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| Department of Education – Western Province | | | | |
| පළමු චාර ඇගයීම First term Evaluation } 2018 | | | | |
| ලේණිය Grade } 7 Subject } Science | Baper I,II Image: Baper 02 hrs | | | |
| නම | | | | |

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

- (01). The plant with tap root system is(i).Mango (ii).Coconut (iii).Bamboo (iv). Kithul
- (02). The type of roots present in *Mimosa* (Touch me not) plant is(i). Storage roots (ii). Aerial roots (iii). Roots with nodules (iv). Climbing roots
- (03). What is the function of the androecium of a flower?(i). Attraction of insects(ii). Production of pollens
 - (iii). Production of ova (iv). Protection of flower buds
- (04). Select the answer only with vertebrates.

(i). Elephant, frog, prawn, rat

- (ii). Gecko, Prawn, crab, snake
- (iii). Elephant, snake, frog, cockroach (iv). Gecko, snake, rat, frog
- (05). Who first revealed that static electrical charges are developed on the surface of the objects by rubbing?
 - (i). William Sucerburg (ii). William Gilbert (iii). Albert Einstein (iv). Benjamin Franklin
- (06). Which of the following is not a source of electricity?(i). Solar cell (ii). Dry cell (iii). Dynamo (iv). Electric motor
- (07).Which of the following is a phenomena related static electricity?(i). Rain (ii). Lightening (iii). Formation of clouds (iv). Wind
- (08). Which of the following is a characteristic of alternate current?
 - (i). Flow of current only in one direction
 - (ii). Change of the direction of current from time to time
 - (iii).Current flows from (-) terminal to (+) terminal
 - (iv). Current flows with time intervals
- (09). Select the electric component which produces electricity according to the electromagnetic induction principle.
 - (i). Dry cell (ii). Electric bulb (iii). Capacitor (iv).Dynamo

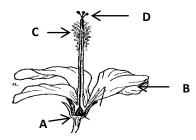
(10).

| What is symb (i). A dry cell | ool represented l (ii). Bulb | by the above d (iii). Capacite | - | (iv). Diode | |
|---|---------------------------------|-----------------------------------|---------|-------------|--|
| (11). Which of the following symbol correctly represent standard unit of measuring electric current? | | | | | |
| (i). A | (ii). V | (iii). Ω | (iv). F | 2 | |
| (12). Select the group of plants which having leaves only with parallel venation. (i). Paddy, Arecanut, Maize (ii). Mango, Chilli, Mung seeds (iii). Coconut, Cashew, Arecanut (iv). Long bean, Maize, Jak | | | | | |
| (13). Which of the following solutions would turn pink due to adding the phenolphthalein? (i). Dilute sulpheuric acid (ii). Sodium hydroxide solution (iv). Salt solution | | | | | |
| (14). Which of the following turns blue litmus in to red?(i). Lemon juice (ii). Soap water (iii). Salt solution (iv). Pure water | | | | | |
| (15). Select the answer which contain only bases. (i).Lemon, soap water, salt solution (ii). Vinegar, Lemon, Tamarind (iii). Lime water, soap, sodium hydroxide (iv). Salt solution, soap water, sodium hydroxide | | | | | |
| (16). The type of sugar present in the sap of sugar cane stem(i). Glucose (ii). Maltose (iii). Lactose (iv). Sucrose | | | | | |
| (17). Generation of electricity in a conductor, when cut with a magnetic field is known as (i). Electromagnetic induction (ii). Static electricity (iv). Electromotive force | | | | | |
| (18). The salt dissolved in sea water most abundantly is (i). Sodium chloride (ii). Calcium chloride (iii). Magnesium sulphate (iv). Calcium sulphate | | | | | |
| (19). The colour of Methyl orange when mixed with an acid is(i). Colourless (ii). Yellow (iii). Red (iv). White | | | | | |
| (20). Which of the following characteristic is seen in dicotyledonous plants? (i). Fibrous root system (ii). The trunk is unbranched (iv). Flowers with five petals or its multiples | | | | | |

Part II

Answer 05 questions including the 01st question.

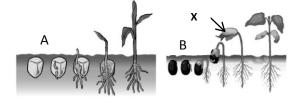
(01). A longitudinal section of a flower is given below.



- (i). Name the parts from A to D. (2 marks)
- (ii). Write down the main function of A and C respectively.(2marks)
- (iii). Draw a sketch of the gynoecium and label the parts.(3marks)
- (iv). Write down the dispersal methods of the following fruits and seeds.(2 marks)



(v). From the diagrams A and B, which represent the germination of monocot seed

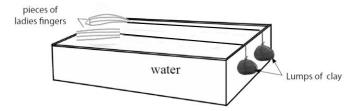


(vi).What is the structure shown as?(1 marks)

(vii).Select the flowering plants from coconut, Salvinia, Cycas and Jasmin.(2 marks)

(viii).Write down an example of a plant for each of the following root type .(3marks)

- a). prop roots b). climbing roots c). respiratory roots
- (02). A. The colour is important for the safety of animals. The shape is important for locomotion. A picture of an activity done by a group of students related to the above is given below.



(i). Write down the observation of the above activity.(1mark)

(ii). Write down the conclusion that can be arrived based on the above observation.(1mark)

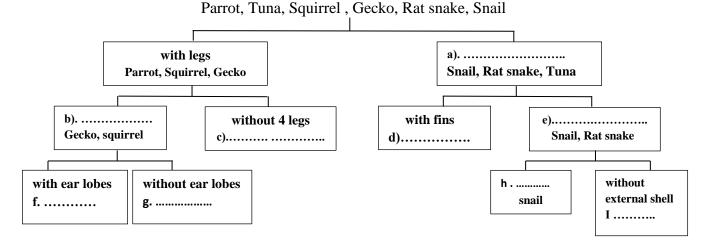
(iii). Briefly explain the importance of body shape for birds in locomotion.(1 mark)

- B. If the statement is correct put $(\sqrt{})$ tick mark put (\times) mark if the statement is wrong.
 - (i). Akkapana leaves produce new plants by vegetative propagation. ()
 - (ii). The leopard cannot be identified by other animals due to the presence of spots on its body()
 - (iii). An activity was done with the use of coloured tooth picks scattered on gravel ground, from them brown tooth picks were first picked out from the rest.()
 - (iv). Snail and prawn are invertebrates. ()
 - (v). The grasshopper can't be identified easily when it is among dry grass. ()
 - (vi). "Large animals and small animal" can be used as a characteristic to classify animals using dichotomous key. ()
 - (vii). Underground stems are present in ginger and onion. ()
 - (viii). Papaw leaves are compound leaves. ()

(8 marks)

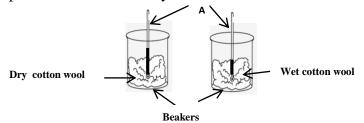
(03). Dichotomous key is used for classifying organisms.

- (i). Write down a main characteristic of a dichotomous key.(1mark)
- (ii). Complete the following dichotomous key.(9 marks)



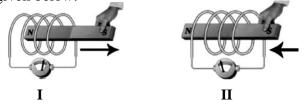
(iii). Write down the main difference between vertebrates and invertebrates.(1mark)

(04). The following set up arranged by a group of students to examine a specific property of water, kept inside the laboratory



- (i). Which property of water is tested by the above activity?(1mark)
- (ii). Name the instrument A .(1 mark)
- (iii). State a factor that should be considered when using the apparatus A.(1 mark)

- (iv). Write down an instance of using the above property of water.(1 mark)
- (v). Give another specific property of water.(1 mark)
- (vi). Name a substance that is soluble and insoluble in water properly.(2 marks)
- (vii). Two instances of an activity to demonstrate the generation of electricity by a dynamo is given below.



Write down the observation in each instance. (2 marks)

I II.

(viii). Write down the principle behind the generation of electricity in the coil.(2 marks)

(05). (i). Classify the following substances as Acidic, Basic and Neutral(3marks)

Lime water, Vinegar, salt solution, Pure water, Lemon juice, ash dissolved in water

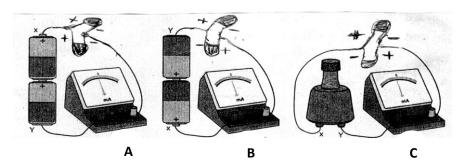
| Acidic solution | Basic solution | Neutral solution |
|-----------------|----------------|------------------|
| | | |
| | | |
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(ii). Write down an indicator that can be used to classify substances according to above criteria. (1mark)

- (iii). Name an acid that is used in the laboratory. (1 mark)
- (iv). What is the colour of the pH papers that is used in the laboratory(1 mark)
- (v). Fill in the blanks using suitable words The substances that convert blue in to red are known as The substances that convert red in to blue are known as

(4 marks)

- (vi). Name a basic chemical substance used in the laboratory.(1 mark)
- (06). The experimental set up arranged to conduct an activity in the laboratory is given below. Answer the following questions in relation to the activity.



(i). Fill the blanks selecting a suitable letter from experimental set ups given above.(3 marks)

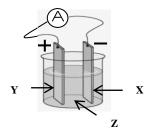
| (a) | (b) | (c) |
|--------------------------|---------------------------|-----------------------------------|
| Only one LED illuminates | Both the LEDs illuminates | Two LEDs illuminate alternatively |
| | | |

(ii). Give reasons , for illumination of two LEDs alternatively only in one set up. (1 mark)

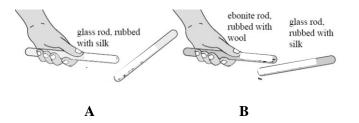
(iii). What is known as direct current?(2 marks)

(iv). What is known as a battery?(1 mark)

(v). Answer the questions based on the experimental set up given below.



- (a). Label the metal sheets X and Y.(2 marks)
- (b). Name the solution in which the above metals are dipped.(1 mark)
- (c). What is the name given to the above experimental set up?(1 mark)
- (07). An activity done by you in the laboratory is given below. Answer the questions based on the activity.



(i). What is the type of static electrical charges on glass rod rubbed with silk? (2marks)

(ii). What is the type of static electrical charges on ebonite rod rubbed with wool?(1 mark)

(iii). In which instance of A and B, an attraction occurs between the two rods?(1 mark)

(iv). In which instance of A and B, a repulsion occurs between the two rods?(1 mark)

(v). Give reasons for each attraction and repulsion between the rods.(2 marks)

(vi). What is known as capacitor?(1 mark)

(vii). What is measured by using Farad (F) and Microfarad(μ F)? (2 marks)