



विद्या सर्वार्थ साधिका

ANANDALAYA
PERIODIC TEST - 2
Class: VII

Subject: Science
Date : 23-09-2024

MM : 50
Time: 2 hours

General Instructions:

1. This question paper consists of 23 questions. All questions are compulsory.
2. Question paper has four sections: Section A, Section B, Section C and Section 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. What acts as an indication of the weather outside being very cold, with the temperature in the range of -2°C to 8°C ? (1)
(A) Mild sunlight (B) Fogged window panes
(C) Leaves rustling in the wind (D) Heavy clouds and grey skies
2. Which process causes air above the hot tea to get heated? (1)
(A) Conduction (B) Convection
(C) Evaporation (D) Radiation



3. The timetable of a train is shown below. (1)

Station	Arrival time	Departure Time
New Delhi	-	06:45 am
Meerut	08:00 am	08:05 am
Muzaffarnagar	08:45 am	08:50 am
Saharanpur	09:50 am	09:55 am
Roorkee	10:30 am	-

What is the total travel time of the train?

- (A) 3 hr 30 min (B) 3 hr 45 min (C) 4 hr 15 min (D) 4 hr 45 min
4. A student took a half-filled test tube with dilute hydrochloric acid and a few drops of phenolphthalein in the solution. As he put a few drops of sodium hydroxide into the solution, it turns to light pink. Further, he put a few extra drops of the acid and observes that the colour disappears. What caused the colour to disappear from the solution? (1)
(A) The volume of the solution increased.
(B) Turning of the mixture into a neutral solution.
(C) Decrease in the amount of acid in the solution.
(D) An increase in the amount of base in the solution.
 5. A student collects wax from a burning candle. He melts it and then adds a new wick to it and leaves it to cool. Can a new and functional candle be created by this process? Why or why not? (1)
(A) Yes; it is a reversible physical change in state of wax.
(B) No; it is a physical change that cannot be reversed.
(C) No; it is an irreversible chemical change with the formation of a new substance.
(D) Yes; it a chemical change causing the wax to change from one state to another.

6. What do guard cells regulate? (1)
 (A) Water flow in xylem (B) Sugar transport in phloem
 (C) Opening and closing of stomata (D) Absorption of sunlight
7. Cellulose rich food substances are good sources of roughage in human beings because (1)
 _____.
 (A) human beings do not have cellulose digesting enzymes
 (B) cellulose gets absorbed in the human blood and converts into fibres
 (C) the cellulose digesting bacteria convert cellulose into fibres
 (D) cellulose breaks down into smaller components which are egested as roughage
8. During the process of inhalation, the diaphragm and ribs move _____ and _____. (1)
 (A) down and inwards (B) up and inwards
 (C) down and outwards (D) up and outwards

For question numbers 9 to 11, two statements are given-one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (A), (B), (C) and (D) as given below.

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

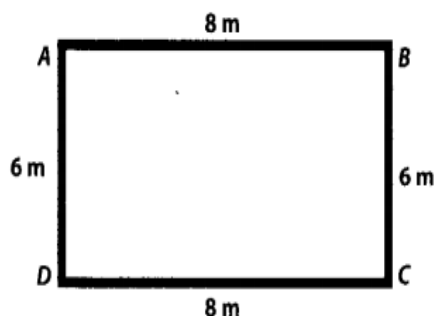
9. (A): Speedometer is a device used to measure the speed of a moving vehicle. (1)
 (R): Speed is the total time taken divided by total distance covered by an object.
10. (A): Lime water turns China rose indicator into green. (1)
 (R): Lime water is basic in nature.
11. (A): The mode of nutrition in higher animals is heterotrophic. (1)
 (R): Animals can use different ways for heterotrophic mode of nutrition.

SECTION B

12. Write any one condition for transfer of heat through conduction. How is conduction different from convection? (2)
13. How is acid rain caused? What kind of damage is caused by acid rain? (2)
14. On the school sports day, your friend won the first position in a 200m race event, but suffered from muscle cramps after the event. (2)
 (a) Write the scientific reason for his muscle cramps?
 (b) What will you do instantly to reduce his pain?

SECTION C

15. Starting from A, Sohan moves along a rectangular path ABCD as shown in figure. (3)
 He takes 2 minutes to travel each side.
 (a) Plot a distance-time graph in your answer paper.
 (b) Using graph, explain whether the motion is uniform or non-uniform.
 (c) Calculate the average speed of Sohan.



16. (a) What is the time period of a simple pendulum? (3)
 (b) The bob of a simple pendulum takes 0.5s to go from mean position to one of the extreme positions. Calculate the time period of the pendulum.
 (c) How does the time period of pendulum change when the length of it increased?
17. (a) Explain in short – any two applications of neutralisation reaction in everyday life. (3)
 (b) Sodium chloride is a result of the reaction between an acid and a base. Name this acid and base.
18. (a) Select the odd one out. (3)
 Evaporation, cutting of paper, burning of paper, condensation
 (b) When water changes from one state to another state, it is called physical change. Write the names of the physical state water show.
 (c) Is breaking down of ozone layer, a physical change or a chemical change?
19. (a) Croton plants have deep red, violet or yellow coloured leaves. Can these leaves perform the photosynthesis process? Justify your answer by stating the scientific reason. (3)
 (b) Wild animals like tiger, wolf, lion and leopard do not eat plants. Does this mean that they can survive without plants? Explain.
20. Jalpa takes three test tubes. She fills three fourths of each test tube with water and labels them as A, B and C. She keeps a water snail in test tube A, a water plant in test tube B and the snail and plant both in test tube C. She leaves all the test tubes undisturbed for an hour. (3)
 (a) Which test tube would have the highest concentration of CO₂ and why?
 (b) Write one similarity between photosynthesis and respiration.

SECTION D

21. (a) Define temperature of a body. (5)
 (b) Write any two points of differences between a clinical thermometer and a laboratory thermometer.
 (c) Explain why:
 (i) Normal human body temperature is an average temperature of the human.
 (ii) A few sharp jerks are given to clinical thermometer before using it.
 (iii) It is advised not to hold the thermometer by its bulb while reading it.
22. (a) Write word equations for two chemical reactions with the help of materials given below. (5)
 Air, copper sulphate, iron, vinegar, iron oxide, carbon dioxide, iron sulphate, copper, lime water, water
 (b) Write any two characteristics of a chemical change.
 (c) Give an example of a chemical change where sound is produced.
 (d) Define: Galvanisation.
23. (a) Name the parts of the alimentary canal that perform the following function: (5)
 (i) absorbs the simpler form of protein
 (ii) digests fats present in the food
 (iii) makes the food moist in the mouth
 (iv) secretes digestive juice and hormone
 (b) What is the role of hydrochloric acid secreted by the stomach?
 (c) Where and how is digested food absorbed by our digestive system?