



JAFFNA HINDU COLLEGE

Risk Holiday Self - Education Worksheet - 2020

Grade - 07 | Science

Name/Index No :

செல்வி.கை.கீதா B.Sc, NDT(Science)

Answer the all questions

Unit 1 - Plant Diversity

1. Give 4 non flowering plants.

.....

2. Give the main function of following plant parts

Stem.....

Roots.....

3. Give the type of roots which gives additional support for the plants

.....

4. What is the function of root nodules of Leguminasea plant?

.....

5. Fill in the blanks

Plant	Function of special root	Type of root
Banyan tree		
	Give additional support to stem	
Betel		
Avicenia		
	Foot storage	

6. How does Orchid plant get the water?

.....

7. Give 2 plants which have photosynthetic stem

.....

8. Give 2 plants which have underground stem

.....

9. What are the benefits of underground stem with the function of food storage?

.....

10. Give 2 plants which have parallel venation in leaves

.....
.....

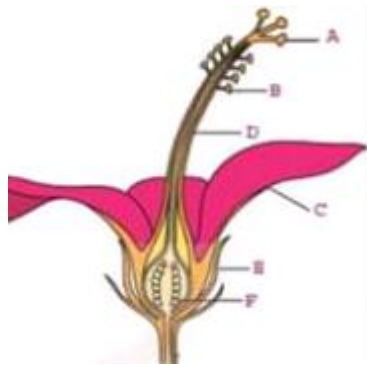
11. Write the functions of leaves with suitable examples

.....
.....

12. Name 2 plants which are reproduced by leaves

.....
.....

13. Following diagram shows the longitudinal section of a flower



1. Identify the parts A- F

- A –
- B –
- C –
- D –
- E –
- F –

1. Identify the letters which denote the androecium part

.....

2. Identify the letters which denote gynoecium part

.....

3. What is the function of part C ?

.....

4. What is the function of part B?

.....

5. Write the adaptation of part C in flower that blooms at night.

.....

6. Which part of flower is produce pollen grain?

.....

7. What is the difference between stilt root and prop root?

.....

8. What is the importance of seeds dispersal?

.....

16 .Answer the questions based on following figures

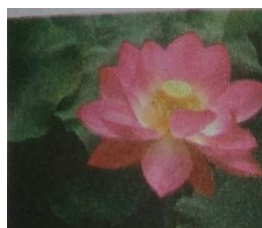
A



B



C



1. Identify the method of dispersal and the adaptation of fruits A ,B and C for it dispersal

.....
.....
.....

2. Give 2 fruits that are dispersed in the same way as in fruit A

.....
.....

3. Which type of plant commonly has hypogeal germination?

.....
.....

4. Differentiate the Hibiscus and Coconut trees based on the structure of stem ,leaves and roots.

.....
.....

Unit 2 - Static electricity

1. How can you charge a plastic pen?
.....
2. What is static electricity ?
.....
3. What are the types of static electricity?
.....
4. Which scientist discovered the charges created on the surface of the object when they are rubbed with another object?
.....
5. Following information is based on the activity to identify repulsion and attraction on different charged rods. filling the blanks based on it.

Suspended rod	Charge type on the rod	The rod brought closer	Charge type on the rod	observation
Glass rod rubbed with silk cloth		Glass rod rubbed with silk cloth		
Ebonite rod rubbed with wool cloth		Glass rod rubbed with silk cloth		
Ebonite rod rubbed with wool cloth		Ebonite rod rubbed with wool cloth		

6. What happens when a charged object make contact with other object?
.....
.....
7.
 1. Which instrument is used to identify the static charges?
.....
 - 2 How can you identify charged object by the above mentioned instrument?
.....
8. Give 2 phenomena related with static electricity.
.....
9. How does lightning is formed? Explain
.....
10. Give 3 appliances that are work on the basis of static electricity.
.....
11. Give the use of capacitor?
.....
12. Draw the symbol of capacitor.
.....
13. In a capacitor written as 10 F , what do you mean by it?
.....
14. Give 2 electrical instruments which have capacitors

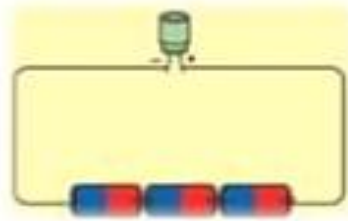


Fig A

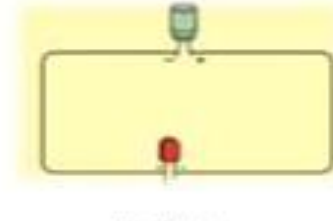


Fig2

1. Name the process in fig A and B.

.....

2. What could be observed in Fig 2 ? Give reason.

.....

3. How you should connect dry cell and LED to the capacitor?

.....

Unit - 3 : Production of electricity

1. Give 4 source of electricity ?
.....
2. How does electricity produced in dry cell and dynamo? Explain
.....
3. Which instrument is used to measure the electric current?
.....
4. What is the standard international unit of measuring electric current?
.....
5. Write the substances that are used make an alkali cell.
.....
6. What is the electrolyte of motor vehicle batteries?
.....
7. Name the positive and negative terminal of dry cell.
.....
8. What is the electrolyte of dry cell?
.....
9. Give instances where button cells are used.
.....
10. A dry cell connected with a center zero galvanometer .The indicator of galvanometer deflected to right ,when the terminal of dry cell was reversed,. the indicator deflected to the left. What is the reason for this observation?
.....
.....

11. The following diagram is a structure simple cell.



1. Identify the positive and negative terminal of the simple cell
.....
2. Identify the electrolyte of the above cell
.....
3. What change could be observed in zinc sheet?
.....
4. Denote the direction of current flow in the diagram
.....
5. What change could be observed when a center zero galvanometer is connected instead of bulb in the circuit ?
.....

.....
6. Write the weakness in a simple cell.
.....

12. what is the difference between cell and battery?
.....
.....

13. What is direct current? Give an example for source of direct current
.....
.....

14. What is alternate current? Give an example for source of alternating current
.....
.....

15. Draw a graph Separately for AC,DC with time.
.....
.....
.....
.....

16. what are the advantage and disadvantage of solar cell used as electric source?
.....
.....
.....

17. What is electromagnetic induction?
.....
.....

18. In which way electricity is produced in cycle dynamo?
.....
.....

19. Write 2 ways to increase the current produced by the dynamo
.....
.....
.....

Unit - 4 : Functions of water

1. Give 4 substances that completely dissolved in water.
.....
2. Give 4 substances that partially dissolved in water.
.....
3. Give 2 gases which dissolved in water.
.....
4. Give 4 instances where water act as solvent.
.....
5. Give other functions of water except solvent property.
.....
6. How does an aquatic animal get their oxygen?
.....
7. Filling the blanks

substances	Containing chemicals
Battery acid	
Acetic acid	
Saline	
Sugar cane juice	

8. How is salt produced from sea water?
.....
9. How coolant property of water is used in the protection of machinery from over Heating. ? .Explain
.....
10. Give 2 mammals which use water as external medium for their living environment.
.....
11. Which salt is dissolved in sea water at high percentage ?
.....
12. Water is a biological medium of life . Explain.
.....
13. In which part of the human body produce urea?
.....
14. Give 2 examples for the water act as medium of transport.
.....
- 15.

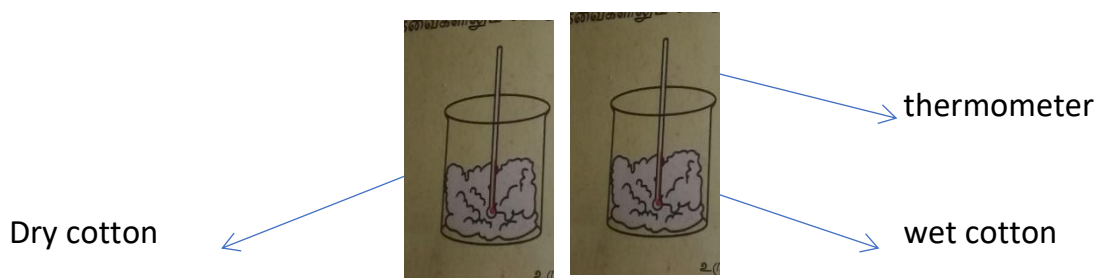


Fig 1 Fig 2

1. Which property of water is tested in the above activity?
.....
2. What could be observed in both set up after few minutes? Give reason.
.....
3. Give the instances where above tested property of water is used in day to day life.
.....
.....

Unit - 5 : Acids and Bases

1. Complete the following table

Substances	feature	examples
Acids		
Bases		
Neutral substances		

2. Give acid ,base and neutral substances that are used for household needs.

3. What is Indicators?

4. Give 2 examples for natural indictors.

5. Give 2examples for artificial indictors that are used in laboratory.

6. Alcohol, sulphuric acid and sodium hydroxide were taken as A,B,C solutions but not in order. The following table shows the color changes above 3 solutions with two indicators

indicators	A	B	C
phenolphthalein	No color change	color changes	pink
Blue litmus paper	red	blue	blue

1. Identify the solutions A,B and C.

2. which of the above solution give blue color with red litmus?

7. What is the color of pH paper?

8. What is the color of phenolphthalein solution?

9. The pH of a solution is 2 . what is the nature of that solution?

10. What is the pH of a neutral solution?

11. Give the pH range of bases.

12. Give 2 acids which are used in laboratory.

13. Give 2 acids which are used in laboratory.

14. Give the color change when methyl orange solution is added to an acid solution.

.....

Unit - 6 : Animal Diversity

1. Complete.

animals	Have vertebral column	Haven't vertebral column
Earth worm		
Crab		
Shark		
Snake		
Bat		
Dolphin		
Sea anemone		
Spider		
eagle		

2. Name the group of vertebrate animals.

.....

3. What is adaptation ? give the importance of it

.....

4. What is the benefit of camouflage of animal?

.....

5. Give 4 animals which show camouflage and give the adaptation of those animals individually.

.....
.....
.....
.....

6.

1. Name 2 animal groups that have stream lined body shape

.....

2. Give the importance of that body shape with respect to that environment.

.....

7. Give the characteristic of dichotomous key.

.....

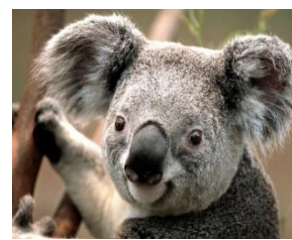
8. Identify the following animal group as vertebrate /invertebrate and write an external feature of that animal



A



B



C

.....
.....

9 . Complete the following dichotomous key.

Eagle, earth worm, fish, snail , butter fly

