

Southern Provincial Department of Education

Year End Test - 2018

Science Grade 06

Name / Index No.

Time - 2 hours

- Answer all questions.
- Underline the most Suitable Answer.

Paper - I

(01) Which of the following is an autotrophic organism?

(1) Man (2) Cow (3) Grasshopper (4) Mango Tree

(02) What is the process that does not take place in photosynthesis?

(1) Releasing Energy (2) Absorbing Carbon dioxide gas
(3) Releasing Oxygen gas (4) Absorbing Water

(03) An electric conductor is,

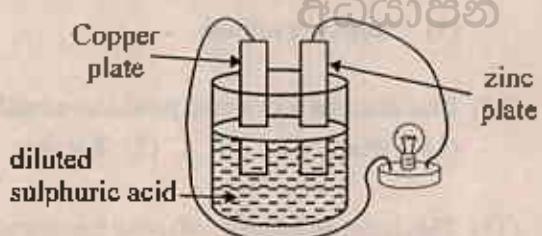
(1) gold (2) carbon (3) rubber (4) glass

(04) Select the answer which shows state changes in sequence when heat is supplied to a material.

(1) solid → liquid → gas (2) gas → liquid → solid
(3) liquid → gas → solid (4) solid → gas → liquid

(05) This diagram shows a simple voltaic cell. This is not an observation obtained, when electricity is generated.

(1) dissolving the zinc plate
(2) dissolving the copper plate
(3) emitting gas bubbles near the copper plate
(4) decreasing the brightness of the bulb gradually



(06) The property of making wires by drawing a metal is,

(1) malleability (2) brittleness (3) ductility (4) plasticity

(07) This is used as a fuel.

(1) petrol (2) L.P. gas (3) bio gas (4) all of the above

(08) Select the answer which contains only luminous objects.

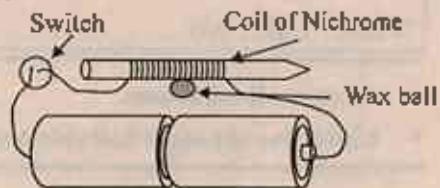
(1) Sun, moon, planets (2) Sun, moon, stars
(3) lighted bulb, lighted candle, moon (4) Sun, lighted oil lamp, lighted electric bulb

(10) The quantities measured by kg, Ω , $^{\circ}\text{C}$ in sequence are,

(1) weight, resistance, temperature (2) mass, resistance, temperature
(3) weight, current, temperature (4) mass, current, temperature

(11) When the switch is closed in this set - up wax ball melts and falls down. What effect of electricity is demonstrated by it?

(1) magnetic effect (2) chemical effect
(3) heat effect (4) magnetic and heat effect



(12) Select the incorrect food chain.

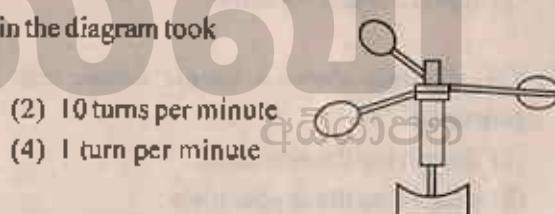
(1) Plants → Rabbit → Deer → Lion (2) Plants → Squirrel → Crow → Eagle
(3) Plants → Grasshopper → Frog → Rat snake (4) Plants → Mouse → Rat snake → Eagle

(13) Select the answer which contains only translucent materials.

(1) Plane glass, Cardboard, Muddy water (2) Tissue papers, Cut glass, Muddy water
(3) Colourless polythene, cut glass, tissue papers (4) Cardboard, Wood, Cut glass

(15) Which of the following electrical accessory can pass electric current in both directions?
(1) Resistor (2) Electric cell (3) Rectifier diode (4) Light emitting diode

(16) What is the speed of wind if the anemometer shown in the diagram took 2 minutes for 20 rotations?



(18) This is not an instance of using the phenomena expansion.

- (1) when measuring the temperature using a thermometer
- (2) When fixing a rim to a cart wheel
- (3) When making various shapes by heating metals
- (4) When removing a metal lid fitted to a bottle lightly

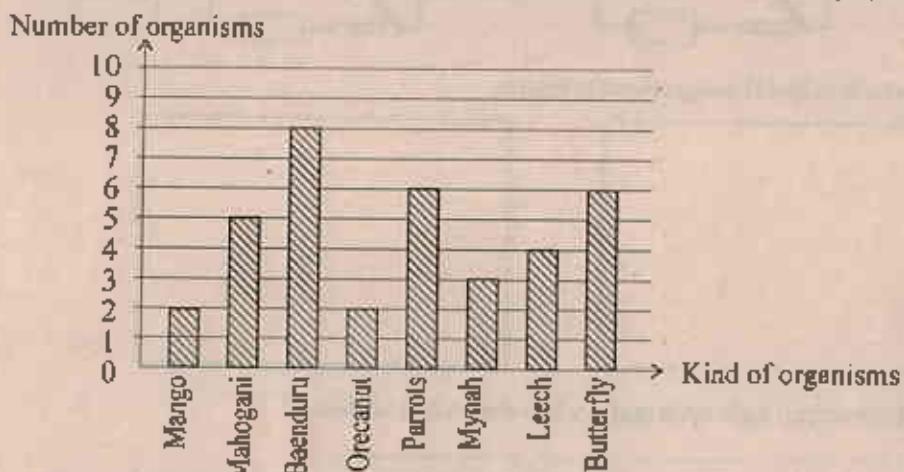
(19) Land slides mostly occur in,
(1) Coastal areas (2) Plain areas (3) Hilly area (4) Sloping areas

(20) What is the least efficient electric bulb?
(1) Filament bulb (2) LED bulb (3) CFL bulb (4) Fluorescent lamp

Paper - II

- Answer Five (5) questions only, including First question and four others.

(01) (A) A group of children who participated in a field trip, collected information about organisms in a small forest near the school. Some information about them are shown in the graph below.



(i) Answer these questions using the graph

- What species of organism has the highest number of organisms?
- How many butterflies can be found in the field?
- What is the total number of organisms shown by the graph?

(ii) Name the feeding method shown by the leech?

(iii) Mention a main difference shown by a mango tree and an arecanut tree.

(B) This diagram shows a circuit prepared by a group of children in grade six.

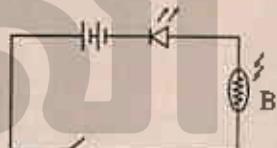
(i) Name the accessories shown by A and B in this circuit.

A - B -

(ii) The light emitting diode was not lit up when the switch is closed. Mention the reason for it?
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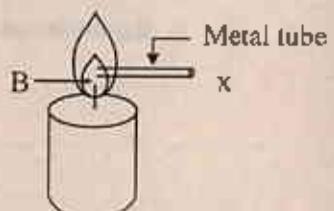
(iii) What should be done to correct the circuit to be able to light the LED?
.....

(iv) What should be done to decrease the brightness of the bulb without changing the number of dry cells?



(C) (i) A metal tube is placed closer to the region B in the candle flame.

Write an observation that can be seen when a flame is brought closer to the end of 'X' of the metal tube.

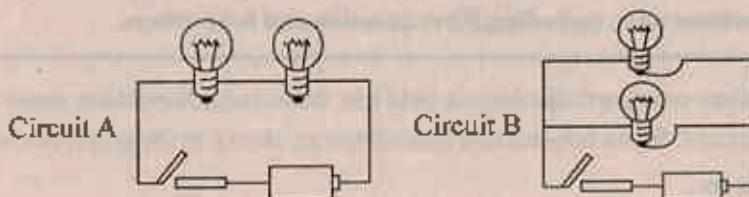


(ii) Write a state change taken place when the candle is lighted.

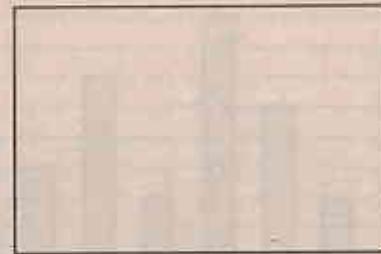
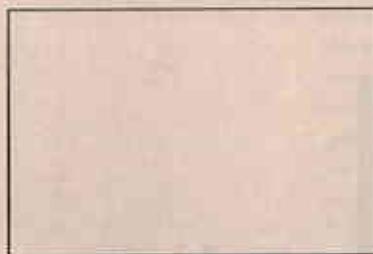
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(iv) What is the advantage of using a Bunsen flame instead of a candle flame to heat substances in the laboratory?
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(02) (A) The diagram below shows two circuits prepared to light two identical bulbs at once.



(i) Draw the circuits A and B using circuit symbols.

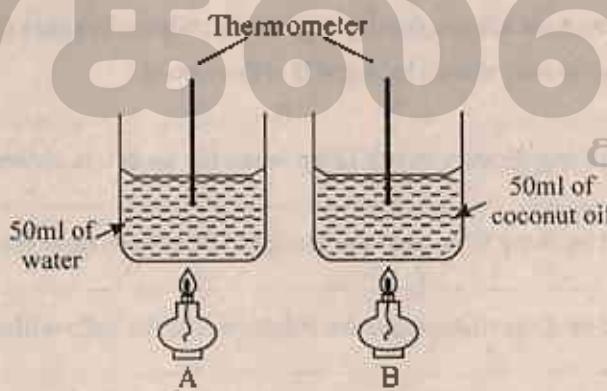


(ii) Bulbs of which circuit light up brightly when the switch is closed?

(iii) (a) What is the instrument used for measuring the current flowing in a circuit?

(b) What is the standard unit used for measuring current?

(B) Two set-ups A and B are prepared to find the relationship between heat and temperature. They are heated in an equal time duration.



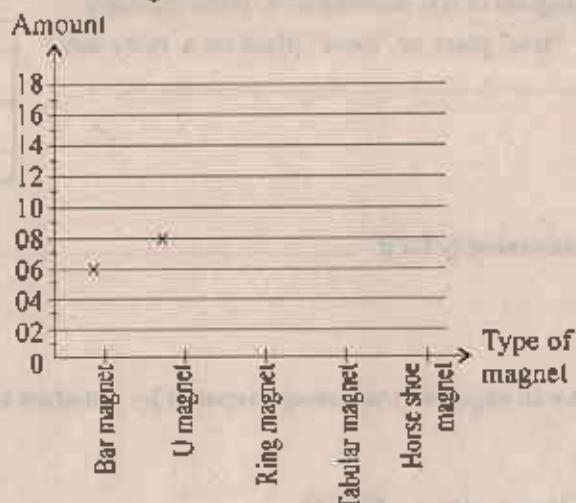
(i) Temperature of which set-up rises up speedily?

(ii) Burners supply heat continuously even after boiling water and coconut oil. What happens to the thermometer readings?

(03) (A) A child wanted to measure the strength of several magnets. He measured it according to the attraction of file clips to magnets. The results of it is shown in the table below.

Type of magnet	Bar magnet	U magnet	Ring magnet	Tabular magnet	Horse-shoe magnet
Number of file clips attracted	06	08	10	14	16

(i) Complete the graph below using the above results.



(ii) What is the strongest magnet out of the magnets examined?

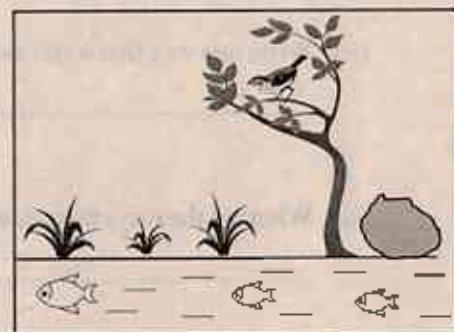
(iii) Draw the external appearance of the above magnet.



(iv) Write an action that can be taken to prove the accuracy of the results obtained from the above activity.

(B) This diagram shows how a bird lies on a tree is looking at a fish in a pond.

(i) Name the two important factors needed for the bird to see the fish.



(ii) Name the two transparent media that light travels.

(iii) Name an opaque object present in the picture.

(iv) A specific biological reaction takes place in the leaves of the above tree with the aid of sunlight. What is it?

(04) (A) An instrument prepared to measure the amount of water vapour in the atmosphere is shown in this diagram.

(i) Write the name of the instrument shown in the picture.

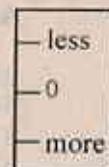
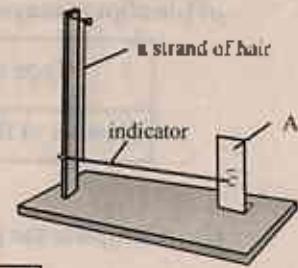
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(ii) Name the part shown as A.

A -

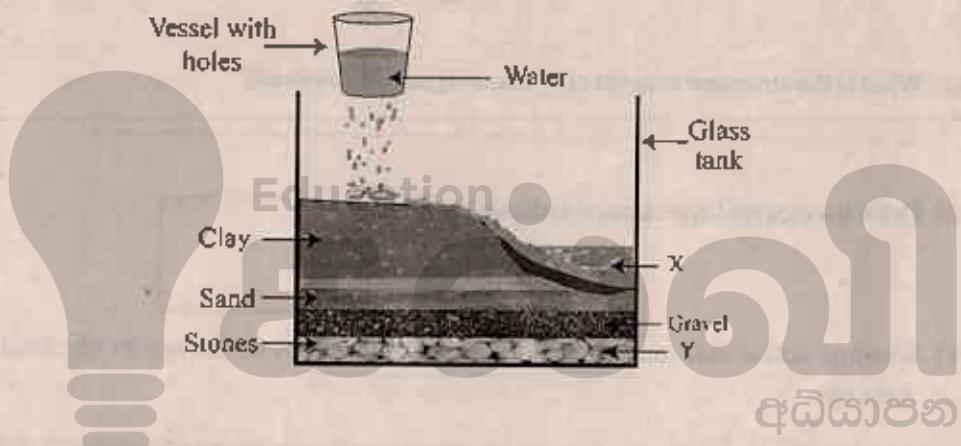
(iii) An enlarged diagram of A is shown below. Is the indicator placed on the "less" place or "more" place on a rainy day?

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(v) Explain the reason simply for it.

(B) This diagram shows an experimental set-up prepared by a student to demonstrate the various ways that water exists.



(i) What are the ways that water exists as shown by letters X and Y?

X -

Y -

(ii) Write one way that water exists as Y is taken for the consumption of man.

.....

(iii) What are the ways that water can be categorized according to the salinity?

(05) (A) Various food relationships among various animals living in a natural environment are present as a web. Several animals that have such food relationships are shown below.

Rabbit, Deer, Green plants, Python, Hawk, Tiger

(i) Write a food chain with three links.

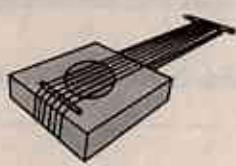
(ii) Name the producer in this food chain

(iii) Mention a carnivore present in this food chain.

(B) Several toys that produce sound are shown below.



a horn made by a tender coconut leaf



violin



xylophone

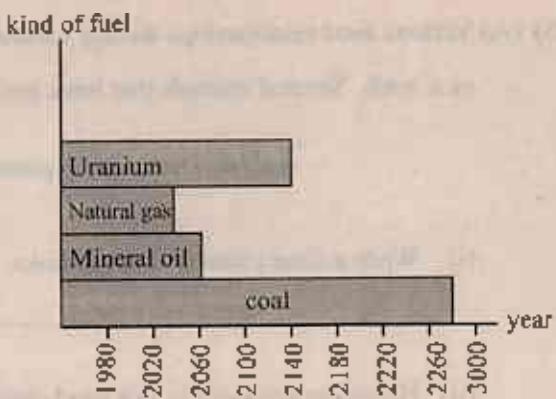
(i) Mention the method of producing sound by the horn made by the tender coconut leaf

(ii) What change should be done to the strings of the violin to make the sound louder?

(iii) To which metal tube out of P, Q, R, S Should be tapped in the xylophone to make the sound louder?

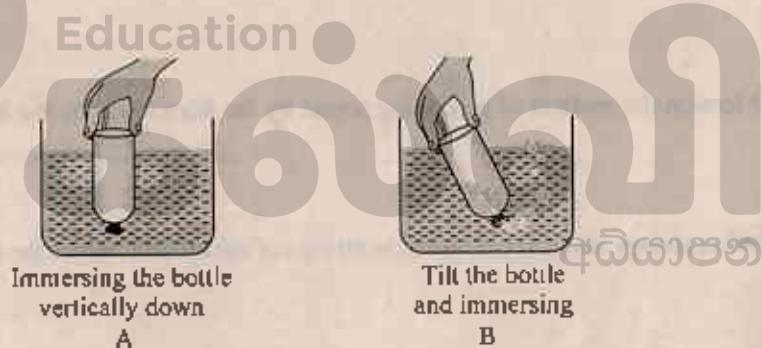
(iv) What do you call the unrhymic non-formal sound?

(06) (A) People in the world obtain large amounts of energy from mineral oil, coal, natural gas and the element uranium. These sources of energy are decreasing speedily and not generated again. The energy sources which are not generated again are known as non-renewable sources of energy. This graph shows such non-renewable sources of energy and time taken by them to finish.



- What is meant by non-renewable sources of energy?
- According to the graph, what source of energy is decreased more speedily?
- In which year is it expected to finish mineral oil, completely?
- To which kind of source of energy does uranium belong?
- Name another source of energy which is not finished and can be used when the other sources of energy are finished completely?
- Explain briefly what the sustainable use of energy is.

(B)



- What property of gaseous matter is tested by the above activity?
- What is the change that can be seen in the bottles in the instances A and B?
- What is the reason for this change?
- Write the specific properties of solid matter used in the instances below.
 - Using rubber to make gloves
 - Using copper wires to make electric cables