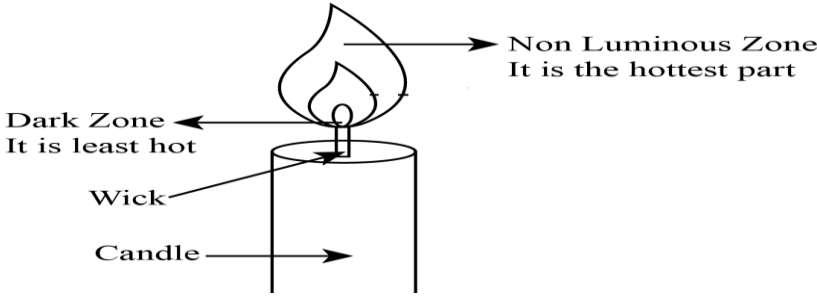


ANSWER KEY – CLASS 8 – SCIENCE – POMT – SET 2 – 2023 – 24

SECTION A (1X7=7)		
1	a. The release of carbon dioxide gas	1
2	b. Irregular reflection	1
3	d. Objects 1 and 2	1
4	b. 11	1
5	iv) A is false but R is true	1
6	iii) A is true but R is false.	1
7	i) Both A and R are true and R is the correct explanation of the assertion.	1
SECTION B(3X2=6)		
8	<p>a. An ideal fuel is cheap, readily available, easily combustible and easy to transport. It has a high calorific value. It does not produce gases or residues that pollute the environment. It has a moderate ignition temperature.</p> <p>b. When the paper cup is heated containing water, water absorbs the heat coming from the burning source and thus prevents the paper from reaching its ignition point. Hence it does not burn. / An empty paper cup reaches its ignition temperature quickly.</p>	(Any two) $\frac{1}{2}+\frac{1}{2}=1$ $\frac{1}{2}+\frac{1}{2}=1$
9	a. The tendency of a metal to convert into a sheet when beaten through a hammer is known as malleability. Generally, when	$\frac{1}{2}+\frac{1}{2}=1$

	<p>non-metals are beaten they break, which means non-metals are non-malleable.</p> <p>b. Sodium and potassium are stored in kerosene as they are extremely reactive elements. Even when they come into contact with air, they are highly flammable. Sodium and potassium are highly reactive metals that react violently with oxygen and moisture in the air, potentially causing a fire.</p>	1
10	<p>a. A real image can be formed on a screen but a virtual image cannot be formed on a screen. A real image is always inverted. A virtual image is erect.</p> <p>b. The law of reflection states that the incident ray, the reflected ray, and the normal to the surface of the mirror all lie in the same plane. The angle of reflection is equal to the angle of incidence.</p>	<p>(Any 1 point each) $\frac{1}{2} + \frac{1}{2} = 1$ (only E.g. $\frac{1}{2}$)</p> <p>$\frac{1}{2} + \frac{1}{2} = 1$</p>
SECTION C(3X3=9)		
11	<p>a.</p> <ul style="list-style-type: none"> • To make cooking wares. • In making electric appliances, electric wires, fridge etc. • Sheets of aluminium and iron for building materials. • In manufacturing jewellery from gold, silver, coins from copper, aluminium etc. <p>b.</p> $2 \text{Cu(s)} + \text{H}_2\text{O(l)} + \text{CO}_2(\text{g}) + \text{O}_2(\text{g}) \rightarrow \text{Cu(OH)}_2(\text{s}) + \text{CuCO}_3(\text{s})$ <p style="text-align: center;"> (Copper) (Water) (Carbon dioxide) (Oxygen) (Copper hydroxide) (Copper carbonate) </p> <p>c. We can confirm the presence of hydrogen gas by bringing a burning splinter near the test tube. If it burns with a pop sound, the gas liberated is hydrogen.</p>	<p>(Any two)</p> <p>$\frac{1}{2} + \frac{1}{2} = 1$</p> <p>Only product -1</p>

		1
12	<p>a. A communicable disease is one that spreads from one person or animal to another or from a surface to a person. They include colds and flu.</p> <p>b. Rhizobium is a bacterium found in soil that helps in fixing nitrogen in leguminous plants. It attaches to the roots of the leguminous plant and produces nodules. These nodules fix atmospheric nitrogen and convert it into simple forms that can be used by the plant for its growth and development.</p>	<p>1+1=2</p> <p>1</p>
13	<p>a. Rods are sensitive to dim light. Cones are sensitive to colour and bright light.</p> <p>b. Upon passage through the prism, the white light is dispersed into its component colours - red, orange, yellow, green, blue, indigo and violet.</p> <p>c. A- eye lens B- optic nerves</p>	<p>$\frac{1}{2}+\frac{1}{2}=1$</p> <p>1</p> <p>$\frac{1}{2}+\frac{1}{2}=1$</p>

14	<p>a.</p>  <p>b. Kerosene oil, gets vaporized during burning and forms flames. Coal, on the other hand, does not vaporize and so does not produce a flame.</p> <p>c. Heat given by 4kg of fuel is 20,000 kJ</p> <p>Calorific value = Heat produced/ Weight of the fuel</p> <p>i.e. $20000/4$</p> <p>$=5000 \text{ kJ/kg}$</p>	<p>1+1=2(Diagram+ Labelling)</p> <p>1</p> <p>$\frac{1}{2} \times 4 = 2$</p> <p>(Formula+ c</p> <p>Substitution+ Ans+Unit)</p>
SECTION E		
15	<p>i. The medicines kill or stop the growth of the disease-causing microorganisms. Such medicines are called antibiotics. E.g. Penicillin, streptomycin, tetracycline and erythromycin</p> <p>ii. The antibiotics are extracted from bacteria and fungi.</p> <p>iii. It is important to remember that antibiotics should be taken only on the advice of a qualified doctor. Also, you must complete the course prescribed by the doctor. If you take antibiotics when not needed or in the wrong doses, it may make the drug less effective when you might need it in future. Also, antibiotics taken unnecessarily may kill the beneficial bacteria in the body</p>	<p>$\frac{1}{2} + \frac{1}{2} = 1$</p> <p>1</p> <p>(Any two)</p> <p>$\frac{1}{2} + \frac{1}{2} = 1$</p>
TOTAL		30