
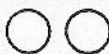





බස්නාහිර පළාත් අධ්‍යාපන දෙපාර්තමේන්තුව மேல் மாகாணக் கல்வித் திணைக்களம் Department of Education - Western Province	
වර්ෂ අවසාන ඇගයීම ஆண்டிறுதி மதிப்பீடு - 2016 Year End Evaluation	
ශ්‍රේණිය } 09 தரம் } Grade }	විෂය } பாடம் } Science Subject }
පත්‍රය } வினாத்தாள் } I, II Paper }	කාලය } 02 hours காலம் } Time }
Name:- Index No.	

Part I

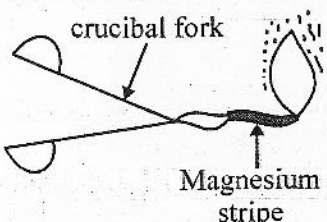
- ◆ Answer all questions.
- ◆ Underline the correct or the most suitable answer.

- (01) Who was presented a new method of symbolizing elements
 (1) John Dalton (2) Ernest Rutherford (3) J. J. Thomson (4) J. J. Berzelius
- (02) Example for the Natural composite substance.
 (1) Coconut shell (2) Timber (3) Cardboard (4) Fiber optics
- (03) The most common compound in the biogas
 (1) Ammonia (2) Methene (3) Acetylene (4) Hydrogen Sulfide
- (04) What is not true about the primary energy sources?
 (1) Environment pollution is resulted by using them
 (2) Unlimited supply
 (3) Rapid
 (4) Can be converted in to a secondary energy source
- (05) Which one is used for the measuring of small quantity of liquid volume?
 (1) Beaker (2) Measuring cylinder (3) Volumetric flask (4) Burette
- (06) What are the two metals can be found in the welding lead?
 (1) Lead, Tin (2) Bronze, Tin (3) Copper, Tin (4) Aluminium, Tin
- (07) The name of the quality certificate that responsible for the accuracy and hygienic conditions in the food industry.
 (1) I.S.O. (2) SLS (3) HACCP (4) HFAC
- (08) Which animal that is synonymed by the name of 'chemical weapon'
 (1) arrow poison frog (2) sea horse (3) mekong catfish (4) vampire bat
- (09) What is the correct proposition of the following sentence in related to the scientific method? although the switch in on, the bulb did not light up
 (1) an error in the switch (2) The bulb is not connected properly
 (3) due to the power supply failure (4) Why the bulb is not lighted up

- (10) The following illustration is a part of a polymer. 
The correct structure of the monomer is
(1)  (2)  (3)  (4) 

- (11) The giant panda's daily diet consists almost entirely of
(1) see plants (2) insects (3) food reserved roots (4) amature bamboo leaves

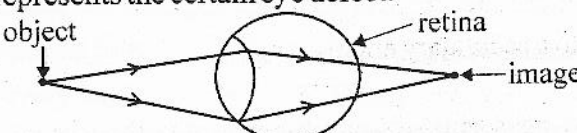
- (12) A certain flower has following properties,
colour is dark yellow highly fragrant consist of sticky pollen
What should be the pollen agent of this plant?
(1) wind (2) insects (3) water (4) by bats

- (13) 
(1) A bright flame (2) releasing a gas
(3) making a noise (4) a white powder is left

- (14) The endermic amphibian named by the name of Sri Lanka Biologist?
(1) Planaria (2) Arrow poison frog (3) Pathirana salaya (4) Buco Kotagamai

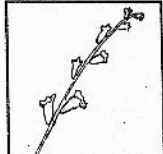
- (15) Among the answers given bellow cluster of stars is
(1) Ursa major (2) Ursa minor (3) pleiades (4) orion/hunter

- (16) What is correct about the 'paddy seed'
(1) simple fleshy fruit (2) Simple dry fruit
(3) An Aggregate fruit (4) Composite fruit

- (17) The diagram represents the certain eye defect.


- The correct order of eye defect and the suitable remedy is
(1) short sightedness - concave lens (2) Short sightedness - convert lens
(3) long sightedness - concave lens (4) long sightedness - convex lens

- (18) The pair of constellation lying on either sides of capricon belonging to zodiac is correctly denoted in
(1) sagitarius and Aquarius (2) Pisces and Aquarius
(3) Sagitarius and pisces (4) Scorpius and Aquarius

- (19) 
The inflorescence denotled in the picture
(1) simple raceme (2) spike
(3) Symple cyme (4) Compound cyme

- (20) Which of the following can not be considered the use of nano-cosmatics products in beauty culture
(1) making allergies (2) penetrate deep in to the skin
(3) absorption of Infrared radiation (4) active life being long

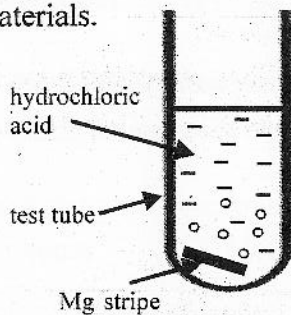
Part II

♦ ANSWER THE FIRST QUESTION AND FOUR MORE QUESTIONS.

(01) (A) The activities we follow in daily life experiences, the properties of final materials are different from the initial materials.

- (i) In the burning candle, the solid wax turns to liquid wax. Which type of change occurs in this incident?
- (ii) Give an evidence for a chemical reaction when lighting a match to light the candle?
- (iii) Write the steps of the experiment to detect the mass difference of reactant and product in a chemical change?
- (iv) How many elements are found in the chemical formula of AgNO_3 ?

(B) The following activity is about the identification of the interactions among the materials.



- (i) Which gas is released in this experiment?
- (ii) What is the colour of the element sulphur found in the laboratory?
- (iii) State two specific properties of an alloy other than the metal?

(C) The consumers are protected with right to buy goods having high quality standards.

- (i) Write the two information printed on the milk packet to detect the quality?
- (ii) What is meant by composite materials?
- (iii) Which type of composite material belongs to the cement plaster?
- (iv) The over usage of polymers has become a severe environmental problem today. Write the two solutions which can be adopted to minimize this problem.

(02) (A) The student has mentioned that the grass were converted by a piece of wood was become yellow after few days.

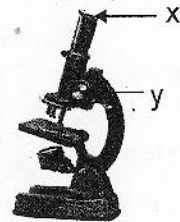
- (i) Describe the word of hypothesis.
- (ii) Write a hypothesis regarding the above phenomenon
- (iii) What is the use of doing control experiment in testing the hypothesis?

(B) Many equipments are used to observe the minute objects. Write parts of this apparatus which are belong to following system.

(i) by the above diagram write a part of

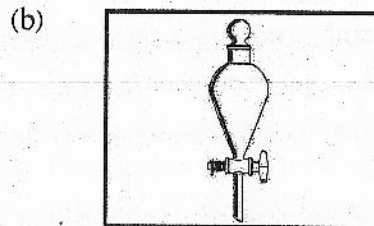
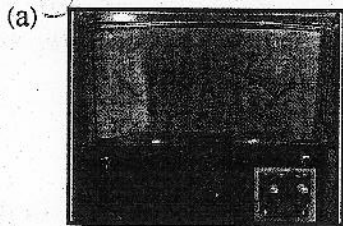
(ii) A light microscope has the magnification of eyepiece and the objective refers as 10 and 25.

Calculate the magnification power of the light microscope.

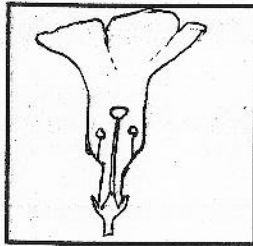


- (C) (i) Describe the term of Micro organisms
 (i) Name a dairy product which is producing by using of micro organisms.
 (ii) What is the use of adding a small quantity of decayed compost in to the compost mixture?

(D) The following illustration is about the two instruments which is used in the laboratory. State one use of each instrument.



(03) (A) A given below is a transverse section of an Ipomea flower.



(i) Mention the things represented by each of the following symbols of the floral formula of this flower.

- a. $C_{(5)}$
 b. A_5

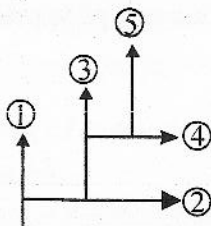
(ii) What is the function of sepals?

(iii) Write down two features that can be seen in a flower pollinated by wind.

(iv) Mention the changes that take place in the following parts of a flower when becomes a fruit.

- a. Ovary wall b. Ovary

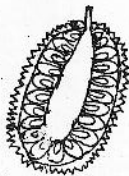
(B) The diagram below shows the position of flowers in a certain inflorescence.



- ❖ First flower occurs at the apex of the bud.
- ❖ Second flower occurs at the apex of a new bud formed from the first bud.
- ❖ The third flower occurs at the apex of a bud of the second flower.

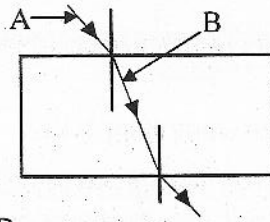
- (i) Is this inflorescence racemose or cymose?
 (ii) Mention the sub type of the above inflorescence in which the above shown inflorescence belongs to.

(C)



- (i) Mention the type of fruit in which the jak fruit belongs.
 (ii) What is represented by a floret of a jak fruit?

- (04) (A) Given below is a set up for an activity to find out how light travels through a glass block.



- (i) Name the two rays A and B.
- (ii) What is the name given for the change that take place when light travels through the glass block?
- (iii) Write a natural phenomena that occurs as a result of the above mentioned behaviour.
- (B) Sound as well as light travels to another direction when it hits a surface.
- (i) Doors and windows are vibrated as a result of lightning. What is the phenomena related to above behaviour?
- (ii) Write one strategy used to avoid echoing in cinema halls.
- (C) Drought is a natural disaster. It occurs as a short term drought and a long term drought.
- (i) What is meant by drought?
- (ii) Briefly explain how the drought will effect on generating energy.
- (iii) Write a natural phenomena that effect on Tsunami.
- (iv) Write a protective activity you should be taken when you are informed a tsunami condition.
- (05) (A) The time taken by three students who ran 100 m in a linear path is mentioned in the table given below.

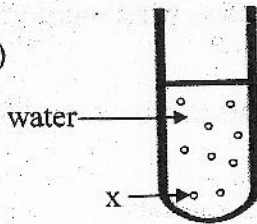
Name	Time taken (seconds)
Amal	22
Latheek	20
Suraj	23

- (i) Calculate the speed of Latheek.
- (ii) What is the reason for naming speed as a scaler quantity?
- (iii) Write the formulae for calculating velocity.
- (B) Wheel brace and grinders are two equipments used in repairing vehicles.
- (i) Write one use of each equipment mentioned above.
- (ii) What is the use of having a tool board in a place where motor vehicles repair?
- (iii) What is the use of disc plough in an agricultural work site?

(C) Energy resources in the world are divided into two as primary and secondary energy resources.

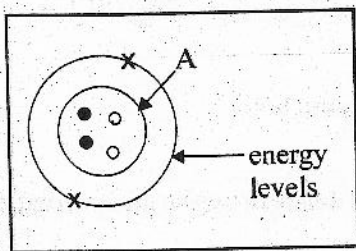
- (i) state a situation where primary energy resources are used to produce secondary energy resources.
- (ii) Mention one problem when using solar cells.
- (iii) write a crisis that can be faces when using excess grains to produce ethanol.
- (iv) write a way that you can contribute to conserve energy.

(06) (A)



Give below is a set up prepared to identify the evidences of a chemical reaction.

(i) Name a suitable substance for x if the test tube became cool



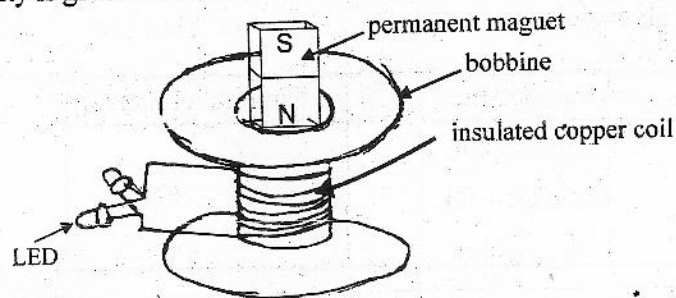
(ii) Name the part A in this diagram of atom. State a failure of Dalton's atomic theory.

(iii) Write a fact of Dalton's atomic theory which was broken down.

(B) A balanced diet should be taken to maintain a healthy body.

- (i) Mention the type of nutrition responsible for the growth of the healthy body.
- (ii) What is the test done in order to identify the above mentioned nutrient?
- (iii) Mention the category in which glucose and sucrose belong.

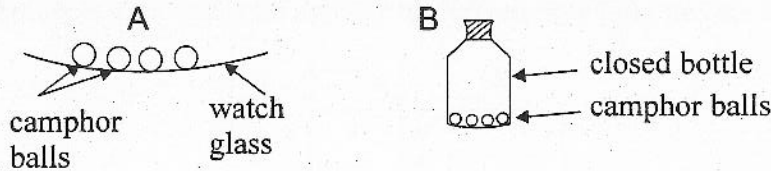
(C) Different methods are used to generate electricity in day to day life. A set up used to generate electricity is given below.



Fill the table using the above activity.

Activity	LED glows	LED doesn't glow
A. Magnet doesn't move. coil moves		
B. coil doesn't move. Magnet moves		

Given below is an activity done by a student using camphor balls.



(ii) Write down the observations inside of camphor balls in A and B after two weeks.

A

B

(iii) Explain the reason for the above observation.

(07) (A) (i) Write down the two main theories related to location of the celestial objects.

(ii) State the number of rotations occur during one revolution of the earth

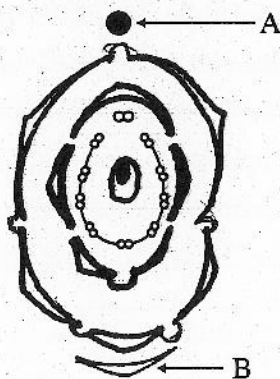
(B) (i) What is the name given to the gaseous cloud which form the stars?

(ii) State the name given for the final stage of a star

(iii) Name the constellation in which the brightest star 'series' belongs

(iv) Mention an advantage of studying constellations.

(C) Given below is a floral diagram of sesbania flower.



(i) How many petals are there?

(ii) How many parts are there in the Androceum

(iii) Write the pattern of arrangement of androceum

(iv) Name A and B