



विद्या सर्वार्थ साधिका


ANANDALAYA
PERIODIC TEST – 1
Class: VII

Subject: Science
Date : 19-07-2024

MM : 40
Time: 1 Hr. 30 min.

General Instructions:

1. There are 21 questions in this question paper. All questions are compulsory.
2. Q. No. 1 to 12 are objective type questions and carry 1 mark each.
3. Q. No. 13 to 15 are short answer type questions and carry 2 marks each.
4. Q. No. 16 to 19 are also short answer type questions and carry 3 marks each.
5. Q. No. 20 and 21 are long answer questions and carry 5 marks.

1. The fastest mode of heat transfer is _____. (1)
(A) conduction (B) convection (C) radiation (D) adsorption
 2. The maximum - minimum thermometer is used for measuring maximum and minimum environment temperatures and mainly suitable for meteorological purposes. It records the temperature in degrees Celsius and degrees Fahrenheit. The least count of Celsius scale and Fahrenheit scale shown in the thermometer are _____. (1)
(A) 1 °C and 1 °F
(B) 1 °C and 2 °F
(C) 2 °C and 2 °F
(D) 2 °C and 1 °F
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3. Turmeric is a natural indicator. On adding its paste to acid and base separately, which colour/s would be observed: (1)
(A) Yellow in both acid and base (C) Pink in acid and yellow in base.
(B) Yellow in acid and red in base (D) Red in acid and blue in base.
 4. Neutralisation reaction is a _____. (1)
(A) physical and reversible change (C) chemical and reversible change
(B) physical change that cannot be reversed (D) chemical change that cannot be reversed
 5. Identify the gas which is released by the plants in the process of photosynthesis. (1)
(A) Oxygen (B) Hydrogen (C) Nitrogen (D) Carbon dioxide
 6. Look at the given reaction. (1)
Hydrochloric acid + Sodium hydroxide (base) → Sodium chloride (salt) + Water.
Sodium chloride formed in this reaction remains in solution form. Can we get solid sodium chloride from this solution? Suggest a method (if any).
 7. State whether the following statements are true or false. Correct the false statements. (1)
(a) Common salt dissolved in water turns blue litmus red.
(b) Calamine can be used to treat ant's sting.
 8. Why are cooking vessels made of metals but their handles are made of plastic? (1)
 9. A unique feature in leaves allow them to prepare food while other parts of plants cannot. Write the scientific reason for the given statement. (1)

For question numbers 10 to 12, 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.

10. Assertion (A): When water at 50°C is poured in a pan at 50°C , the heat flows from water to pan. (1)
Reason (R): Conduction takes place only when two bodies are not in contact.
11. Assertion (A): Acid turns blue litmus red and bases turn red litmus blue. (1)
Reason (R): Substances which are neither acid nor bases are called neutral.
12. Assertion (A): Water and minerals present in soil are absorbed by roots hairs and transported to the leaves. (1)
Reason (R): Stomata transport plant nutrients from stem to the surface of leaves for photosynthesis.
13. Explain the phenomenon of sea breeze in coastal areas with the help of a diagram. (2)
14. Answer the following questions. (2)
(a) Why does a turmeric stain on a white shirt turn red when it is washed with soap?
(b) What happens when acid and bases are treated with a china rose indicator?
15. A lichen is a combination of fungus and algae that lives on trees and rocks. How does this association benefit both the organisms? (2)
16. At a campsite, there are tents of two shades – one made with black fabric and the other with white fabric. Which one would you prefer for resting (i) on a hot summer afternoon and (ii) during winter? Give a reason for your choice in both cases. (3)
17. You are provided with four test tubes containing sugar solution, baking soda solution, tamarind solution and salt solution. (3)
Write down an activity to find the nature (acidic/basic/neutral) of each solution.
18. Answer the following questions: (3)
(a) What happens when acidic soil is treated with purple cabbage juice?
(b) What is soil treatment?
19. Insectivorous plants are partially heterotrophs whereas other plants are autotrophs. They depend on insects to derive nitrogen from them. The Pitcher plant, Venus fly trap and Sundew plant are some examples of insectivorous plants. (3)
(a) Which part of the Pitcher plant is modified to trap insects?
(b) How are insects attracted towards insectivorous plants?
20. (a) Draw a labelled diagram of a clinical thermometer. (5)
(b) What is the use of 'kink' in the clinical thermometer?
(c) Write any two precautions to be followed while using the clinical thermometer.
(d) Why is mercury commonly preferred as a thermometric liquid?
21. (a) Represent the photosynthesis process in the form of chemical equation. (5)
(b) What is the role of chlorophyll in photosynthesis?
(c) Draw the diagram of opened stomata.
(d) Explain the mode of nutrition exhibited by mushroom.