

Visakha Vidyalaya, Colombo 05

1st term Test - 2016

Science

Grade 07

time : 2 hours

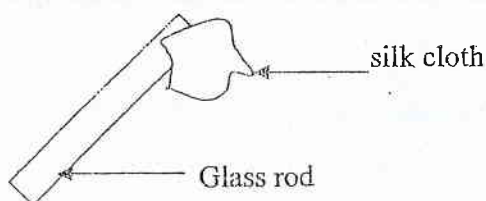
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Part I

Answer all the questions.

(A) Underline the most correct answer.

- 1) A part which can be seen in each and every plant is,
(i) Flowers (ii) Leaves (iii) Fruits (iv) Seeds
- 2) The diagram shows how a glass rod is rubbed using a piece of cloth. By this method we can create static electricity.

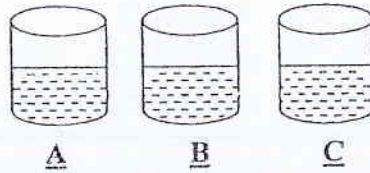


Select the true statement about the above phenomenon.

- (i) A kind of charge in the glass rod is transferred to the silk cloth.
 - (ii) A kind of charge in the silk cloth is transferred to the glass rod.
 - (iii) Silk cloth gets positively charged
 - (iv) Glass rod gets negatively charged.
- 3) What are the parts of a flower connected with androecium?
(i) Style and stigma (ii) Filament and anther
(iii) Ovary and style (iv) Stigma and pollens
 - 4) A group of equipments which can be used to light a number of filament bulbs is,
(i) Solar cells, turbine , simple cells.
(ii) Dry cells, simple cells, dynamo
(iii) Solar cells, turbine , generater
(iv) Dry cells, alkali cells, Lead – acid accumulator
 - 5) An occation where static electricity is produced naturally.
(i) When operating a photo-copy machine (ii) When ironing cloths
(iii) When lightening (iv) When going near a T.V
 - 6) An example for a compound and a simple leaf.
(i) Kathurumurunga, Pumpkin (ii) Sweet potatoes, Pumpkin
(iii) Vetimara, bread fruit (iv) Curry leaves, temarind

7) In the 3 beakers, there is an acid, base and a neutral solution. Which is the most suitable indicator to identify the above solutions.

- (i) Phenolphthalein
- (ii) Turmeric juice
- (iii) pH papers
- (iv) Arecanut juice

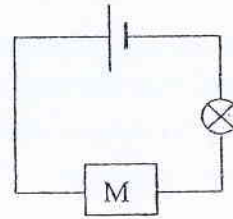


8) In which industry doesn't evaporate solutions mixed with water.

- (i) Salt industry
- (ii) Juggery industry
- (iii) Vinegar production
- (iv) Sugar production

9) When you change the two terminals of the battery in the circuit given below. What can you say about the direction of the motion.

- (i) Direction will change
- (ii) Direction will not change
- (iii) Bulb will light up
- (iv) Bulb will not light up



10) A part belongs to the shoot system of a plant is,

- (i) Lateral roots
- (ii) Tap root roots
- (iii) Fibrous roots
- (iv) Clasping roots

11) Which is a true statement about the produced food in a plant?

- (i) Produced food is stored in the tap root of sweet potatoes.
- (ii) Produced food is stored in the tap root of beet root
- (iii) Produced food is stored in the tap root of manioc
- (iv) Produced food is stored in the tap root of potatoes.

12) Which is a true statement about water?

- (i) It's a neutral solvent
- (ii) It's a medium which helps the aquatic organisms to breath.
- (iii) It's a colourless and odourless solvent
- (iv) All of the above.

13) Which is a neutral substance we come- across at home.

- (i) Tamarind
- (ii) Kerosene oil
- (iii) Sodium bi-carbonate
- (iv) Goraka

14) What is the pH range to identify the acidic substances?

- (i) 1 – 7 (ii) 8 – 14 (iii) 6- 8 (iv) 1-6

15) Who is the father of static electricity?

- (i) William Gibert (ii) Albert Instine
(iii) Ambour (iv) Benjamin Franklin

16) What is the method of producing electricity in a dynamo.

- (i) Static electricity (ii) Electromagnetic induction
(iii) Dynamo electricity (iv) Non of the above

17) The equipments needed to make a simple cell are stated as follows by many groups.

Group A – Copper and Zinc strips and a papaw.

Group B – Copper and Zinc strips and a lemon

Group C – Copper and Zinc strips and a vinegar solution

Group D – Copper and Zinc strips and Sodium bicarbonate

Select the correct groups.

- (i) A and B (ii) B and C (iii) C and D (iv) D and A

18) Which is a good solute dissolve in water.

- (i) Blue powder (ii) Glucose (iii) Clay (iv) Kerocine

19) A group of animals belongs to mammals.

- (i) Sealion, Thilapiya, Shark
(ii) Crabs, Shark, Platypus
(iii) Sealion, Shark, platypus
(iv) Shark, Sea horse, platypus

20) A dynamo and a LED bulb is fixed to a circuit. What are the observations that you come across when operating the circuit.

- (i) LED bulb will light in the same way
(ii) LED bulb will be on and off frequently
(iii) LED bulb will not light up
(iv) Non of the above

Part II

- Answer all the questions.

(01) When you walk around the school garden you came across a mango tree and a grass plant. Your science teacher ask you all to discuss the difference of the above two plants under the followings topics.

(i)

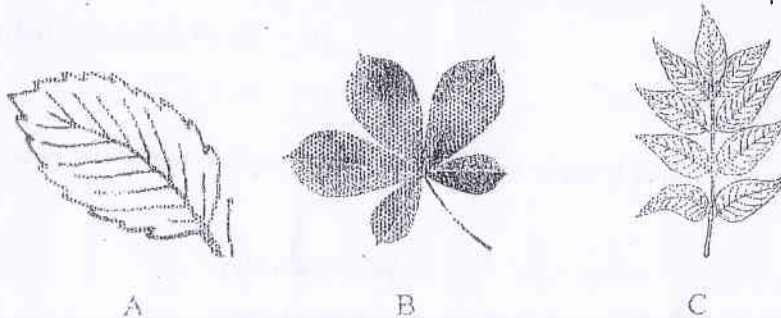
	Grass plant	Mango tree
Branching		
Veins system		
Number of cotyledons of the seed		
Root system		

($\frac{1}{2} \times 8 = 4$)

(ii) Write a similarity and a difference of germination in the above plant.

(02 marks)

(iii)



How can you divide the above leaves shown in the diagram into two groups?

(2 marks)

(iv) Mention an example of leaves each which shown in the above diagram

A,B and C.

(3 marks)

(v) Name the special type of roots in the following plants and write the function of it.

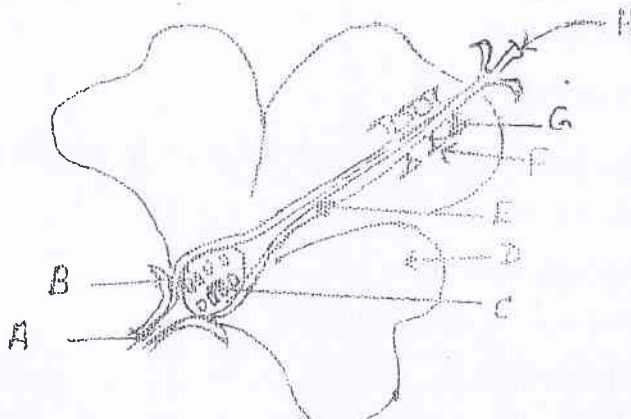
- a) Banyan tree
- b) Pepper plant
- c) Mimosa

- d) Ranpe plant
- e) Orchid plant

($\frac{1}{2} \times 10 = 5$)

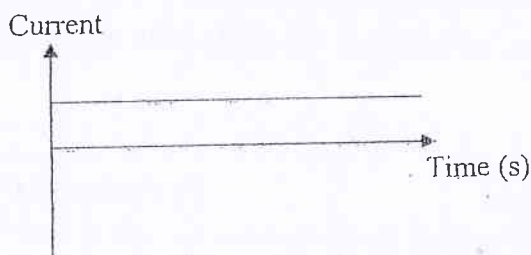
[16 marks]

(02) The diagram given is a half flower

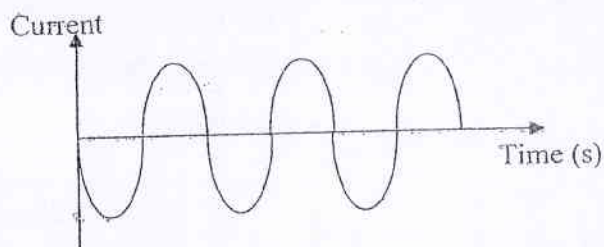


(02) G7- P-6

(04)



A



B

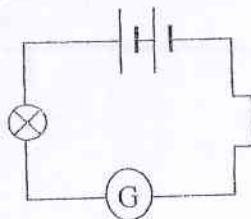
In two graphs drawn above current is against the time.

(i) Name the type current that flow in each A and B. (2 marks)

(ii) Write two equipments each to get the above type of current. (4 marks)

(iii) What is the equipment which can be made by using a number of simple cells? (1 mark)

(iv) Name the direction of the current flow in the circuit given below in words. (1 mark)



(v) What you should do to increase the amount of current which flow? (1 mark)

(vi) What is the equipment which can be fixed to measure the direction of current? (1 mark)

(vii) What should be the discarding method of cell phones and batteries at home? (1 mark)

[11 marks]

(05) The day you went to the labouratory to do the experiment with acids, bases and neutrals you came across many labeled substances on the table as follows.

diluted sulphuric acid , diluted sodium hydroxide , pH papers, phenolphthalein , red and blue litmus , methyl orange , sugar solution , diluted hydrochloric acid , soapy solution , sodium bicarbonate.

(i) Explain the meaning of the word "diluted" mentioned in the solution. (2 marks)

(ii) What is called as battery acids? (1 mark)

(iii) What kind of substances show pink colour when adding phenolphthalein. (2 marks)

(iv) Which kind of solutions turns methyl orange red? (2 marks)

(v) What can you observe when you add two kinds of litmus into a sugar solution. (1 mark)

(vi) When you add pH papers in to baking powder, what is the colour range you would obtain? (1 mark)

[11 marks]

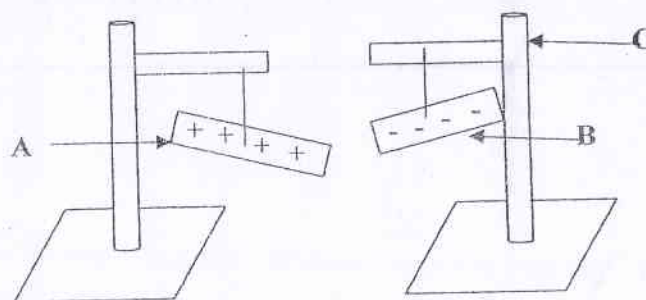
- i) Name the parts A to H. (4 marks)
- ii) What are the female parts of a flower? (2 marks)
- iii) What is pollination? (1 marks)
- iv) Write two ways how the flowers are adapted for pollination. (2 marks)
- v) There are various ways of dispersal of seeds. Fill the following chart accordingly.

Method dispersal	Two examples each
1) By bursting	
2) By water	

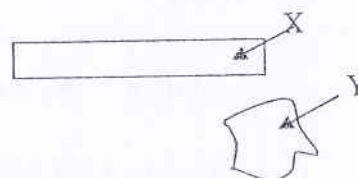
(2 marks)

[11 marks]

- (03) The diagram given below shows two rods charged by static electricity. They were hanged to observe their behaviour by some students.



- (i) Name the parts A, B and C. (3 marks)
- (ii) What is the phenomenon observed? (1 marks)
- (iii) If we hang two positively charged rods as above. What can you observe? Write the reason. (2 marks)
- (iv) What is the equipment which can store charges? (1 mark)
- (v) Mention how you could make the above mentioned equipment at home. (2 marks)
- (vi) When X is rubbed by the Y cloth X got negatively charged and Y got positively charged by static electricity.



Draw a diagram to show the above phenomena.

(2 marks)

[11 marks]