

Note: Answer all questions. Choose the most correct or most appropriate answer.

## Part A

01. Causing disuses is one of the adverse effects of micro organisms. The answer which shows the correct combination micro organism and the disease caused by it is,

(i) Tuberculosis – Protozoa

(iii)Polio – bacteria

(ii) Corona – virus

(iv)Leprosy - Fungus

02. "bulath hapaya" belongs to,

(i) Mammalia

(iii) Pisces

(ii) Mollusca

(iv)Cnidaria

- 03. Choose the answer only consists invertebrates only.
  - (i) Leech, Dragonfly, Snail, Earthworm
  - (ii) Bat, Beetle, Butterfly, Sea anemone
  - (iii) Snake, Dolphin, Python, Hydra
  - (iv)Spider, Sea anemone, Dragon Fly, Rat snake

04. An animal that can live in both the sea and lagoon,

(i) Beetle

(iii)Hydra

(ii) Dragonfly

(iv)Prawn

05. The vertebrate group with metamorphosis is,

(i) Mollusca

(iii)Amphibia

(ii) Aves

(iv)Arthropoda

06. A disease spread by bacteria,

(i) Corona

(iii)Leishmania

(ii) Tuberculosis

(iv)Measles

07 Factor that does not	t affect the growth of micr	roorganisms is		
(i) Pressure (ii) Temperature	(iii)pH value (iv)Humidity	toorganisms is,		
08. Which of the follow	ving leaves shows the high	hest photosynthesis effic	ency?	
(i)	(ii)	(iv)	(iii)	
09. A raw material for p  (i) Carbon dioxide  (ii) Oxygen  (iii) Sunlight  (iv)Glucose				
10. A special type of ro (i) Climbing Roots (ii) Prop Roots (iii)Respiratory Root (iv)Ariel Roots		ric water vapor and gives	it to the plant is,	
	ıpiyaliya, Gotukola	t produces new plants by	leaves,	
12.A plant with a spiral  (i) Mango  (ii) Guava	leave arrangement,			
(iii)Kanda (iv)Rukattana				
13. An example for an o	element is,			
(i) Iron (ii) Sugar				
(iii)Distilled Water (iv) Air				
	ving is not a pure substanc	ce?		
(i) Iron (ii) Sugar				
(iii)Air	• 1			
(iv)Sodium Hydrox	ade			

- 15. The characteristic of liquid matter is,
  - (i) Particles are arranged in a systematic pattern
  - (ii) particles can move
  - (iii) The space between the particles is limited
  - (iv) The particles are tightly interconnected
- 16. The masses were measured separately by filling the water and coconut oil into a density bottle. It was observed that when the water was filled, there was also greater mass. The conclusion is,
  - (i) Coconut oil is denser than water.
  - (ii) when the coconut oil is put into a pot of water, the water floats on the coconut oil.
  - (iii) The density of coconut oil and water is equal.
  - (iv) The density of water is higher than that of coconut oil.
- 17. Select the answer that contains only materials that are easily compressed.
  - (i) Water, Iron, Oxygen
  - (ii) Water, Coconut Oil, Petrol
  - (iii) Air, oxygen, water vapor
  - (iv) Aluminum, Iron, Mercury
- 18. Factor that affect for the frequency of tuning fork,
  - (i) Type of metal it consists
  - (ii) Length of an arm
  - (iii)Thickness of arm
  - (iv)Length of the rod
- 19. How to change the length of the air column that vibrates in a flute,
  - (i) Blowing by mouth.
  - (ii) By opening the windows out of the fingertips.
  - (iii) By closing the windows with fingertips.
  - (iv) By closing and opening windows with fingertips.
- 20. Grass hoppers/ Crickets produce sound by,
  - (i) By rubbing the fibers of the foot with the other foot.
  - (ii) By moving small wings to the sides.
  - (iii) By rubbing feet and mouth.
  - (iv) By a stream of air emitted by the mouth.

(Marks  $2 \times 20 = 40$ )

## Part B

- Answer only five questions, including the first question.
- 01. Resources for School Science Journal are as follows.

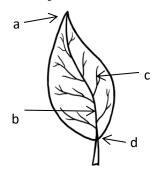
Microorganisms live in every environment. They can live in extreme environments as well. Microorganisms that can be categorized into five main categories show a great diversity. And they are again different according to their nutritional methods

- (A)
- a. Introduce the microorganism.
- b. Name the five main categories of microorganisms.
- c. What is meant by extreme environment?
- d. Name two important factors for microbial activity.
- (B) Some microorganisms grow in food, and make them unsuitable for the consumption .
  - a. Write down three changes in food by microorganisms.
  - b. Name two factors controlled by keeping a food in the fridge.
  - c. What is the action of microorganisms in lipid-rich foods?
  - d. What is the temperature range that is favorable for microbial growth?
- 02. The facts collected by three students of junior science team a during a field trip are given below.

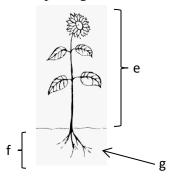
## Names of plants

- Aloe Vera
- Udupiyaliya
- Begonia
- Date palm
- Cactus
- Rukkattana
- Guava

Ranula



Nethvidu

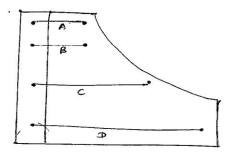


Sasmitha

- A. Answer following questions regarding above information.
- 1. What is a plant that bears fleashy leaves to survive in xerophytic environment?
- 2. What is the name given for arranging leaves on the stem?
- 3. (a) What is the plant which has opposite arrangement leave?
  - (b) What is a plant which has circular arrangement of leaves?
- 4. What is the non fleashy plant which has a long leaf blade and a shape leaf tip?
- 5. Write a plant that does vegetative propagation by leaves.
- B. Answer the following questions using the diagrams above.
- 1. Name the parts a, b, c, d.
- 2. Name the two systems e and f.
- 3. Name the special root type known as g.
- 4. Write the English letter related to the part which absorbing sunlight and contributes to the photosynthesis of the plant.

O3. (A) (1) If a watch glass has been p paint, design an appropriate ac (2) When the lid of the perfum (3) Copy the blank answer she	tivity to show the particul e bottle is opened, fragrar	ate nature of liquince will spread in	id. air. Explain the rea	ison.		
Solid	Liquio	1	Gas			
(B) (1) what is the name given for homogeneous pure substance that is formed by the combination of two or more elements at a specified rate?						
(2) Categorize the followings (Copper	as elements and compound , glucose, nitrogen, water		dioxide)			
Eler	Elements		Compounds			
(3) Name a physical quality th	at can be used to verify th	e purity of a com	pound.			

04. Below is a diagram of an instrument designed for a class presentation by Pulindu, a Grade 8 student.



A piece of wood is fastened to one side of the plank and four wire ends are attached to it. The other ends of the wire are fastened to the front of the board by slightly raised nails. All four wires are made of the same metal.

- A and B wire have the same length but B is thinner.
- C and D have the same cross-section but differ in length.
- An sound is born when the wire is vibrated with the finger on any wire.
- 1 What is the change occurred by vibrating a string?
- 2. A, B, C, D The four strands of wire can make different sounds. What characteristics of a wire can be seen to change the sound produced by a wire?
- 3. A ringing patter can be produced by vibrating strings according to a pattern.
  - (i) Name the common name of a sound with such a ring pattern.
  - (ii) What name is given to the sounds which are irregular to our ears?
  - (iii)Name two traditional musical instruments.
  - (iv)Name two musical instruments that occurate through the same way as the figure.
- 5. Music therapy is a medical treatment, which use to cure certain medical conditions. Write two illness that can be cured by Music therapy.

05. Please mark ( $\checkmark$ ) for correct statements and ( x ) for wrong statements.
<ol> <li>Blue magpie belongs to the Mollusca group. ( )</li> <li>Animals in the Pisces category have lidless eyes. ( )</li> <li>Plants such as akkapana, begonia, produces new plants by vegetative propagation. ( )</li> <li>When the potassium permanganate is put into a water bowl and it spreads throughout the solution. This proves about particulate nature of solid. ( )</li> <li>A matter is substance with a mass and occupies a space. ( )</li> <li>The bud of a plant is not a part of the shoot system. ( )</li> <li>The blight on the plant is caused by a macro organism. ( )</li> <li>Vibration frequency is high when vibrating a lengthy wire. ( )</li> <li>A density bottle is used to measure the density of a liquid. ( )</li> <li>The physical property of a gas substance, odour, is used to detect gas leaks. ( )</li> <li>The dog can hear sounds with frequencies below 20Hz and high Frequency sounds at above 25000Hz. ( )</li> </ol>
(Marks 1×11)
06. Fill in the blanks with the words in brackets.
(Guitar, Frequency, Low, Ferreted, Compression, Photosynthesis, Classification of Animal ,25C $^{\circ}$ - 30C $^{\circ}$ , Ethyl Alcohol, 100C $^{\circ}$ , Glucose)
01.       is an example of a string instrument.         02.       differs, when length of tuning fork is changed.         03. Density of ice is       comparative to density of water.         04. Gas can be easily          05. Leaf margin of shoe flower is          06. Main objective of leaf is to perform the process of          07. Reptilian has a dry skin with          08. Categorizing the animals with common characteristics is known as          09.       is the temperature range that promotes food spoilage.         10.       is a product of the reaction between yeast and sugar.         11. Pure water becomes a gas at the temperature of
(Marks 1×11)