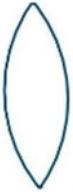



ANSWER KEY – CLASS 7 – SCIENCE – POMT – SET 1 – 2023 – 24

SECTION A (1X7=7)			MARKS
1	a) Test tube A as the solution is a base.		1
2	b) 1 m		1
3	c) Chemical change in both the wick and wax; physical change in some wax.		1
4	c) Lime water turning milky.		1
5	i) Both A and R are true and R is the correct explanation of the assertion.		1
6	iii) A is true but R is false.		1
7	ii) Both A and R are true but R is not the correct explanation of the assertion.		1
SECTION B (2X3=6)			
8	a) Rusting of iron requires contact with water (moisture) and oxygen. By painting an iron gate, we prevent the contact between iron, Oxygen and water (moisture), this helps in preventing rusting of iron. b) Magnesium hydroxide. It is basic in nature.		$\frac{1}{2} + \frac{1}{2} = 1$ $\frac{1}{2} + \frac{1}{2} = 1$
9	a) <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  Convex lens </div> <div style="text-align: center;">  Concave lens </div> </div> b) Virtual, erect and magnified. (ANY TWO POINTS)		$\frac{1}{2} + \frac{1}{2} = 1$ $\frac{1}{2} + \frac{1}{2} = 1$
10	a) Carbon dioxide, sulphur dioxide and nitrogen dioxide (ANY TWO) b) In acidic solution - Magenta/Dark pink In basic solution - Green/Greenish yellow		$\frac{1}{2} + \frac{1}{2} = 1$ $\frac{1}{2} + \frac{1}{2} = 1$
SECTION C (3X3=9)			
11	a) Moisture content = Weight of moist soil (g) – Weight of dry soil (g) = 500g – 432g = 68g b) If a soil sample has high rate of percolation, less water will be retained by it. But if the soil has less rate of percolation, more water will be retained by it.		$1 + \frac{1}{2} + \frac{1}{2} = 2$ 1
12	a) These are sour to taste. Acids turn blue litmus red. Acids do not change the colour of red litmus. With china rose indicator, these give dark pink (magenta) colour. Acids do not change the colour of turmeric indicator.		

	<p>Bases are bitter to taste. They do not change the colour of blue litmus. Bases turn red litmus blue. Bases give green colour with china rose indicator. Bases turn the colour of turmeric indicator to red. (ANY ONE DIFFERENCE)</p> <p>b) The reaction in which an acid and a base react to produce salt and water. / ACID + BASE \longrightarrow SALT + WATER</p> <p>c) Calamine solution contains a base called zinc carbonate. It neutralises the acidic liquid injected by the ant and cancels its effect.</p>	$\frac{1}{2} + \frac{1}{2} = 1$ 1 1
13	<p>a) Copper sulphate + Iron \longrightarrow Iron sulphate + Copper</p> <p>b) Formation of copper. c) It is a chemical change.. due to new product formation.</p>	1+1+1/2 +1/2
SECTION D (5X1=5)		
14	<p>a) Plane mirror forms an erect and virtual image. Size of the image is the same as that of the object. Image is formed at the same distance behind the mirror as the object stands in front of it. Image formed is laterally inverted. (ANY TWO POINTS)</p> <p>b) An image that can be obtained on a screen is called a real image. The image is always inverted. An image that cannot be obtained on a screen is called a virtual image. The image is always erect. (ANY ONE POINT EACH)</p> <p>c) convex mirror. It can be used to view a much larger area.</p>	2 1+1 = 2 $\frac{1}{2} + \frac{1}{2} = 1$
SECTION E (1X3=3)		
15	<p>a) Soil erosion is the gradual removal of topsoil by the action of flowing water, wind, waves or snow.</p> <p>b) Roots of plants firmly bind the soil particles. In the absence of plants, soil becomes loose.</p> <p>c) Planting trees and plants in large numbers, preventing overgrazing, and adopting step farming in hilly areas. (ANY TWO)</p>	1 1 $\frac{1}{2} + \frac{1}{2} = 1$