

Provincial Department of Education, Northern Province



Diagnostic Test -2021

Grade: 07

Science

Time: 2 Hours

Part I

Underline the most suitable answer for the following questions.

1. Which of the following animals do not possess vertebral column?



1)



3)



2)



4)

2. The plant which has a root for exchange of air with the atmosphere?

1) Pandanus

3) Mimosa

2) Avicennia

4) Orchid

3. Which one of the following is not a feature of monocots?

1) fibrous root

3) parallel venation

2) five petals

4) single cotyledon

4. When a glass rod is rubbed with silk, the charge acquired by the silk is

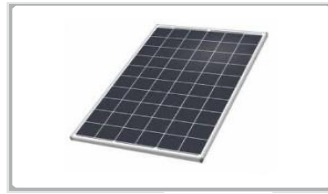
1) positive charge

3) no charge

2) negative charge

4) partly positive and partly negative

5. Which of the following is a cell that generates electricity by a chemical process?



1)



3)



2)



4)

6. The colour of phenolphthalein in acidic medium is

1) Pink

3) Red

2) Blue

4) Colourless

7. Which one of the following is not a base substance that is used in day to day life?

1) lime water

3) salt solution

2) baking powder

4) milk of magnesia

8. Which of the following animal groups have a streamlined body?

1) Fishes, Reptiles

3) Fishes, Aves

2) Reptiles, Aves

4) Amphibians, Fishes

9. The main elements present in the Earth's core are

1) Iron, Aluminium

3) Magnesium, Silicon

2) Iron, Nickel

4) Magnesium, Iron

10. What will be the angle between two mirrors for getting 5 images?

1) 30°

3) 60°

2) 45°

4) 90°



11. Which mirror does not produce an object size image?

1) convex mirror

3) plane mirror

2) concave mirror

4) none of the above

12. The image formed by a plane mirror is always

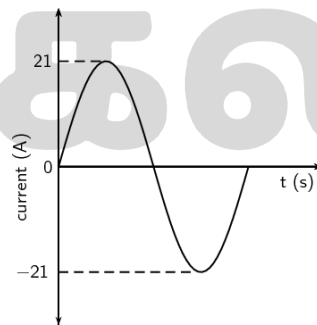
1) obtained on a screen

3) formed in front of the mirror

2) Smaller than the object

4) virtual

13. The unit of electric energy is
- 1) Ampere
 - 2) Watt
 - 3) Joule
 - 4) Farad
14. Which part of the compound microscope that controls the intensity of light entering the viewing area?
- 1) mirror
 - 2) convex lens
 - 3) Diaphragm
 - 4) Stage
15. The instrument used in bacterial research is
- 1) electron microscope
 - 2) compound microscope
 - 3) simple microscope
 - 4) kaleidoscopes
16. The thin layer of earth is
- 1) inner core
 - 2) mantle
 - 3) crust
 - 4) outer core
17. Which one of the following animals do not show camouflage?
- 1) Leaf insect
 - 2) Caterpillar
 - 3) Moth
 - 4) Magpie
18. Which device generates electricity as in the graph given below?



- 1) Button cell
 - 2) Simple cell
 - 3) Dynamo
 - 4) Solar cell
19. Positive and negative terminal of simple cell respectively.
- 1) Copper, Zinc
 - 2) Copper, Iron
 - 3) Zinc, Copper
 - 4) Aluminium, Zinc
20. The instance where light energy is converted into chemical energy is
- 1) cooking with solar cooker
 - 2) during photosynthesis in plants
 - 3) when the candle is lit
 - 4) generation of electricity from solar panel

(20 x 2 = 40 Marks)

Part - 02
Answer all questions.

01) Mark whether the following statements are true (✓) or false (×).

1. Gardenia is a plant which can produce flowers. ()
2. In living organisms, cells combine to make organs. ()
3. Respiratory roots are found in Mangrooves (Kinnai). ()
4. Lemon and Kerosene are the common household acidic substances. ()
5. We can not use solar panel, when there is no sunlight. ()
6. A glass rod rubbed with silk gains positive (+) static electric charges. ()
7. Frog does not have vertibral column. ()
8. Conversion of one form of energy to another form of energy is called energy transformation. ()
9. On land, earth crust's thickness is about 35 km. ()
10. Concave mirrors are used in reflecting telescopes.. ()

(10 x 1 = 10 marks)

02) Fill in the blanks using the words given.

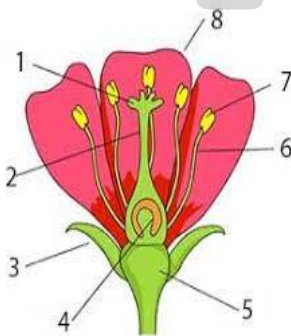
(Mechanical enerngy, blue, straight, diverged, camouflaje, electron microscope, red)

1. is used to observe the viruses..
2. Parallel beam of light can beby a convex mirror.
3. Potential and kinetic energy together is called as
4. By process most of the animals escape from predators.
5. Blue litmus paper turns under acidic condition.

(5 x 2 = 10 marks)

03) **The given diagram represents the longitudinal section of a flower.**

A) 1). Name the parts 1 – 8.



- 1.....
- 2.....
- 3.....
- 4.....
- 5.....
- 6.....
- 7.....
- 8.....

(4 Marks)

2)What are the parts of androecium?

.....

(1 Mark)

3) What is the function of sepals?

.....

(1 Mark)

B)

A



B



C



1. Mention the mode of dispersal of A, B and C?

ABC.....

(3 marks)

2. Give one adaptation found in A for easy dispersal?

.....

(1 mark)

(Total 10 marks)

04) Match.

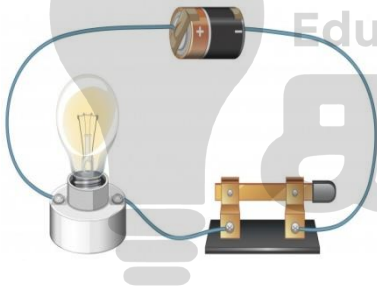
1. The energy found in water at a higher elevation.
2. Energy in running water.
3. Produces virtual and real images.
4. Used as a simple microscope.
5. Used as a side mirror in vehicles.

- A. Concave mirror
- B. Convex mirror
- C. convex lens
- D. Potential energy
- E. Kinetic energy

(5 x 2 = 10 marks)

05) A)

A



B



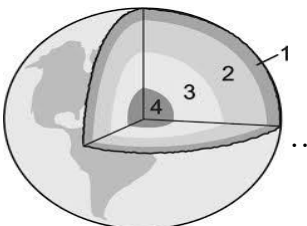
1. Write the energy transformation in A?
2. Indicate the direction of current flow in A?
3. Identify B.

(2 marks)

(1 mark)

(2 marks)

B) 1) Diagram given below is the inner nature of earth. Name the parts 1 – 4.



1.
2.
3.
4.

(4 marks)

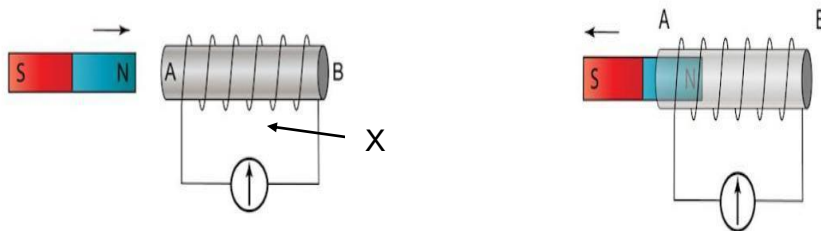
2) Give one element which is found in earth crust and mantle

(1 mark)

(Total 10 marks)

06)

A)



1. Identify the instrument (x), which is connected with the coil?
(1 mark)
2. What is your observation, when one end of the magnet bar is moved into the coil?
(2 marks)
3. What is your observation, when one end of the magnet bar is moved out of the coil?
(2 marks)
4. What is your observation, when the magnet is moved faster within the coil?
(1 marks)

B)



1. What is your observation, when the salt solution is heated?
(2 marks)
 2. Which is the salt found in highest percentage in sea water?
(2 marks)
- (Total 10 marks)**