



INDIAN SCHOOL AL WADI AL KABIR

POST MID-TERM EXAMINATION-2023-24

CLASS: VII

Sub: SCIENCE

MAX.MARKS: 30

DATE: 28-11-2023

Set -I

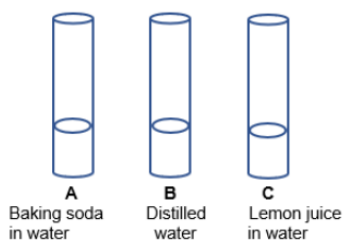
TIME: 1 HOUR

General Instructions:

- i. All questions are compulsory. Marks are indicated against each section.
- ii. The question paper comprises **4** pages and **15** questions in 5 sections **A, B, C, D** and **E**.
- iii. Q 1 to Q 4 in **section A** -MCQ carry ONE mark each. Write the correct answer along with the option only in the answer script.
- iv. Q 5 to Q 7 in **section A** -Assertion and Reason carry ONE mark each.
- v. Q 8 to Q 10 in **section B** are short Answer Type Questions and carry TWO marks each.
- vi. Q 11 TO Q 13 in **section C** are Short Answer Type Questions and carry THREE marks each.
- vii. Q 14 in **section D** is a Long Answer Type Question and carries FIVE marks.
- viii. Q 15 in **section E** is a Case study/paragraph Questions and carries THREE marks.
- ix. Write the same question number as given in the question paper.
- x. Whitener should not be used in the answer script.
- xi. Diagrams should be drawn using a pencil.

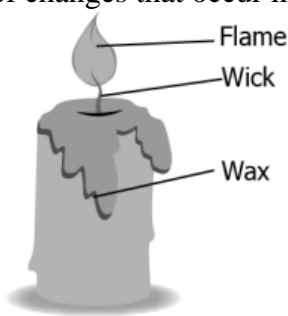
SECTION A (1X7=7)

1. Three test tubes with solutions were taken as shown in the given figure. Red and blue litmus papers were dipped in all three test tubes to test the nature of the solutions. Identify the test tube in which red litmus paper shows the colour change.



- a. Test tube A as the solution is a base.
 - b. Test tube B as the solution is neutral.
 - c. Test tube C as the solution is an acid.
 - d. Both test tubes A and B as they are neutral.
2. If an object is placed at a distance of 0.5 m in front of a plane mirror, the distance between the object and the image formed by the mirror will be:
- a. 2 m
 - b. 1 m
 - c. 0.5 m
 - d. 0.25 m

3. When a candle is lit, the kind of changes that occur in the wax and the wick are:



- a. Chemical change in the wick; physical change in the wax.
- b. Physical change in the wick; chemical change in the wax.
- c. Chemical change in both the wick and the wax; physical change in some wax.
- d. Physical change in both the wick and the wax.

4. Which among the following is a standard test of carbon dioxide?

- a. Crystallisation
- b. Galvanisation
- c. Lime water turning milky
- d. Chromium plating

For the following questions, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (i), (ii), (iii), and (iv) as given below.

- i) Both A and R are true and R is the correct explanation of the assertion.*
- ii) Both A and R are true but R is not the correct explanation of the assertion.*
- iii) A is true but R is false.*
- iv) A is false but R is true.*

5. **Assertion (A):** Distilled water is considered as a neutral substance.

Reason (R): Distilled water is neither acidic nor basic in nature.

6. **Assertion (A):** The change of water from liquid to steam is a physical change.

Reason(R): When water changes from liquid to a gaseous state the chemical composition of water changes.

7. **Assertion (A):** The ray of light that falls on the surface of the reflecting material or mirror is the incident ray.

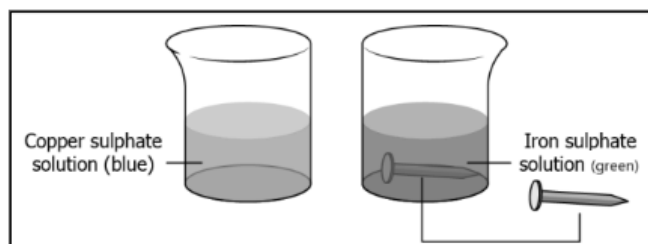
Reason (R): The splitting up of white light into seven colours on passing through a glass prism is called dispersion of light.

SECTION B (2X3=6)

8. a. How can painting of an iron gate prevent it from rusting?
b. Write the name of the product formed and its nature when we mix white ash with water.
9. a. Draw neat diagrams of a convex lens and a concave lens.
b. What kind of image is formed by a convex lens if the object is placed close to the mirror?
- 10 a. Name the gases released into the air which are responsible for acid rain.
b. What is the effect of China rose indicator on acidic and basic solutions?

SECTION C (3X3=9)

11. a. 500g of soil is dried completely under the sun. The mass of dried soil is 432g. Calculate the moisture content in the given sample of soil.
b. What is the relation between rate of percolation and the amount of water retained?
12. a. State one difference between acids and bases.
b. What is neutralisation reaction?
c. Calamine solution is applied on the skin when an ant bites. Give a reason.
13. Observe the given activity in the figure and answer the questions.



- a. Write the word equation involved in the above reaction.
b. What is the brown deposit on the iron nail?
c. Is the above activity, a physical change or a chemical change? Give a reason.

SECTION D (5X1=5)

14. a. What are the characteristics of an image formed by a plane mirror?
- b. Differentiate between a real image and a virtual image. (any two points)
- c. A shopkeeper wants to fix a vigilance mirror in his shop. What type of mirror should he use? Give a reason.

SECTION E (1X3=3)

15. Read the following passage and answer the questions given below.

Soil erosion is the gradual removal of topsoil by the action of flowing water, wind, waves or snow. Erosion of fertile topsoil leaves the land unfit for cultivation. Heavy rains and floods make the soil particles loose and lead to soil erosion. Roots of plants firmly bind the soil particles. In the absence of plants, soil becomes loose. So, it can be moved by wind and flowing water. Erosion of soil is more severe in areas of little or no surface vegetation such as desert or barren lands. So, cutting of trees and deforestation should be prevented and effort should be made to increase the green areas. We can prevent soil erosion by planting trees and plants in large numbers, preventing overgrazing, and adopting step farming in hilly areas.

- (i) What is soil erosion?
- (ii) Erosion of soil is more severe in areas with low vegetation. Why?
- (iii) Suggest two methods by which soil erosion can be prevented.