



Grade

7

## SECOND TERM TEST - 2019

SUBJECT - **Science**

School : .....

Name of the Student/ Index No : .....

Time : 2 ½ hrs.

### Part I

Answer all the questions.

Underline the most suitable answer

01. A plant which does not bear flower is,

- (1) Curry Leaves (2) Drynaria (Benduru) (3) Long bean

02. A part of a plant that does not belong to the shoot system,

- (1) Apical bud (2) Fruit (3) Top root

03. Following features could be observed in a plant of which the root system has been removed.

- Veins spread as a net throughout the leaf
- Flower with four petals

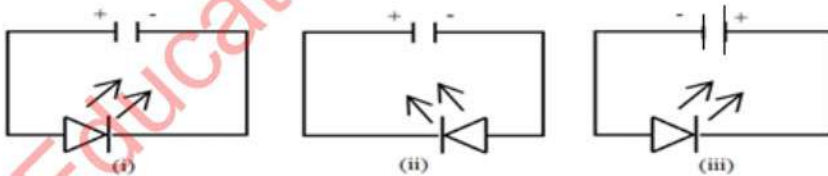
That plant may be,

- (1) Monocot flowering plant (2) Dicot flowering plant  
(3) Non – flowering plant

04. The magnification of eye piece of a microscope was x 10 and the objective lens is X10. The magnification of the microscope is,

- (1) 1 (2) 10 (3) 100

05. Select the LED that lights up.



06. Tissues which carry food and minerals in a plant are,

- (1) Xylem, Phloem (2) Phloem, Xylem (3) Phloem, Pith

07. The reason for using water when preparing saline water is its,

- (1) Coolant property (2) Transparency (3) Solvent property

08. A solution in a bottle without a label in the laboratory gives following colours with litmus.

Type of litmus	Given colour
Red litmus	Blue
Blue litmus	Blue

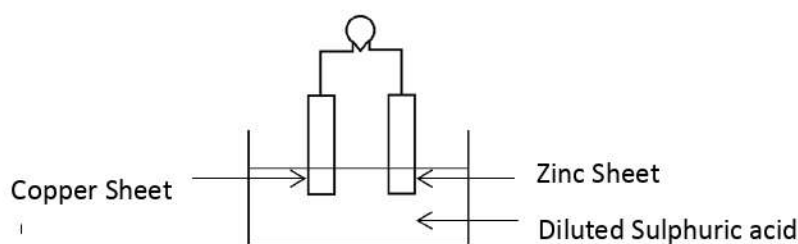
That Solution is,

(1) Sulphuric acid

(2) Sodium Hydroxide

(3) Sodium Chloride

09. Following is a set up of a simple cell.



Negative terminal of the above cell is,

(1) Copper sheet

(2) Diluted Sulphuric acid

(3) Zinc Sheet

10. Which one of the followings generates Alternating current?

(1) Dry cells

(2) Dynamo

(3) Lead – acid accumulator

11. Select the energy transformation way that occurs when electricity is generated by wind.

(1) Potential energy  $\longrightarrow$  Electrical energy

(2) Kinetic energy  $\longrightarrow$  Electrical energy

(3) kinetic energy  $\longrightarrow$  Potential energy

12. Following properties could be observed in an image formed by a certain mirror.

- Cannot be obtained on to screen.
- Smaller than the object
- Erect

That mirror is a,

(1) Convex mirror

(2) Plane mirror

(3) Concave mirror

13. What is the correct ascending order of sound energy transmission?

(1) Solid, Liquid, Gas

(2) Gas, Liquid, Solid

(3) Gas, Solid, Liquid

14. On which tectonic plate is Sri Lanka situated,

(1) Philippine tectonic plate

(2) Antarctica tectonic plate

(3) Australian tectonic plate

15. Select the mirrors, from which the following light beams could be obtained.



A



B



C

(1) A – Plane, B – Convex, C - Concave

(2) A – Concave, B – Convex, C - Plane

(3) A – Plane, B – Concave , C – Convex

16. The Unit of measuring atmospheric pressure is,

(1) Joule

(2) Millibar

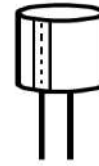
(3) Kelvin

17. Use of this equipment is,

(1) To store static electrical charges.

(2) To identify static electrical charges.

(3) To generate static electrical charges



18. Select the layers of the atmosphere relevant to the following incidents.

- Place where the International Space Station is located
- The cool layer of the atmosphere
- Where the ozone canopy is located

(1) Thermosphere, Mesosphere, Stratosphere

(2) Mesosphere, Thermosphere, Stratosphere

(3) Thermosphere, Stratosphere, Mesosphere

19. Only invertebrates are included in,

(1) Dolphin, Ichthyophis

(2) Salamander, Lizard

(3) Prawn, Star fish

20. An animal who uses the streamlined shape for existence is,

(1) Fish

(2) Lion

(3) Lizard



## Part – II

**Answer only 5 questions including question no. 1**

01. If the Statements are correct put (✓) if incorrect put (x) in the given brackets.

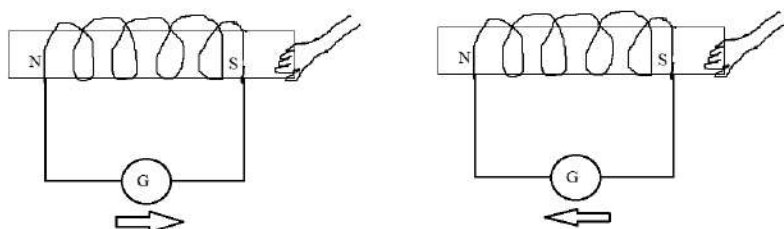
- i. When go upwards in the stratosphere, temperature decreases. (      )
- ii. The coolest layer in the atmosphere is mesosphere. (      )
- iii. Vibration is not compulsory to produce a sound. (      )
- iv. The resolving power of the compound light microscope is 500 times than the naked human eye. (      )
- v. Camouflage is used to find food by animals. (      )
- vi. The amount of electrical charges that can be stored in a capacitor is measured by Farads. (      )
- vii. Sound travels through air more efficiently. (      )
- viii. Larynx is the common part for both respiratory and digestive systems. (      )
- ix. To increase the efficiency of dynamo, the number of turns of the coil should be decrease. (      )
- x. Direction of the current could be found by center – zero ammeters. (      )
- xi. Erect, real images are formed by plane mirrors. (      )
- xii. Curve mirrors are used in side mirrors of vehicles to see rare view. (      )

02. Select the correct words from the brackets and fill the blanks.

(water, cells, androecium, nitrogen, a medium, mechanical, stilt roots, solvent property, crow, television, Ichthyophis, electrical cell)

- i. ....are important as a support to the stem.
- ii. From the composition of the atmosphere ..... is the most abundant component in the troposphere.
- iii. The functional unit of the organisms is .....
- iv. Anther is a part of.....
- v. Breaking of food in to smaller particles by teeth is the ..... digestion.
- vi. ....is needed to travel sound.
- vii. Electricity can be generated by chemical reactions in.....
- viii. ....of water is needed to absorb minerals to the plant.
- ix. For the existence of life, streamlined body shape is helpful for.....
- x. Sugar is produced by removing the ..... in the sap of the sugar cane.
- xi. Static electrical charges can be experienced by the .....
- xii. .... is a vertebrate.

03. Following experiment is conducted by a grade 7 student to generate electricity, to identify the function of dynamo.



A.

- i. Mention an observation of this experiment. (01 Marks)

.....

- ii. What is the method of generating electricity in a conductor when magnetic field is cutting with the conductor? (01 Marks)

.....

- iii. Write down two changes that can be made to increase the efficiency of a simple dynamo (02 Marks)

.....

.....

- iv. Mention 02 equipment which generate simple current. (02 marks)

.....

.....

- v. Give 02 alternating sources which can be used as a solution for electricity crisis. (02 marks)

.....

.....

B. Write down the energy transformations for following instances.

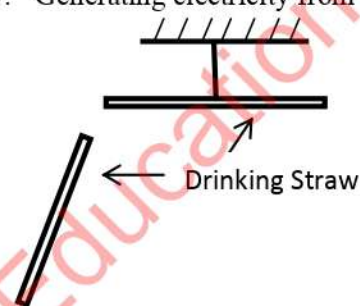
- i. Generating electricity by a solar cell.....

- ii. Generating electricity by a dry cell.....

- iii. Producing sound from a radio.....

- iv. Generating electricity from wind .....

04.



A. Two drinking straws are charged by rubbing with a polythene and keep closer as in the above figure.

- i. What is your observation? (01 marks)

.....

- ii. What is the conclusion of that observation? (01 marks)

.....

- iii. What is your observation if the rubbed piece of polythene keep closer to the drinking straw? (01 marks)

.....

- iv. Mention the convulsion you obtained there? (01 marks)

.....

B.



i. Name the 02 zones in the screen. (02 marks)

A.....

B.....

ii. To observe the zones clearly, should the torch be moved towards? Or out wards? (01 marks)

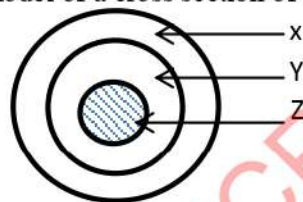
.....

iii. Write down two instances where convex and concave mirrors used in day to day life. (02 marks)

Concave mirrors- .....

Convex mirrors - .....

C. Following is a model of a cross section of the earth.



Name X, Y and Z

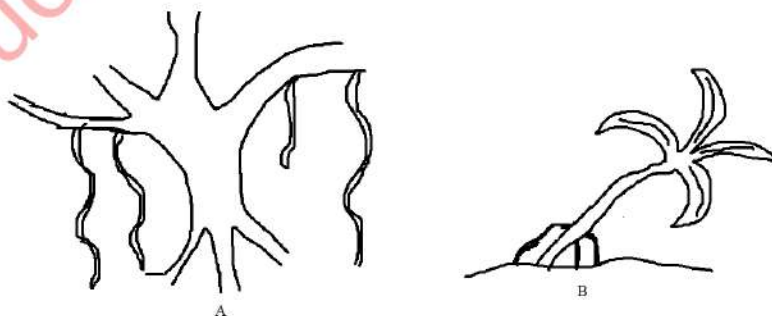
X - .....

Y - .....

Z - .....

05.

A.



i. Name the types of roots in A and B (02 marks)

A .....

B .....

ii. Write down a function in each A and B (02 marks)

A .....

B .....



iii. Categorize the following animals as vertebrates and invertebrates.

(earthworm, turtle, spider, shark)

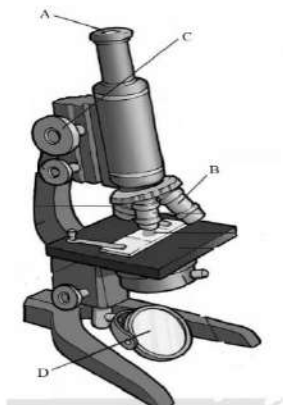
a. Vertebrates ..... (02 marks)

Invertebrates .....

b. What is the reason for the above categorization? (01 marks)

.....

B.



i. Name the A,B,C parts in the above microscope. (03 marks)

A.....

B.....

C.....

ii. What is the type of lens used in that microscope? (01 marks)

.....

iii. What is the importance of D? (01 marks)

.....

06. Plant and animal bodies are created with the collection of cells.

A.

i. Name 02 organs in the human body. (02 marks)

.....

ii. Name 02 systems in the plant body. (02 marks)

.....

B. Indicators are used to identify acid bases in the laboratory.

i. Name 02 natural indicators. (02 marks)

.....

.....

ii. Complete the following table.

Indicator	Colour with acidic substance	Colour with basic substance
(a).....	Red	Blue
Phenolphthalein	(b).....	Pink
Methy orange	Red	(c).....

C.

- i. What is the chemical substance dissolve in sea water, which makes it salty in taste? (01 marks)  
.....
- ii. How do fish obtain oxygen for respiration through gills needed for respiration? (01 marks)  
.....
- iii. What is the method used to classify organisms based on their external features. (01 marks)  
.....

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