2024-09-02

Negombo Education Zone
Second Term Evaluation - 2024
Science

Index number:.....

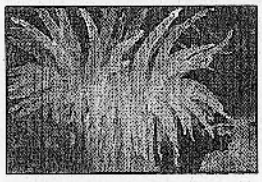
Grade 06	Paper I & II	Time 02 Hours

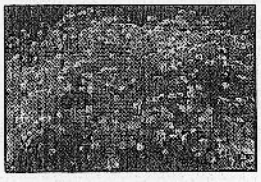
Instructions:

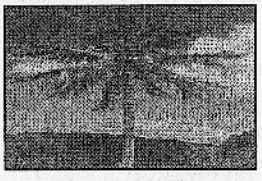
- **Answer all the questions in part I. Select the most appropriate answer and underline it.**
- **From part II, answer five questions including the first question. The first question is compulsory.**

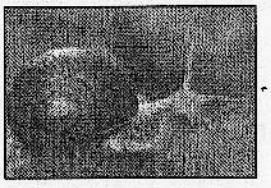
Part I

01. Among the following organisms, which one has the ability of **locomotion**?

i. 

ii. 

iii. 

iv. 

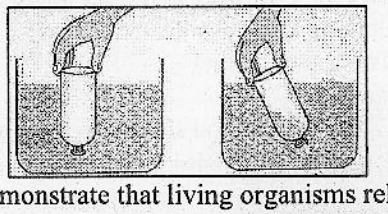
02. **The Standard International unit** (SI unit) of measurement of mass is,

i. Gram ii. Milligram iii. Kilogram iv. Metric ton

03. Identify the type of magnet shown in the diagram,

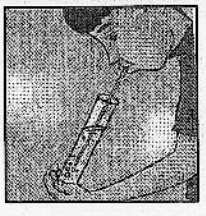
i. Ring Magnet ii. Horseshoe Magnet
iii. U-shaped Magnet iv. Tabular Magnet

04. Given below is an image of an activity carried out by a group of students while investigating the properties of matter. What is the observed property of matter from the above activity?



i. Air occupies space.
ii. Water occupies space.
iii. Air is made up of particles.
iv. Air has a definite shape.

05. The following picture shows an activity diagram to demonstrate that living organisms release carbon dioxide gas during respiration. What is the **observation**?

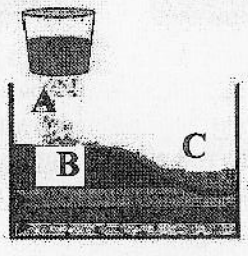


i. Lime water turns milky white
ii. Lime water does not change color
iii. Lime water turns pink
iv. None of the above

06. What is the term used for organisms that produce **their own** food?

i. Heterotrophs ii. Saprophytes iii. Parasites iv. Autotrophs

07. The following image shows an activity to demonstrate how water exists on Earth. What are the forms represented by **A, B, and C respectively**?



i. Surface water, Groundwater, Precipitation
ii. Precipitation, Surface water, Groundwater
iii. Surface water, Precipitation, Groundwater
iv. Precipitation, Groundwater, Surface water

08. Which option correctly lists Matter and Energy, **respectively**?

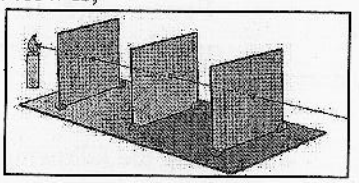
i. Light, Heat ii. Air, Water iii. Water, Heat iv. Sound, Air

09. Which of the following is a pair of musical instruments that produce sound using the **same method**?

i. Tabla, Rabana ii. Tabla, Guitar
iii. Sitar, Serpina (Harmonium) iv. Violin, Flute

10. **A conclusion** that can be obtained from the activity shown in this figure below is,

i. That light travels in a straight line
ii. That light is necessary for vision
iii. The piece of cardboard is opaque
iv. A healthy eye is necessary for vision



11. Which of the following choices is used to produce electricity in different countries of the world but is **not yet used** as a source of energy for the production of electricity in Sri Lanka?

i. Wind ii. Geothermal energy iii. Sun iv. Fossil fuel

12. Which of the following choices correctly denotes the **descending salinity order** in classifying water on the basis of salinity?

i. Marine water, Brackish water , Fresh water, ii. Brackish water ,Marine water, Fresh water
iii. Marine water, Fresh water , Brackish water iv. Fresh water ,Marine water, Brackish water

13. **The correct statement** about "Tidal Waves" used as a source of energy is,

i. Tidal waves are caused by the influence of the moon and the sun.
ii. Two types of tidal waves can be seen as high tides and low tides.
iii. In some countries, tidal waves are used to generate electricity.
iv. All the above statements are true.

14. Which of the following is **not an example** of a rhythmic sound?

i. Playing a song ii. Playing the violin
iii. The sound of cars iv. The sound of a drum

15. What is an activity you should do to **protect the aquatic environment**?

i. Throwing household waste into the canal
ii. Removing sewage from household toilets into the lagoon
iii. Dumping used agrochemical bottles into the lake
iv. Avoid adding waste to reservoirs

16. The **environmentally friendly** energy source that can be used to produce energy in the future is,

i. Coal ii. Sun iii. Firewood iv. Petroleum oil

17. Given below are two cases where two pairs of bar magnets are placed close to each other. Which of the following answers **correctly states the observations** received here?

i. Attracts - Repels ii. Repels - Attracts
iii. Attracts - Attracts iv. Repels - Repels

18. Which of the following is **not an example** of water in a solid state?

i. Snow ii. Glaciers iii. Steam iv. Ice

19. Which of the following is **not a use** of light?

i. For the production of food in plants
ii. To produce sound
iii. For communication purposes
iv. Entertainment

20. As a child who learns science, one of the **correct tasks** you should do is,

i. Protecting the environment.
ii. Creating various environmentally friendly inventions related to the subject of science.
iii. Using energy efficiently.
iv. Performing all the above tasks.

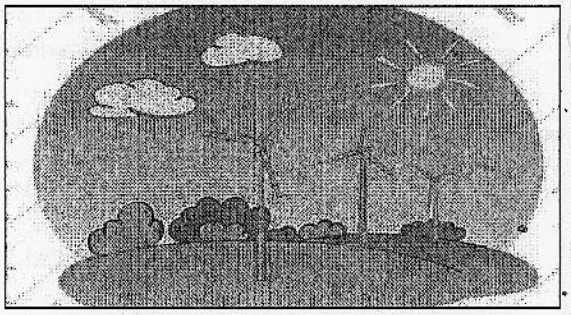
Part II

Instructions:

- **Answer 5 questions including the first question.**

01.

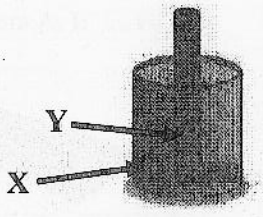
A. We need energy to perform various tasks in daily life. Objects that can provide energy are called energy sources. Observe the image below carefully and answer the following questions.



i. What is the main source of energy for all the processes on the Earth? **(1 mark)**
ii. Write two main forms of energy we get from the above-mentioned source of energy. **(2 marks)**
iii. Write **one use of each** of the two types of energy **mentioned in ii above**. **(2 mark)**
iv. Name another source of energy shown in this figure. **(1 mark)**
v. What is the man-made invention shown in the above image that is used to generate electricity in Sri Lanka? **(1 mark)**
vi. Write two places where such power plants are located in Sri Lanka. **(2 marks)**

B. Biomass is used to generate energy at home.

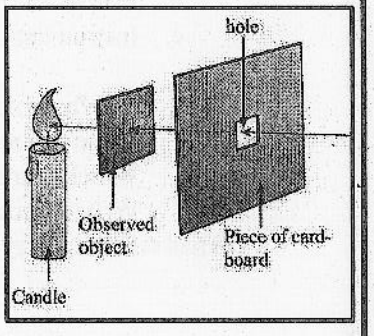
i. Define the term "Biomass". **(2 marks)**
ii. Write two examples of biomass. **(2 marks)**
iii. An example of the utilization of biomass as a source of energy is given below.



a. What is this device? **(1 mark)**
b. Name X and Y here. **(1 mark)**
c. Write down the biomass that can be used for this device. **(1 mark)**

(Total Marks: 16)

02. In an activity for grade 6 students, the following setup was used. Each material was placed between a candle and a piece of cardboard, and the candle flame was observed through a hole.



A - thin piece of glass B - Oiled paper C - Metal sheet

Write the correct letter (A, B, or C) in the table according to what was observed. **(3 Marks)**

	Observations:	Material Used
i.	Both the light and the flame are clearly seen.	
ii.	The light is seen, but the flame is not clearly seen.	
iii.	Neither the light nor the flame can be seen clearly.	

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iv. Based on the observations, write the correct term (transparent, translucent, opaque) for each material. **(3 Marks)**
   a. A -
   b. B -
   c. C -
v. Name a luminous object used in this experiment. **(1 Mark)**
vi. Why is the moon not considered as a luminous object? **(2 Marks)**
vii. Draw a diagram showing a beam of light. **(2 Marks)**

(Total Marks: 11)

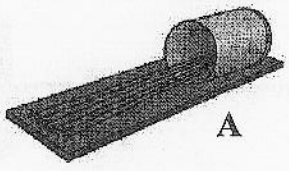
03. Choose the most appropriate word from the following words to complete the given sentences:

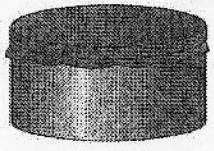
(compound microscope, measuring cylinder, oxygen gas, poles, elasticity, north-south, ductility, electricity, vibration, water pollution, excretory)

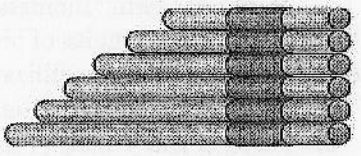
i. Plants emit ..... during photosynthesis.
ii. A ..... is a device used to observe things that cannot be seen with the naked eye.
iii. The property of being drawn into a wire without breaking is known as ..... .
iv. Water is important as an ..... medium for living beings.
v. Addition of waste materials to water until it becomes unsuitable for consumption is known as .....
vi. The force of a magnet is greatest at its .....
vii. A ..... is used to measure the volume of a liquid.
viii. When a magnet is suspended freely, it lies still between the ..... direction.
ix. A ..... is felt when a bicycle bell rings.
x. ..... is an example of energy.
xi. Rubber is used to make baby teats because of their property of .....

(Total Marks: 11)

04. Given below are pictures of some sound-producing equipment set up for a science exhibition.


A


B


C

i. What are objects that produce sound called? **(1 Mark)**
ii. Write the part where sound is produced in the instruments shown in the pictures, **(3 Marks)**
   a. Instrument A -
   b. Instrument B -
   c. Instrument C –

iii. Briefly write the difference between Music and Noise. **(2 Marks)**
iv. Write two examples of Noise. **(2 Marks)**
v. Which human organ is sensitive to sound? **(1 Mark)**
vi. Write a situation in which this organ might be damaged. **(1 Mark)**
vii. Write a way to prevent this damage. **(1 Mark)**

(Total Marks: 11)

05. State whether the following statements are correct "✓" or incorrect "X" by placing the respective symbol in front of each statement.

i. The process of making new organisms is called reproduction. ( )
ii. More than 90% of Earth's surface is covered by water. ( )
iii. The ability to do work is energy. ( )
iv. Kerosene is a substance that exists in a liquid state. ( )
v. All energy sources are running out (depleting) day by day. ( )
vi. The energy required to propel (move) satellites was obtained through solar cells. ( )
vii. The growth of a plant is unlimited. ( )
viii. Water in which soap is dissolved is a translucent solution. ( )
ix. Texture is the feeling of a substance when it is touched. ( )
x. Ear lobes help direct sound waves to the ear. ( )
xi. A nuclear power plant is located at Norochcholai. ( )

(Total Marks: 11).

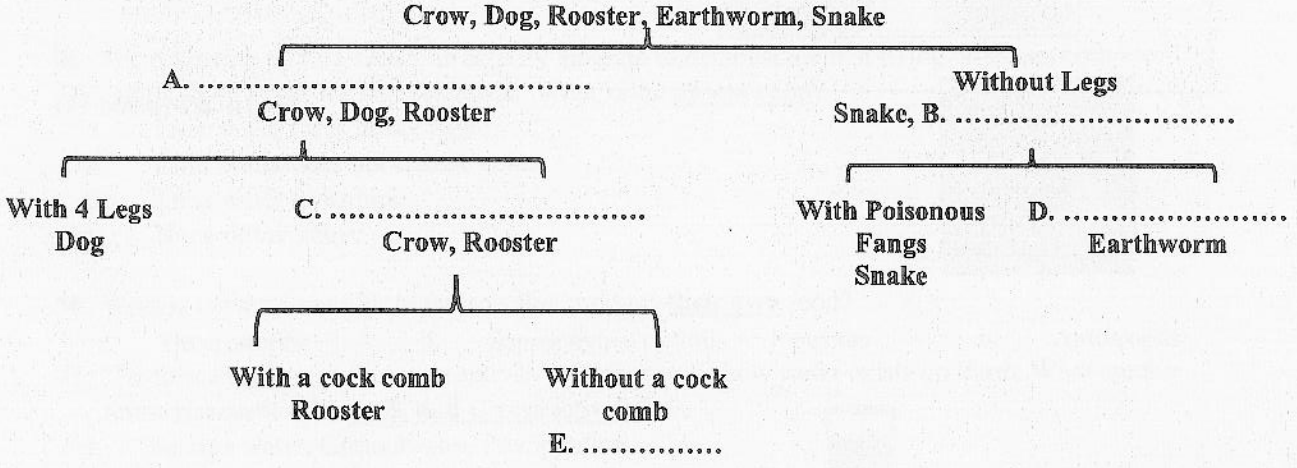
06.

A. Given below are some observations made by a group of grade 06 students during a field trip in the school garden. Answer the questions based on these observations:

A. A millipede curling up at the base of a tree.
B. The movement of Mimosa (Touch Me Not) leaves when touched.
C. A caterpillar eating leaves.
D. A brick broken into small pieces.
E. Leaves falling from a broken plant branch.

i. Write two animal activities observed here. **(2 Marks)**
ii. Name a type of movement shown by plants. **(1 Mark)**
iii. Name an herbivorous animal. **(1 Mark)**
iv. Name a non-living thing. **(1 Mark)**
v. Name a substance mentioned here that represents the solid state of matter. **(1 Mark)**

B. Consider the dichotomous key below and write the answers corresponding to the letters A, B, C, D, and E. **(5 Marks)**

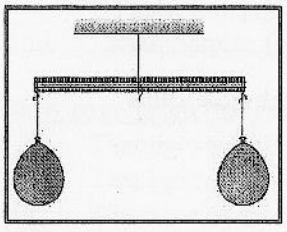


(Total Marks: 11)

07.

A. Diagrams related to some of the activities you did in the lab are given below. Answer the questions based on them:

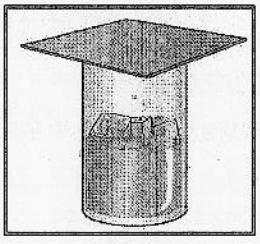
i.



a) What was the change made to one balloon during the activity? **(1 Mark)**

b) Draw a sketch of your observation. **(1 Mark)**

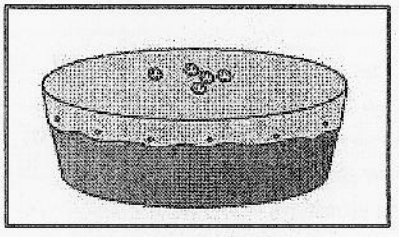
ii.



a) What change was observed on the outer surface of the glass shortly after the experiment? **(1 Mark)**

b) What conclusion can be drawn from that observation? **(1 Mark)**

iii.



a) What happens to the small pieces of paper when the rabana is played? **(1 Mark)**

b) Based on this observation, how does sound occur? **(2 Marks)**

B. From the following list of substances, identify which are attracted to a magnet and which are not:

A pin, Pieces of aluminum, Iron nails, Brass nails, Pieces of wood, Pieces of plastic, A needle, A ten-rupee coin

Materials that are attracted to a magnet	Materials that are <u>not</u> attracted to magnets

(Total Marks: 11)