



विद्या सर्वार्थ साधिका

ANANDALAYA  
PERIODIC TEST - 2  
Class: VII

Subject: Science  
Date : 26-09-2023

MM : 50  
Time: 2 hours

General Instructions:

1. This question paper consists of 23 questions. All questions are compulsory.
2. The question paper has four Sections - A, B, C, and D.
3. Section A consists of 11 multiple-choice questions carrying 1 mark each.
4. Section B consists of 3 short answer questions carrying 02 marks each.
5. Section C consists of 6 short answer type questions carrying 03 marks each.
6. Section D consists of 3 long Answer type questions carrying 05 marks each.

SECTION A

1. The process in which heat transfers from one end of a body to another end of the body (1) without any actual movement of molecules of the body is called \_\_\_\_\_.  
(A) Conduction (B) Convection (C) Radiation (D) Expansion
2. The SI unit for speed is \_\_\_\_\_. (1)  
(A) km/hr (B) m/hr (C) km/s (D) m/s
3. The working of clocks uses the concept of \_\_\_\_\_. (1)  
(A) Linear motion (B) Periodic motion (C) Random motion (D) Non-Periodic motion
4. Neutralisation reaction is a \_\_\_\_\_. (1)  
(A) physical and reversible change  
(B) physical change that cannot be reversed  
(C) chemical and reversible change  
(D) chemical change that cannot be reversed.
5. When fried food spoils, it emits a foul odour as a result of a chemical change. What is the (1) name given to this process?  
(A) Rusting (B) Rancidity (C) Crystallisation (D) Corrosion
6. Anaerobic respiration produces \_\_\_\_\_. (1)  
(A) more energy than aerobic respiration.  
(B) same amount as aerobic respiration  
(C) less amount of energy than aerobic respiration  
(D) amount of energy cannot be compared.
7. Ruminants chew the cud because \_\_\_\_\_. (1)  
(A) they have no enzyme to digest the cellulose  
(B) they have rough tongue but lack teeth  
(C) cellulose needs to be broken down into simpler form  
(D) their intestine is short
8. The flowering plant that can survive without chlorophyll is \_\_\_\_\_. (1)  
(A) Loranthus (B) Dodder (C) Nepenthes (D) Chandan

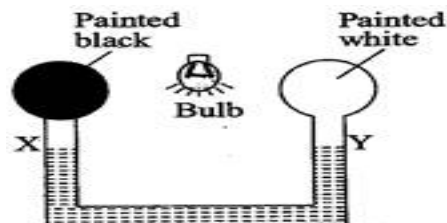
The question numbers 9, 10 and 11 are assertion reason based questions. Choose the answers from the given options.

- (A) Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
- (B) Both Assertion and Reason are true but Reason is NOT the correct explanation of Assertion.
- (C) Assertion is true but Reason is false
- (D) Assertion is false and Reason is also false.

9. Assertion: All hot bodies radiate heat. (1)  
Reason: Our body gives heat to the surroundings and receives heat from it.
10. Assertion: When an ant bites it injects the acidic liquid into skin. (1)  
Reason: An ant sting has formic acid.
11. Assertion: Chlorophyll and sunlight are essential requirements for photosynthesis. (1)  
Reason: Carbon dioxide is fixed in the form of starch during photosynthesis.

**SECTION B**

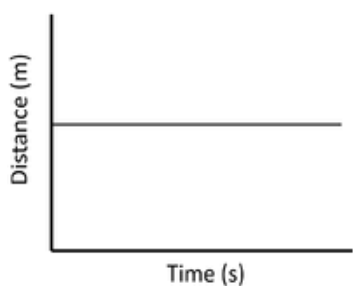
12. The picture shows two air filled bulbs connected by a U-tube partly filled with water. How will the levels of water in arms X and Y change when the bulb is ON? Give the reason for your answer. (2)



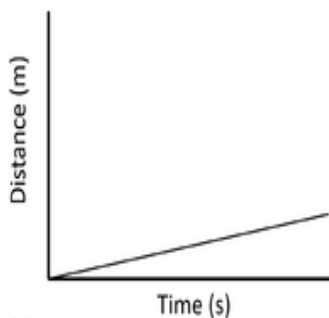
13. There are many acids, bases and salts that are commonly used in our daily life. Write two examples and the uses of each. (2)
14. It is said that plants are the ultimate source of energy for all living organisms in this world. Justify this statement by stating two scientific reasons. (2)

**SECTION C**

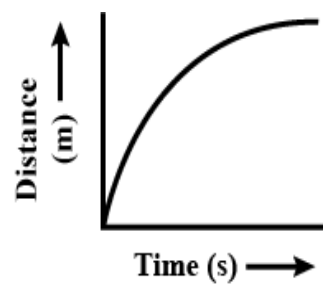
15. (a) Out of the given graphs A, B and C, which graph represents the bicycle moving with varying speed? (3)



(A)



(B)

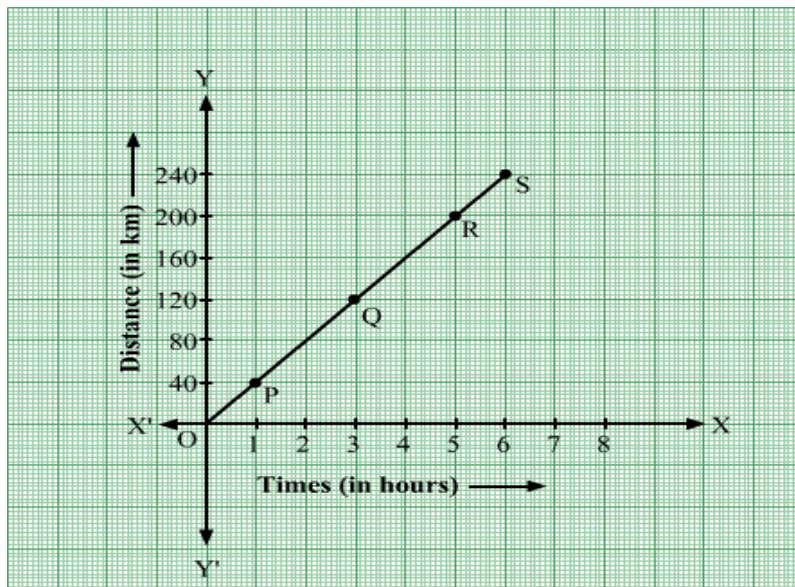


(C)

- (b) What does an odometer measure?  
(c) Calculate the time period of a grandfather clock pendulum if it completes 30 oscillations in 30 seconds.

16.

(3)



By studying the above graph, answer the following questions:

- (a) Write scale of X-axis and Y-axis of the graph.
  - (b) Where is the object at 2 sec and 4 sec from the graph?
  - (c) Calculate the speed of the object from the graph.
17. Three liquids are given to you. One is hydrochloric acid, another is sodium hydroxide and the third is sugar solution. How will you identify them? You have only a turmeric indicator. (3)
  18. Describe how crystals of copper sulphate are prepared. (3)
  19. During lunch time, the teacher noticed that Ankur eats very fast and goes out to play. The teacher asked him to eat slowly by chewing the food thoroughly. (3)
    - (a) What is the importance of chewing the food thoroughly?
    - (b) Which teeth help you to chew the food?
    - (c) Which other structures in the mouth help in proper chewing?
  20. Abhilash was suffering from diarrhoea. He was taken to the hospital and admitted. Doctor prescribed antibiotics, intravenous glucose drip and ORS for him. (3)
    - (a) What is the need for taking ORS?
    - (b) Instead of giving light food, why was the glucose drip given to him?
    - (c) List any two precautions you would adopt to prevent diarrhoea.

#### SECTION D

21. (a) Explain the formation of land breeze with a neat labelled diagram. When does the land breeze occur? (5)
  - (b) Water is a poor conductor. Name the mode of transfer of heat in it. How does the transfer of heat take place in water?
22. (a) When baking soda is mixed with lemon juice, bubbles are formed with the evolution of a gas. What type of change is it? Explain (5)
  - (b) How would you show that the setting of curd is a chemical change?
  - (c) Explain why rusting of iron objects is faster in coastal areas than in deserts
23. (a) What is the role of oxygen that we breathe in? Where do exchanges of oxygen and carbon dioxide occur in our body? (5)
  - (b) How do aquatic organisms obtain oxygen for respiration?
  - (c) How are the respiratory organs in our body protected?