



## Royal College - Colombo 07

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Grade 6 – Second Term Test – July 2019

දෙවන වාර පරීක්ෂණය - 2019 ජූලි - 6 ශ්‍රේණිය

කාලය : පැය 2  
Time : 2 hours

### Science

### විද්‍යාව

Name :- ..... Grade : -..... Index number:-.....

#### Part I

#### ❖ Underline the most suitable answer.

- The substance which attracts towards a magnet is,  
(i) carbon (ii) brass (iii) lead (iv) steel
- Which of the following is not considered as a bio-mass?  
(i) Rotten vegetables and fruits (ii) Dried cow dung  
(iii) Fire - wood (iv) Tar
- Select the answer which contains, renewable (can be used again and again) energy sources only.  
(i) wind, flowing water, sea waves  
(ii) Sun, wind, fossil fuels  
(iii) wind, geothermal energy, fossil fuels.  
(iv) Petroleum oil, biomass, coal
- Given above are two bar magnets.

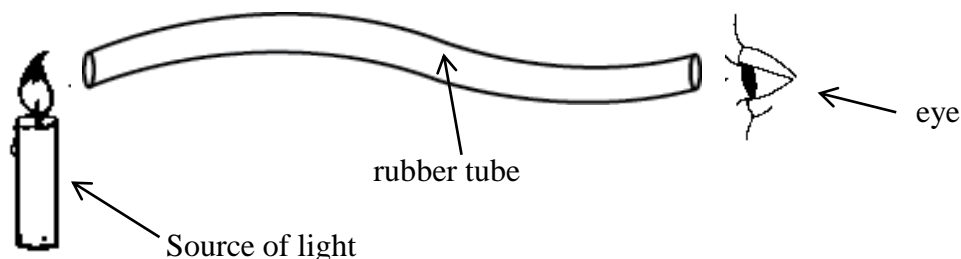
When moving the unmarked magnet 'Z' towards 'Y', they were repelled. The pole of 'Z' which moved towards 'Y' may be,

(i) South pole (ii) North pole  
(iii) unlike poles (iv) cannot be identified properly.
- Which of the following is not a correct example for sustainable use of energy sources?  
(i) Switching off the unnecessary bulbs.  
(ii) Using energy sources that can be used again and again.  
(iii) Opening the refrigerator door frequently.  
(iv) Using solar thermal cookers.

6. Which of the following is the basic characteristic of micro – organisms?

- (i) Invisible to the naked eye, when taken individually.
- (ii) All micro organisms cause infectious diseases for animals.
- (iii) All micro organisms grow in water.
- (iv) All micro organisms locomote in various ways.

7.



Select the correct statement about the above activity.

- (i) Light can be observed through the rubber tube.
- (ii) Light cannot be observed through the curved tube, because light is transmitted only in straight lines.
- (iii) The using light source used is not a luminous object.
- (iv) Light cannot be observed even when a PVC tube is used instead of the rubber tube.

8. The gas produced using rotten vegetables, rotten fruits, hay and of animal waste is,

- (i) bio gas
- (ii) hydrogen gas
- (iii) liquid petroleum gas
- (iv) oxygen gas

9. Large volume of gases are stored in small cylinders. Which characteristic of gases is used in this process?

- (i) Gases do not have a definite mass.
- (ii) Gases can be stored by applying high pressure.
- (iii) Gases having a definite volume.
- (iv) Gases having a definite shape..

10. Select the incorrect statement about magnets.

- (i) The magnetic power is evenly spread all over a magnet.
- (ii) The north pole is indicated by red colour.
- (iii) Like poles (same poles) get repelled.
- (iv) A small magnet is used in a compass as the indicator.

11. Select the activity which does not affect the loss of hearing.

- (i) Inserting foreign objects into the ear.
- (ii) Itching the ear by using different things.
- (iii) Wearing safety equipments when having deep sounds.
- (iv) Using ear – phones more than one hour per day.

12. A plant which grow in water is,

- (i) Icornia (Bimthamburu)
- (ii) Ranawara
- (iii) Lotus
- (iv) Cashew

13. Surface water cannot be seen in

- (i) oceans
- (ii) rain
- (iii) lakes
- (iv) waterfalls

14.

#### Organisms

(a) growth is limited

eg: .....

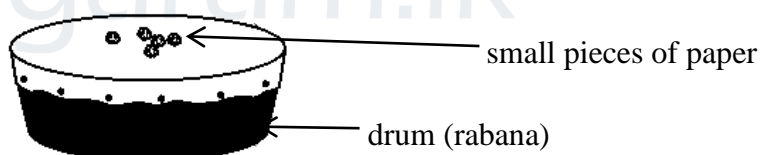
(b) growth is unlimited

eg: ..... ..

Select the answer with correct examples for (a) and (b)

- (i) Gecko, earthworm
- (ii) Jack tree, Guava tree
- (iii) Jack tree, fish
- (iv) Cuttle fish, grass plant

15.



Select the incorrect statement about the above activity.

- (i) Rabana is a sound producing equipment.
- (ii) Vibration of the hide (membrane) of the 'rabana' can be observed by movement of pieces of paper on it.
- (iii) Sound is produced by vibration of something.
- (iv) A deep sound comes out when hide is contracted.

16. The gaseous state of water is in,

- (i) snow
- (ii) springs
- (iii) glaciers
- (iv) steam

17. The symbol of the standard unit of measuring mass is,

- (i) mg
- (ii) g
- (iii) kg
- (iv) Kg

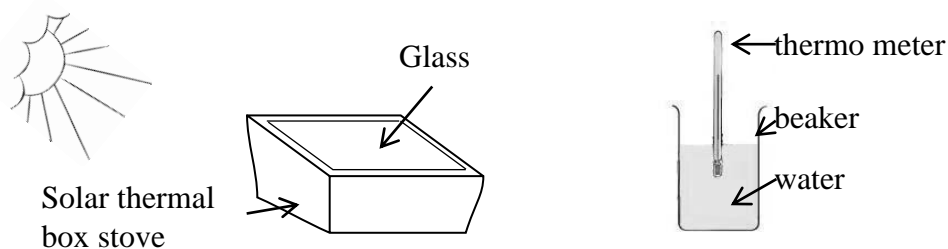
18. Select the answer which includes materials that show the property of elasticity.
- (i) rubber and elastic (ii) rubber and plastic  
(iii) clay and iron (iv) rubber and glass
19. Which of the following is a source of energy,
- (i) flowing water (ii) magnets  
(iii) kinetic energy (iv) sound
20. Select the incorrect statement.
- (i) The amount of salt that is dissolved in water is known as salinity.  
(ii) Mass of water is high with salinity.  
(iii) Water is categorized as fresh water, marine water and brackish water based on salinity.  
(iv) The amount of salt dissolved in fresh water is very high.

### Part II

#### ❖ Answer the first question and four other questions

1. A group of grade 6 students prepared a list of things, which are needed to make a solar thermal box stove.
- (i) Name 3 things that should be in the prepared list.  
(ii) The following apparatus was prepared by the above students to show the function of a solar thermal stove, But teacher told them that it was incomplete.

Complete the diagram.



- (iii) What will be the observation, after completing the mistakes of the stove.  
(iv) Which form of solar energy is absorbed by the above stove.  
(v) Write down the energy transformation of a solar cell.  
(vi) Teacher told them that using solar energy is an environmental friendly. Give two reasons for that.  
(vii) Solar energy is stored in fossil fuels. Name 3 fossil fuels in liquid state.  
(viii) Briefly describe the formation process of fossil fuels.  
(ix) What is the harmful effect on the environment, When using fossil fuels.

## 2. Fill the blanks by using given words.

(Plutonium, repel, opaque, brackish water, respiration, carbon dioxide, bacteria, fuel, coral reefs, ethanol)

- (i) Plants use ..... from air for the process of photosynthesis.
- (ii) Environmental pollution can be prevented by using ..... garbage disposal methods. .
- (iii) Like poles of magnets ..... each other.
- (iv) ..... is used to generate nuclear power.
- (v) Light does not transmit through ..... objects.
- (vi) Plants and animals produce energy by the process of .....
- (vii) The salinity of ..... is less than marine water.
- (viii) ..... is a type of micro – organism used in producing curd.
- (ix) The gases released when burning ..... causes in to increase of temperature of the environment.
- (x) There is a threat for the existence of ....., due to environmental pollution.
- (xi) ..... can be used as a fuel to run vehicles.

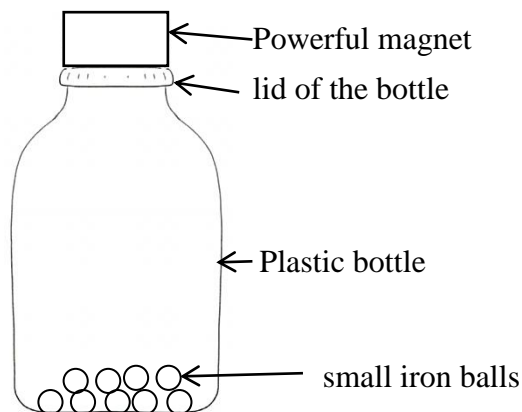
## 3. (A) Put tick (✓) if these statements are correct, and if these are wrong, put a cross (✗) within the brackets.

- (i) Light rays do not transmits in a straight line. ( )
- (ii) Moon is a non-luminous object. ( )
- (iii) 'Rabana' produces sound in the same way as a drum. ( )
- (iv) Air is transparent even when the mist is there.  
(when having mist also) ( )
- (v) Optic fiber technology is used in different decorations. ( )

## (B) Write short answers.

- (vi) An animal that cannot locomote, but show movements. - .....
- (vii) The pigment, which gives green colour to the plants - .....
- (viii) The property of increasing the length of a material by a force of stretch. –  
.....
- (ix) A liquid state of precipitation - .....
- (x) The chemical substance contains in salt - .....
- (xi) The equipment which uses optic fiber technology and used to observe the interior parts of the body  
.....

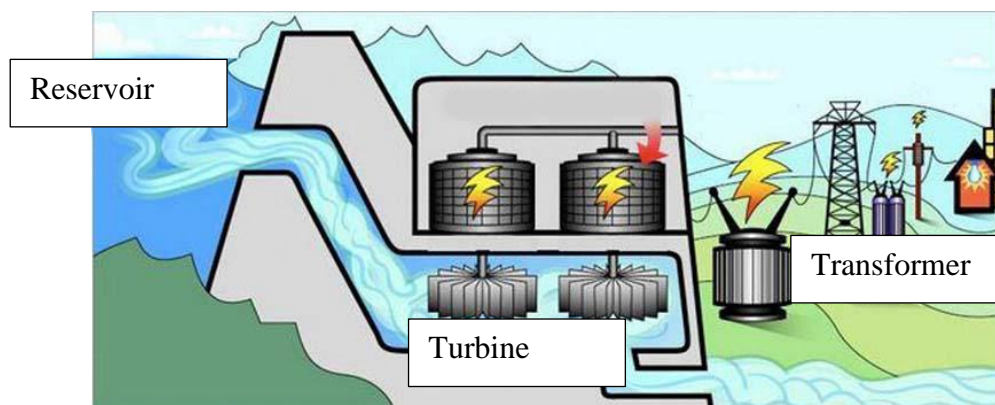
4.



There are some small iron balls in the above plastic bottle. A powerful magnet is attached to the top of the lid.

- (i) What will be the observation, after shaking the bottle vertically (up and down)?
- (ii) Mention the reason for the above observation.
- (iii) Name 2 other things than iron balls that can be used in the above practical, to get the same observation.
- (iv) To which direction, will a bar magnet settle when it's hunged freely.
- (v) When an unmarked bar magnet is brought towards the north pole of a freely hunged magnet, it was "repelled". What may be the reason?
- (vi) Which pole of a magnet should be brought closer to the above hanging magnet, for an attraction.
- (vii) When a compass is kept on a flat surface what is the direction which its red colour point indicates?
- (viii) Name 2 persons who use the compass to find the directions.
- (ix) Draw a diagram to show how the attraction of iron powder occurs in a bar magnet.
- (x) Name 2 equipments, which have magnets?

5.



- (A)
  - (i) Name the process, described by the above diagram.
  - (ii) Fill the blanks according to the given energy transformation, after copying to your answer script.

- (iii) Write down two reasons for increasing the kinetic energy of flowing water.
- (iv) Name 2 energies other than flowing water that can be used to rotate the turbine in as in part (ii)
- (v) What do you mean by 'Sustainable use of energy sources'?
- (vi) Suggest 2 ways, that can be used to practice, "Sustainable use of energy" in your home.

- (B)
- (i) A natural sound comes out from flowing water. What is the term given to the objects that produce natural sounds.
  - (ii) By which process, that the above objects produce sound.
  - (iii) Name a sound producing instrument that you made.
  - (iv) Name another musical instrument which produce sound similar to the equipment that you made.

6. Following equipments are given to you to prove that light is transmitted in a straight line.

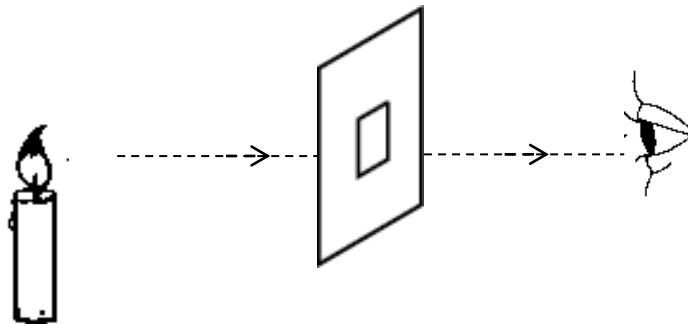
a transparent wide glass bottle

a piece of cardboard,

joss sticks,

laser beam torch

- (i) Draw labeled diagram to show the above given activity.
- (ii) Mention the difference between a light ray and a light beam.
- (iii)



After keeping a special material. between the candle and the cardboard, light can be seen but the flame cannot be clearly seen. What will be the type of material used?

- (iv) Give 2 examples for such materials?
- (v) Give a use of above material.
- (vi) The objects that produce light are known as sources of light. Name 3 natural sources of light.
- (vii) Mention 3 uses of light.

- (viii) Light is a form of energy. Explain the difference between matter and energy.
- (ix) Name the physical states of matter.
- (x) Mention the physical state that ice, glaciers, and snow belongs.

7. (A) Plants show a vast diversity based on their nature and can be categorized as plants, shrubs, trees and creepers.

- (i) Mention another way of showing diversity among plants than the nature of plants.
- (ii) Give one example each for plants and creepers.

Plant -

creeper -

- (iii) Tabulate 3 differences between plants and animals.

	Plants	Animals
1		
2		
3		

- (iv) Given one example of plant movement that cannot be observed within a short time period.

(B) (v) Consider the practical that, you can do to prove "carbon dioxide is released in respiration" and complete the following.

- (a) The things needed:
- (b) Labeled diagram:
- (c) Method:
- (d) Observation:
- (e) Conclusion: