

**Richmond College - Galle**



**First Term Test - 2020**

**Science**

**Grade 7**

**1 hour 30 min.**

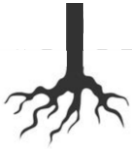
**Name - :** .....

**Part I**

**Underline the most suitable answer.**

01. A plant without root nodules is  
(i) Beans                      (ii) Sesbenia                      (iii) Wing Beans                      (iv) Hathawariya
  
02. Not a plant with reticulate venation is  
(i) Grass                      (ii) Centella                      (iii) Jak                      (iv) Mango
  
03. Not a method of generation of electricity by movement or rotation is  
(i) Bicycle dynamo                      (ii) Solar panels  
(iii) Electric Generators                      (iv) Wind mill
  
04. Pair of leaves that propogate using leaves is  
(i) Akkapana, Godapara                      (ii) Bigonia, Akkapana  
(iii) Canas, Delia                      (iv) Wada/ Hibiscus, Rose
  
05. An under ground stem is  
(i) beet                      (ii) raddish                      (iii) potatoes                      (iv) sweet potatoes
  
06. The group of micro organisms lives in the root nodules of mimosa plant is  
(i) Virus                      (ii) Bacteria                      (iii) Fungi                      (iv) Algae
  
07. Not a function of plant leaves is  
(i) Storing water                      (ii) Storage of food  
(iii) Photosynthesis                      (iv) Reproduction
  
08. A phenomena associated with static electricity is  
(i) Lighting                      (ii) Wind formation  
(iii) Functioning of electric fan                      (iv) Ironing clothes
  
09. The standard International unit of measuring current is  
(i) Amphere                      (ii) Miliamphere                      (iii) Microamphere                      (iv) Volt

10.



A plant with this kind of root system is

- (i) Beans
- (ii) Monarakudumbiya
- (iii) Palm
- (iv) Beli

11. When a positively charged object get contacted with negatively charged object,

- (i) Both object gets positively charged
- (ii) Both object gets negatively charged
- (iii) One object gets positively charged while the other object gets negatively charged
- (iv) No any charge on the both objects. (None of the objects get charged)

12. The type of root that absorb water vapour from the atmosphere is

- (i) Aerial roots
- (ii) Stilt roots
- (iii) Tap root
- (iv) Respiratory roots

13. Select the incorrect statement

- (i) Gasses like oxygen and carbon dioxide dissolve in water.
- (ii) Dirt removed from the clothes due to solvent Property of water.
- (iii) The heat generated due to action of machines is removed due to solvent property of water
- (iv) It feels cool when touch an ice cube to coolant property of water.

14. When negatively charges are removed from an object

- (i) It gets positively charged
- (ii) It gets negatively charged
- (iii) It gets neutralized
- (iv) Non of the above mentioned thing happened.

15. Not a chemical cell is

- (i) simple cell
- (ii) Dry cell
- (iii) Alkali cell
- (iv) Dynamo

16. When a glass rod is rubbed by a silk cloth.

- (i) Glass gets positively charged and silk gets negatively charged.
- (ii) Glass gets negatively charged and silk gets positively charged
- (iii) Both glass rod and silk cloth gets negatively charged.
- (iv) Both glass and silk cloth gets positively charged.

17. Which of the following chemicals cause for the sour taste of tomatoes, lime and vinegar?

- (i) Acids
- (ii) Bases
- (iii) Alkaline materials
- (iv) Salts

18. The correct statement regarding the leaf given is



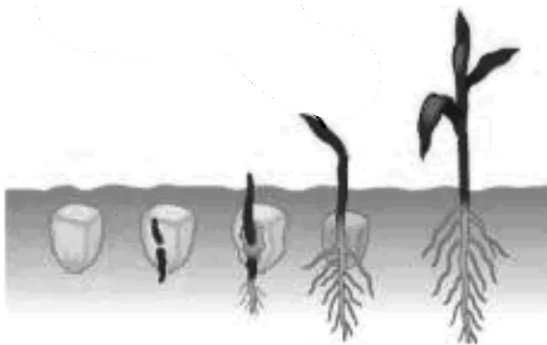
- (i) A simple leaf, Reticulate venation
- (ii) A simple leaf, parallel venation
- (iii) Compound leaf, Reticulate venation
- (iv) A compound leaf, Paralles venation

19. The type of roots present in the diagram is  
(i) Prop roots                      (ii) Clinging roots                      (iii) Stilt roots                      (iv) Respiratory roots
20. Not a solution for the electricity crisis is  
(i) Using alternative sources of electricity  
(ii) Increasing the electricity bill  
(iii) Using electricity in a thrifty way  
(iv) Make aware people on thrifty use of electricity.

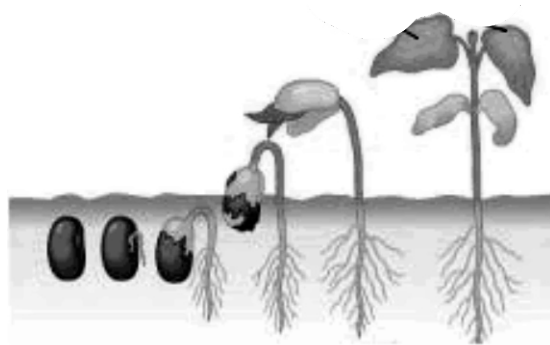
## Part II

- Question number 01 is compulsory.
- Answer 05 questions including question number one.

01. Students of grade 07 have collected following specimens in a field trip to show the germination of seeds.



Germination of monocot seed



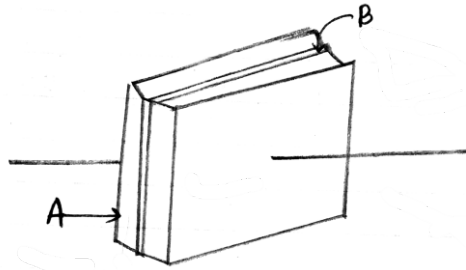
Germination of dicot seed

- (i) Write 2 example each separately for the both germination types mentioned above.
- (ii) What is the main difference between the germination of monocot seed and a germination of a dicot seed.
- (iii) Compare the differences of monocot plants and dicot plants in relation to given features. (Copy down the grid in your answer sheet)

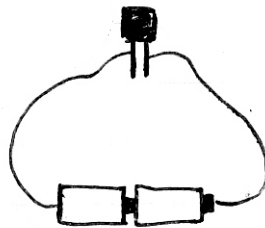
Feature	Monocot plant	Dicot plant
Root system		
Stem		

- (iv) Write short answers.
- (a) Write the names of the 2 acids used in laboratory.
- (b) Write 2 ingredients of a dry cell.
- (c) What is the use of stilt roots to the plant?
- (d) Who is the first scientist conducted experiments on static electricity?

02. A diagram of a capacitor made by students of grade 07 is given below.

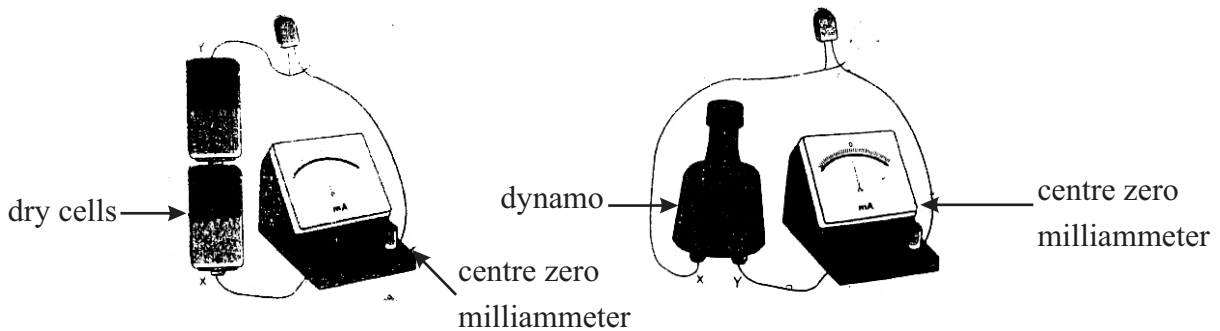


- (i) Label the parts A & B
- (ii) Then the simple capacitor made by the students is fixed to circuit as mentioned below.



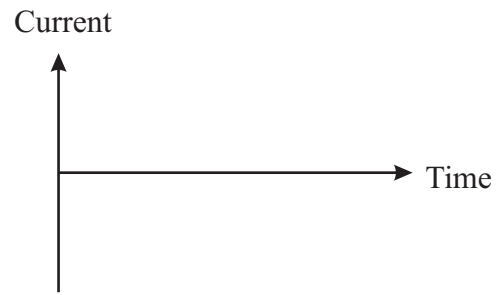
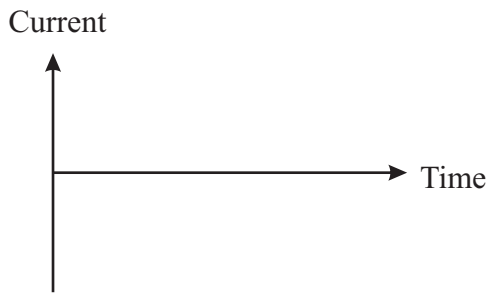
- (a) Draw the above circuit using standard circuit symbols.
  - (b) If a center zero galvanometer is connected instead of dry cells after few seconds, What will be the observation?
  - (c) How do we call the phenomena mentioned in above 'b'
- (iii) What is the unit of measuring static electric charges?  
 (iv) Write 2 devices where capacitors are inserted.

03. An activity conducted on the nature of electric current produced by electrical sources is given below.



- (i) When dry cells are fixed, what are the observations made on centre zero milliammeter on set up A? (2 marks)
- (ii) When motor is rotated, What are the observations made on centre zero milliammeter in set up B? (2 marks)
- (iii) Explain the reason for the observation made on set up A. (2 marks)
- (iv) Explain the reason for the observations made on set up B. (2 marks)

- (v) Illustrate the current produced in set up A and set up B in the graphs given below. (copy down the graphs in your answer sheet) (3 marks)



04. Water has got so many properties that helps the existence of living beings.

- (i) Write the special property of water made use in following instances.
- (a) Use water to cool the engine of vehicles.
  - (b) Transport urea and other nitregeneous excretory matter to the excretory organs.
  - (c) Buffaloes wallow in water during very hot seasons.
  - (d) Aquatic organisms recieve oxygen dissolved in water for their respiration. (4 marks)

(ii) Name, a,

- a - plant
- b - Animal
- c - Microorganism live in an aquatic environment (2 marks)

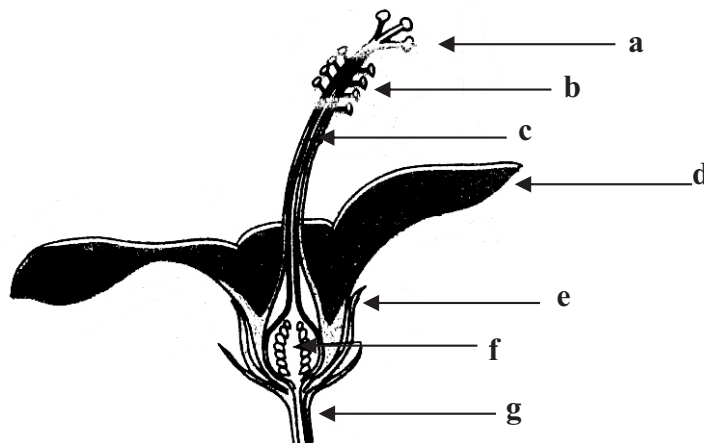
(iii) Write 02 uses of solvent property of water. (2 marks)

(iv) You are provides with following substances.

(Lime, Water, Lime juice)

- (a) Which liquid turns blue litmus in to red? (1 marks)
- (b) Which liquid turns phenopthelene into pink? (1 marks)

05.

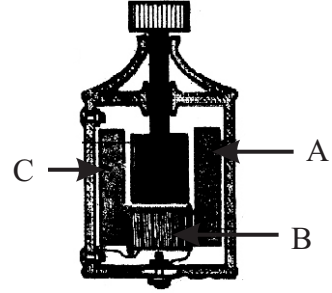


- (i) Draw the androecium and gynoecium seperately and lable the parts (4 marks)
- (ii) Which part of the flower turns into a fruit later? (2 marks)

- (iii) What is the function of sepals (2 marks)
- (iv) Why do we consider 'Hibiscus flower' as the ideal flower to identify parts of a flower? (2 marks)
- (v) Write 02 flowers with nectaries. (2 marks)

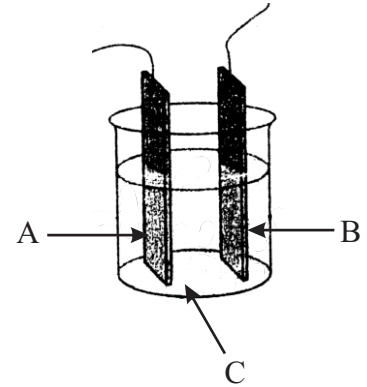
06. A diagram of bicycle dynamo is given below.

- (i) Name A, B, C (3 marks)
- (ii) Write 2 ways to increase the current produced in bicycle dynamo (4 marks)
- (iii) How do we call the method of generation of electricity in dynamos? (2 marks)
- (iv) Write the energy transformation take place in dynamo. (2 marks)



07. A set up of simple cell is given below

- (a) (i) What are the metals used as A & B?
- (ii) Name the solution C.
- (iii) Write 02 short comings / weaknesses of simple cell.



- (b) Write the suitable answer for the description using the plants given below.  
Madu wel, Mimosa, Mango, Rampe, Carrot, Drynaria, Mara

- (1) A non flowering plant -
- (2) Plant with a weak stem -
- (3) Plant with a tuberous root -
- (4) A plant with compound leaves -
- (5) A plant with roots that adds additional support to the stem -