop diseases	A comprehensive discussion on crop diseases is paramount.
3	P.4	Sunshine/ Sunlight helps plants to manufacture starch / Sunlight helps in the process of photosynthesis.	Sunshine helps plants to grow well.	Sunlight as a condition for making starch.	Revise the process of photosynthesis.
4	P.6	To force or push out the food lump from the windpipe / To force or push out the external or foreign body from the trachea.	To make the person breathe / To make the food come out of the gullet.	Forcing out the food from the trachea.	Go through the ways of administering first aid to a casualty.
5	P.6	Fish undergo external fertilization while reptiles undergo internal fertilization / Eggs of reptiles are fertilized internally while those of fish are fertilized externally.	Fish lay eggs while reptiles give birth.	Different modes of fertilization.	Train candidates to read, analyse and interpret questions
6	P.6	Drenching / Deworming / Deworming by drenching	Insemination	Giving liquid drugs / deworming to cattle.	Discuss the cattle management practices with the help of well known diagrams
7	P.6	Helps to kill endo parasites / Internal parasites in cattle.	Helps in deworming	Importance / reason for deworming.	Train learners on how to care for cattle.
8	P.7	Kidneys / Kidney	skin	Body organ that regulates body fluids and mineral salts.	Revise the organs of the excretory system in details.
9	P.4	Tapeworms feed on digested food while hookworms feed on blood.	Tapeworms feed on blood while hookworms feed on digested food.	Tapeworms feed on digested food not blood.	Go through the feeding of tapeworms.
10	P.4	To prevent family members from getting deficiency diseases / To keep the body healthy.	To be happy.	Significance of proper feeding among family members.	Discuss the classes of food in a detailed way.
11	P.7	By tying splints around the broken part / By tying short sticks around the broken bone.	By walking carefully.	Tying splints around the broken bone.	Organise revision questions on first aid administering and accidents as well.

12	P.3	Covering the handles with insulators / Putting insulators on the handles.	Using metals to carry it.	A pen.	Communications
13	P.6	The brain is damaged by alcohol / Alcohol damages the brain hence loss of body balance.	The head is disorganized.	Brain damage	Go through the signs of brain damage.
14	P.6	Wringing reduces the amount of water in the clothes.	Wringing dries clothes fast.	Reduction of water in the clothes.	Practically discuss the processes involved in cleaning clothes.
15	P.4	Floods/ Drought / Heavy rains / Strong wind / Hailstones / Crop pests and diseases / Landslides / Soil erosion / Volcanic eruption.	Laziness among family members.	Natural causes of food shortages.	Make it a routine to orally revise through food and nutrition.
16	P.3	A slasher helps to slash tall grass where mosquitoes hide.	For weeding the garden	Accept a complete response.	Train candidates on proper question approach as a way of proper handling of questions.
17	P.5	To let out smoke / To let out stale air / To let out used air / To let out warm air.	To allow exchange of gases / To take out light and heat.	Exit of stale air and smoke.	Compare a lantern with a house, charcoal stove as application of convection currents.
18	P.5	Through capillary attraction / Through capillarity force.	Through convection	Correct process through which paraffin moves upwards.	Discuss the steps of forces and their usefulness to people.
19	P.7	Drought reduces water in rivers hence low production of hydroelectricity / Dries up water sources.	Drought stops rainfall formation.	Reduction of water in water bodies.	Revise factors that affects production of electricity.
20	P.6 / P.7	Leads to air pollution / Leads to deforestation.	Leads to burns / Fire outbreak	Effects of charcoal burning.	Thoroughly discuss the various activities in the environment.
21	P.7	Both a shadow and an echo are formed by obstruction.	Both are formed by reflection.	Obstruction of energy.	Compare formation of images of echoes.
22	P.5	Worker bees fan the hive / By fanning the hive with their wings / By flapping the wings to fan the hive.	By collecting nectar	Fanning the hive.	Revise the role of bees in and outside the beehive.
23	P.4	To prevent dampness of the flour / To prevent flowing water from entering the flour.	To promote cleanliness.	Correct reason	Train candidates to comprehend correctly to questions that call for common knowledge.
24	P.7	wedges	an axe / Panga	Groups of simple machines with sharp and piercing edges.	Describe the different groups of simple machines.
25	P.6	Advise them to cover the nose and mouth with face masks / To water the dusty floors / To cement the dusty floors.	To walk away from the dusty environment.	Correct use of language.	Emphasise the ways of caring for the respiratory system.

26	P.4	They produce a lot of nectar in the nectaries / Produce a scent / Have brightly coloured petals to attract insects / Produce sticky pollen to stick on insect bodies.	They produce much pollen.	Ability to attract pollinators.	Help learners know the characteristics of insects pollinated and wind pollinated flowers.
27	P.6	Living things respond to stimuli / Response to stimuli.	Living things move.	Response to stimuli.	Describe the importance of different characteristics of living things.
28	P.6	The longer the string, the lower the pitch and the shorter the string, the higher the pitch of sound / Short strings produce high pitch while long strings produce a low pitch.	Long strings produce a low pitch.	Accept a complete comparison.	Practically teach pitch of sound using different types of musical instruments.
29	P.7	A water snail has a hydro-static skeleton while a cockroach has an exoskeleton / A water snail skeleton is made of a liquid under pressure while a cockroach skeleton is made of cuticle.	A water snail has an endoskeleton while a cockroach has a hydrostatic skeleton.	Correct complete comparison response.	Go through the types of skeleton and specify the animals that possess them.
30	P.3	By shaving the hair / By combing the hair/ By planting the hair / By washing the hair / Dyeing the hair.	By cleaning the head.	Accept specific ways of cleaning the head.	Guide learners on proper ways of keeping the body clean.
31	P.4	Knapsack sprayer / Sprayer	Pump	Correct name	Revise garden tools in details with demonstration on how they are used.
32	P.5	The sharp point of the beak is removed/ Debeaking removes the sharp edge of the beak / The beak becomes blunt and unable to break eggs.	The beak is cut off.	Shortening of the beak.	Go through poultry management practices on a poultry.
33	P.5	Such food leads to body poisoning / Leads to diarrhoeal diseases / Leads to discomfort in the stomach / Leads to stomach abdominal pain.	It kills people.	Immediate results of eating rotting food.	Revise the dangers of eating contaminated food.
34	P.7	Lightning is seen before thunder is heard.	Light moves fast.	Correct indicator of given property of light.	Emphasize the facts about principles of light.
35	P.7	Through induction	Magnetism can pass through non-magnetic materials.	Correct method of magnetized.	-Have a thorough discussion on materials of magnetism. -Also emphasise the point of reading headings for diagrams and proper diagram interpretation.
36	P.7	North pole	South pole	Correct name of pole.	Train candidates on proper determination of poles in magnets.

37	P.7	Joints in the skull don't allow any movement / Joints are fixed / They are immovable.	Joints in the skull are suture.	Characteristics of suture joints.	Practically teach the types of joints and their location.
38	P.4	Propping prevents a pawpaw plant from falling / Breaking / Provides rigidity to a pawpaw plant after fruiting and during the fruiting stage.	Provides extra support to a pawpaw plant.	Providing rigidity.	Use the school garden as a key source of demonstrating different crop growing practices.
39	P.5	It trains farmers on proper farming skills / Encourages farming among young people/ Trains young people the management of crop growing projects / Increases food production in a school.	Provides knowledge	Passing onto skills to the learner.	Discuss science-oriented clubs in a school.
40	P.6	Plasmodia germs attack and destroy the red blood cells	Mosquitoes suck a lot of blood from the body.	Destruction of red blood cells.	Revise the diseases of the circulatory system to a detailed form.
SECTION: B					
41	P.6	a) (i) Sorting (ii) Soaking	Washing Wringing	Correct steps required.	Revise the process of cleaning clothes in a detailed form.
		b) A washing machine requires less effort compared to using hands / A washing machine saves time compared to using hands.	A machine simplifies work.	Accept a complete comparison response.	
42	P.6	a) Production record / Sales record b) Dairy cattle c) Poor feeding / Animal torture/ Outbreak of diseases/ Sickness/ Attack from parasites. d) Mastitis / Foot and mouth disease / Brucellosis / Bovine Viral diarrhoea (BVD)	Financial records Dairy cattle Little space Anthrax	Correct type of record. Correct spelling Correct possible reason Diseases also affects the udder/ Spread through milk.	Train candidates on proper interpretation of questions involving death / records.
43	P.5	a) Leaching leads to sinking of soil nutrients from the top layers to the bottom layers. b) Monocropping / Soil erosion / Overcultivation c) Planting legumes / Manuring the soil / Practising crop rotation / Mulching / Intercropping / Applying fertilizers/ Bush fallowing.	Leaching destroys soil. Deforestation Terracing	Meaning of leaching. Cause of soil infertility. Methods of improving soil fertility.	Revise through soil degradation and soil conservation in a detailed way.
44	P.4	a) (i) Foliage leaves (ii) Adventitious roots b) Stores manufactured food / Stores food for an onion. c) By planting bulbs	(i) Leaves (ii) Stem To store food By planting seeds	Specific name Importance of scale leaves on a bulb. Vegetative part used to propagate onions.	Discuss parts of an onion in a detailed way.
45	P.5	a) Toad stools / Puffballs / Mucor (harmful mould)/ Candida albicans / mildew / Rusts / Smuts	Mushrooms	Dangerous moulds	Use question and answer approach to exhaustively revise about fungi.

		b) They cause poisoning / Make food go bad / Cause fungal diseases.	They are dangerous.	Dangers of harmful fungi.	
46	P.4	The seed in the soil absorbs water and swells / The testa becomes soft and bursts to let out the radicle / The radicle comes out first and grows downwards / The plumule also comes out and grows upwards above the soil level.	Any interchanges.	Correct order of germination.	Use small tins to plant sample seeds for germination and correct follow-up of the steps.
47	P.7	a) A sprain is a torn ligament while a strain is an overstretched muscle (tendon). b) Running carelessly / Missing a step on stair cases / Falling down / Stepping in a hole/ Vigorous exercises without resting. c) Practising physical exercises / Feeding on calcified meals / Having a correct body posture / Feeding on a balanced diet.	A sprain is a torn tendon while a strain is a torn ligament. Fighting	Correct description Correct cause of strains and sprains.	Revise through the diseases and disorders of the skeletal-muscular system.
48	P.5/P.6	a) Gills b) It provides protection to the fish's body / skin of the fish. c) Has gills for breathing in water / Has fins for swimming in water / Has a streamlined body to overcome viscosity (friction in water) / Has a lateral line for detecting sound waves in water. d) 	Gill cover/ Operculum For decoration It can swim	Organ protected by the gill cover. Uses of scales. Accept an adaptation and its importance.	Use a real fish to discuss the parts with their functions.
49	P.5	a) Weaning is the gradual introduction of semi-solid (soft) foods to babies to supplement breastmilk. b) To supplement breastmilk / To enable babies get iron which is missing in breastmilk / The iron a baby is born with gets used up / To prevent deficiency diseases. c) To keep them healthy / To enable production of enough breastmilk in their mammary glands / To boost milk production in their mammary glands.	Weaning is when babies are stopped from breastfeeding. To make the baby get colostrum. To prevent diseases.	-Correct definition -Correct reason for weaning. -Correct reasons	Go through the methods of feeding babies in an exhaustive way.

50	P.4	a) To make the soil soft for easy digging / To enable soil regain fertility/ To remove remaining weeds / To allow decomposition. b) By digging using a hoe / By uprooting using hands / tractors / Ploughing using tractors / By mulching gardens.	To clear the land, By weeding	Advantages of ploughing the land. Activities done in weeding gardens.	Use the school garden to discuss the steps followed in land preparation.
51	P.5	a) Pulmonary artery b) To prevent the backward flow of blood. c) Muscle C pumps blood through a longer distance compared to muscle B / To withstand the pumping pressure of blood moving to all other body parts. d) Doing regular physical exercises / Feeding on a balanced diet / Having enough rest / Regular visiting of doctors for medical check-up.	Pulmonary vein To transport deoxygenated blood. Muscle C pumps blood faster than muscle B.	Correct name Use of valves in the heart. Withstanding the pumping pressure of the heart	Revise the circulatory system exhaustively.
52	P.3	a) (i) For balancing the insect during flight. (ii) For laying eggs. b) They spread germs among crops / Destroy (bite) crops.	-For flying -For making	-Body balance - Laying eggs	Revise through the harmful and useful insects.
53	P.7	a) Regular reflection b) Polished surface / Smooth surface / Shiny surface / Mirror surface / Calm water surface c) Helps us to see objects/ Helps us to use a periscope / Helps us to see the behind body parts / Helps in keeping security using curved mirrors / Helps drivers to see behind vehicles.	Irregular / Diffuse Rough surface For seeing	Correct type of reflection. Smooth polished surface Correct importance of reflection.	Use a plane mirror to clearly discuss the concept of reflection.
54	P.4	i) Malaria ii) Black fly / Simulium fly iii) Rat fleas / Fleas iv) Bilharziasis / Schistosomiasis	-Plasmodium -House fly -Lice -Bilhazia	-Correct disease -Correct vector -Correct spelling	Have a detailed discussion on vector and diseases.
55	P.5	a) (i) By radiation (ii) By convection b) Helps proper air circulation in a house / Keeps a lit charcoal stove to keep lighting / Helps in movement of smoke through the chimney / Helps in movement of a bad smell through the vent pipe from a VIP latrine.	-Conduction -Convection currents Helps in boiling water.	Correct methods of heat transfer. Importance of convection as a method of heat transfer in gases.	Practically revise the methods of heat transfer and the usefulness of each in our daily lives.