

SOUTHERN PROVINCIAL DEPARTMENT OF EDUCATION

MID YEAR TEST - 2019

GRADE - 7

SCIENCE



Name/ Index No :- .....

Time : 2 Hours

Part - I

Underline the most suitable answer.

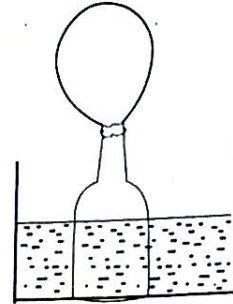
- 01. Which of the following plants is a non-flowering plant?  
 (1) Idda (2) Jak (3) Salvinia (4) Katarolu
- 02. The group of plants in which root system is adapted for vegetative propogation is,  
 (1) Banyan, Kirala, Betel (2) Jak, Bread fruit, Curry leaves  
 (3) Pandanus, Sweet Potatoes, Mimosa (4) Bread Fruit, Slime Apple, Curry Leaves
- 03. Which part of the flower becomes the fruit after pollination?  
 (1) Ovary (2) Ovule (3) Stigma (4) Pollens
- 04. Select the answer which contains only monocotyledonous plants.  
 (1) Paddy, Chick Pea (Kadala), Green Grams (2) Coconut, Maize, Paddy  
 (3) Peanut, Paddy, Coconut (4) Jak, Coconut, Bread Fruit
- 05. The positive (+) terminal of a simple voltaic cell is,  
 (1) Copper plate (2) Carbon rod (3) Zinc plate (4) Lead plate
- 06. The substance that dissolves well in water is,  
 (1) Glucose, Blue powder, Condis (2) Sugar, Salt, Wax  
 (3) Salt, Naphthalene balls, Baking soda (4) Baking soda, Vinegar, Condis
- 07. This is not a plant with a weak stem.  
 (1) Pepper (2) Betel (3) guava (4) Winged beans
- 08. The animal which does not use water as its respiratory medium is,  
 (1) "Kelavalla" (2) Thilapiya (3) "Diyabariya" (4) Shark
- 09. The colour of pH papers present in the laboratory is,  
 (1) Blue (2) Red (3) Yellow (4) Orange
- 10. What property of water is the reason for using water to control heating the vehicle engine excessively?  
 (1) Solvent property (2) Coolent property  
 (3) Lubricant property (4) All the above properties

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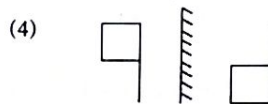
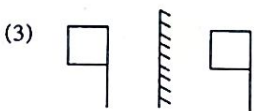
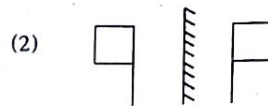
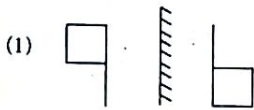
11. The energy transformation taken place when a winding clock operates is,
- (1) Electric energy  $\Rightarrow$  Kinetic energy                      (2) Kinetic energy  $\Rightarrow$  Potential energy  
 (3) Potential energy  $\Rightarrow$  Kinetic energy                      (4) Chemical energy  $\Rightarrow$  Electric energy

12. A balloon was fixed into the mouth of the bottle and bottle was immersed in hot water. The main reason for inflating the balloon is,

- (1) expanding the bottle  
 (2) expanding water  
 (3) expanding air  
 (4) all of the above



13. Select the correct diagram which shows an object placed in front of a plane mirror and its image.



14. The instrument which produces its sound by vibrating strings is,

- (1) flute                      (2) horaneva                      (3) sitar                      (4) tabla

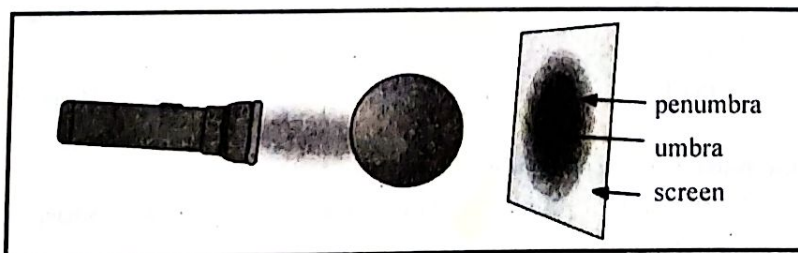
15. The most suitable mirror for a dentist to observe teeth is,

- (1) Concave mirror                      (2) Convex mirror                      (3) Plane mirror                      (4) All of the above

16. The energy possessed by a nut in a tree is,

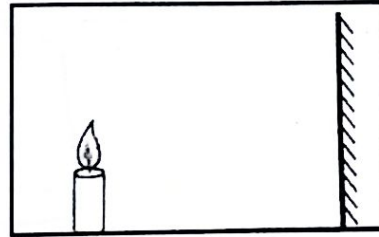
- (1) potential energy                      (2) kinetic energy                      (3) chemical energy                      (4) thermal energy

17. This diagram shows a set-up used to demonstrate formation of umbra. Select the incorrect statement regarding it from the given statements.



- (1) Umbra is formed due to not travelling light through the ball.  
 (2) Umbra is not cleared when the ball and the torch are very closer.  
 (3) Penumbra is formed when the torch is taken away from the ball.  
 (4) Penumbra disappears when the torch is taken away from the ball.

18. Which part of the compound microscope, controls the amount of light reaches to the specimen?  
 (1) Eyepiece                      (2) Stage                      (3) Objective Lens                      (4) Diaphragm
19. A lighted candle is placed in front of a plane mirror.  
 The features of the image formed by it are,  
 (1) Upright, real, equal to the size of the object.  
 (2) Inverted, virtual, equal to the size of the object.  
 (3) Upright, virtual, equal to the size of the object.  
 (4) Upright, virtual, smaller than the object.



20. The gas which avoids entering harmful radiations from the sun to the earth is,  
 (1) nitrogen                      (2) oxygen  
 (3) ozone                      (4) carbondioxide

## Part - II

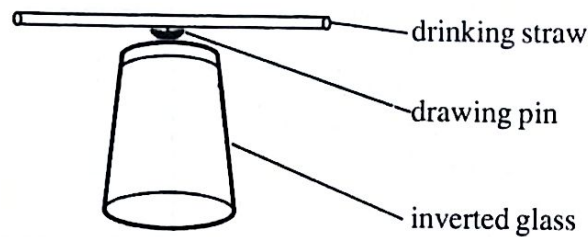
- Question no 01 is compulsory. Select any four questions from the other six questions and answer for 05 questions.

01. (A) The list below shows several species of plants and animals identified by a group of students in a field trip.

Coconut, Mango, Banana, Baenduru, Rampe,  
 Mimosa, Cycas, Grasshopper, Rat snake,  
 Butterfly, Squirrel, Earthworm

- (i) Name the main two methods that the plants in the above list can be classified.
- (ii) Write an example each for the plants which show characteristics shown below from the list.
- (a) Stilt roots  
 (b) Root nodules  
 (c) Underground stem
- (iii) What is the main difference between the root systems of coconut and mango plants?
- (B)
- (i) Name the two main groups that the animals present in the list belong.
- (ii) What is the characteristic you used to separate them for the above two groups.
- (C) There are instances of obtaining advantages for animals due to blending their body colour with the environmental colour.
- (i) What is the scientific word used for introducing this adaptation?
- (ii) Write one advantage obtained by animals from it.
- (iii) Classify the plants coconut, mango, banyan, mimosa, cycas using a dichotomous key.

02. (A) This diagram shows how a drinking straw rubbed with a polythene membrane is placed on a drawing pin which is kept on an inverted glass in a study of static electric charges.

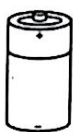


- (i) a. What can be observed when a similar drinking straw is taken closer to the above drinking straw?  
b. What can be observed when the polythene membrane used for rubbing is taken closer to the above drinking straw?
- (ii) Write the reasons for the above observations in the instances (a) and (b).
- (iii) What is the advantage of balancing the drinking straw on the glass with the help of a drawing pin?

(B)

- (i) Write the type of static charges obtained by each material when a glass rod is rubbed with a silk cloth.  
(ii) Write an event related to static electric charges that takes place in day to day life.  
(iii) Write one instance of using static electric charges.  
(iv) What is the instrument that store static electric charges?

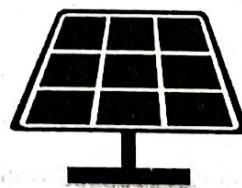
03. These diagrams show several sources of electricity.



A



B



C

- (i) Name the sources of electricity shown as A, B and C.  
(ii) Write separately the methods of producing electricity by them.  
(iii) What is the principle used to produce electricity by B?  
(iv) Write the energy transformation taken place in the production of electricity by C.