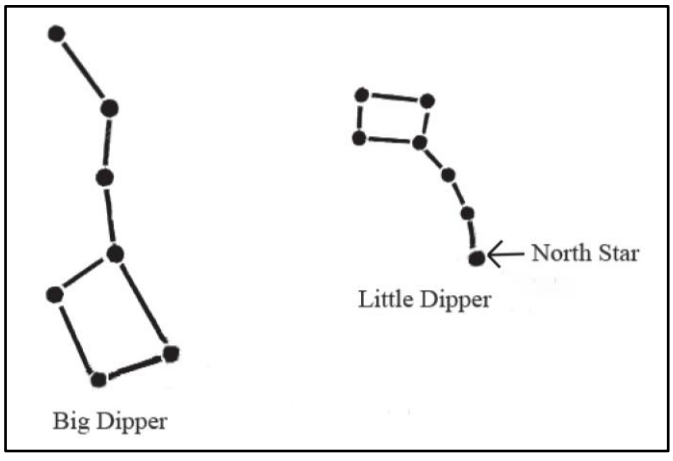
INDIAN SCHOOL AL WADI AL KABIR

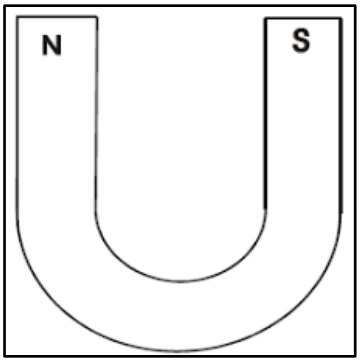
CLASS: VI	DEPARTMENT: SCIENCE	DATE: 11/03/2025
MARKS: 80	FINAL EXAMINATION ANSWER KEY [SET - 1]	DURATION: 3 HOURS

SECTION A (1 X 20 = 20)		
1	(d) Soil erosion	1
2	(d) 78%	1
3	(d) Both A and B	1
4	(b) 37 ^{0}C	1
5	(d) All of the above	1
6	(d) Rubbing a piece of iron it repeatedly on the magnet.	1
7	(a) North pole as like poles always repel.	1
8	(d) Transparent, opaque	1
9	(c) Carbon dioxide	1
10	(b) Evaporation	1
11	(c) The plate has a larger exposed surface area.	1
12	(d) Water vapour from our mouth gets condensed on the glasses.	1
13	(b) There were no buds on the cutting	1
14	(a) Water is essential for plants to survive	1
15	(b) Proxima Centauri	1
16	(d) Dwarf planets	1
17	iii) A is true but R is false	1
18	i) Both A and R are true and R is the correct explanation of the assertion.	1
19	iii) A is true but R is false.	1
20	i) Both A and R are true and R is the correct explanation of the assertion.	1
SECTION B (2 X 6 = 12)		

21	Cutting down trees on a large scale impacts the quality of the soil as the roots of plants hold onto the soil and prevent it from being washed away. Moreover, the leaves that fall from the trees decay and enrich the soil with nutrients. Without trees, the soil becomes loose and can easily be washed away by rain or blown away by wind, leading to loss of fertile topsoil.	2
22	Natural magnets are those that occur in nature and have the property of attracting iron, cobalt, and nickel. Example: Magnetite Magnets made by humans using magnetic substances are called artificial magnets. They are made in different shapes. Examples: Bar magnets, U-shaped magnets, and ring magnets.	1+1
23	In case of water, shape depends on the container but volume remains the same. In case of water vapour, both shape and volume change. It occupies all available space.	1+1
24	**a)** Water seeps through the surface of the earthen pot and evaporates, which imparts a cooling effect on the water. **b)** With the increase in the movement of air, water evaporates faster.	1+1
25	**a)** Mosquito larvae and pupae repeatedly come to the water surface as they require air to respire. **b)** White patches are formed due to sweat. The sweat consists of water and salts removed by the body as waste products.	1 + 1
26	<u>Diagrams</u> -  	1 + 1
SECTION C (3 X 7 = 21)		

27	**a)** <u>Renewable resources:</u> Resources which get renewed, replenished or restored within a reasonable period of time are called renewable resources. E.g. Air, Water and Forests <u>Non-renewable resources:</u> Resources that are in limited quantities and do not get replenished within a reasonable period of time are called nonrenewable resources. E.g. Coal, Petroleum, and Natural gas **b)** Rainwater harvesting is important as it helps in collecting and storing rainwater for future use, especially in regions with limited water supply. It reduces dependence on groundwater, prevents water wastage, and provides a sustainable way for water conservation.	1 + 1 1
28	**a)** i) Handle the thermometer with care. If it hits some hard object, it can break. ii) Should be kept vertically. It should not be tilted. iii) The bulb should be surrounded from all sides by the substance of which the temperature is to be measured. The bulb should not touch the surface of the container. iv) The temperature should be read while the thermometer is inside the water. v) Eye should be directly in line with the level of liquid column while reading temperature. **b)** Doctor used the Fahrenheit scale of temperature. The symbol for Fahrenheit scale is °F. **c)** Convert 80°C to Kelvin. = 80 + 273.15 = **<u>353.15 K</u>**	[Any 2] 1 1 1
29	**a)** The regions of a magnet where the attraction of the magnet is the strongest are called poles of the magnet. **b)** Two-bar magnets should be placed inside a wooden box so that: a) the poles of two magnets lie opposite to each other. b) They must be separated by a piece of wood while two pieces of soft iron should be placed across their ends.	1 1 + 1
30	**a)** Metals when exposed to air react with moisture and gases present in it, thereby forming a dull layer of some other compound on it.	1

<table>
<tr><td></td><td>b) <u>Miscible liquids:</u> Liquids that get completely mixed are called miscible liquids.
E.g.: Honey, milk, vinegar etc.
<u>Immiscible liquids:</u> Liquids that do not mix are called immiscible liquids.
E.g.: Mustard oil, kerosene etc.</td><td>1 + 1</td></tr>
<tr><td>31</td><td>a) Higher temperatures increase the rate of evaporation by providing more energy to water molecules to transition into a gaseous state.
b) i) The water from the ocean and the Earth’s surface evaporates into the atmosphere as vapour and returns as rain, hail or snow, ultimately flowing back to the oceans. This circulation of water is known as the water cycle.
ii) Water vapour is lighter than air, causing it to rise</td><td>1
1
1</td></tr>
<tr><td>32</td><td>a) The time period for which living things remain alive is called its life span.
b) Any 2 differences -
<table>
<tr><th>Life Cycle of Plants</th><th>Life Cycle of Animals</th></tr>
<tr><td>A plant’s life cycle starts with seed germination.</td><td>An animal’s life cycle begins with a new born or egg.</td></tr>
<tr><td>Plants grow throughout their life.</td><td>Animals stop growing after certain stage of time.</td></tr>
<tr><td>Seeds or reproductive parts are produced throughout their life cycle.</td><td>Animals have definite time for reproduction.</td></tr>
<tr><td>Plants do not move from one place to another.</td><td>Animals move from one place to another.</td></tr>
<tr><td>Plants use flowers and vegetative parts for reproduction.</td><td>Animals have specialized organs for reproduction</td></tr>
<tr><td>Plants use stomata for the respiration.</td><td>Animals have specialised organs like lungs or gills for respiration.</td></tr>
</table></td><td>1
1 + 1</td></tr>
</table>

33	**a)** The Moon's surface shows circular bowl-like structures called craters. Most of these craters have been formed due to the impact of asteroids or rocks from the space hitting the Moon's surface. **b)** A constellation is a group of stars forming a recognisable shape or pattern. Orion.	1 + 1 1
SECTION D (5 X 3 = 15)		
34	**a)** A reliable measure of hotness (or coldness) of a body is its temperature. **b)** i) Infrared thermometers measure temperature without touching a person's body. So, they reduce the risk of spreading diseases. ii) The temperature of the human body does not go below 35 ˚C or above 42 ˚C. **c)** Number of divisions = 50, Temperature range = 0 ℃ - 100 ℃ Measurement of each division = 100/50 = 2 ℃	1 1 1 2
35	**a)** Electrical appliances such as televisions, mobiles, CDs, and computers have magnetic storage devices inside them. When we bring external magnets near these appliances, the external magnets will interfere with the magnetic components of the appliances and may damage them. **b)** The two poles of a magnet cannot exist independently. If we cut or break a magnet into two, we cannot isolate the North Pole and South Pole. We could get two pieces, each having a North pole and a South pole. Therefore, the two poles of a magnet are inseparable. **c)** <u>Diagram –</u> 	1 2 2

36	**a)** Kerosene oil forms a thin layer over the water surface. This layer separates water from air, and does not allow larvae and pupae to inhale air. As a result, they die. **b)** Anything or any event that prompts living beings to respond is called a stimulus. Touch me-not plants fold their leaves when we touch them. **c)** The tail in the tadpole stage helps it in: • The tail helps the tadpole in swimming and changing direction in water. • The tail also helps it in finding food and keeping itself safe from predators • It also helps the tadpole in maintaining balance and stability while moving in water.	1 1 + 1 2
SECTION E (4 X 3 = 12)		
37	**a)** Fossil fuels formed from the remains of microorganisms and plants that got buried deep inside the earth, and were converted to petroleum, natural gas and coal. It takes millions of years for these fuels to form. **b)** They are cleaner fuels and do not give smoke and harmful gases when burnt. **c)** Fossil fuels can be conserved by using public transport or carpools to travel, walking or cycling to nearby places, use air conditioners or heaters only when required and use alternative sources of energy like solar energy.	1 1 2
38	**a)** The materials, through which things can be seen clearly, are called transparent. The materials through which objects can be seen, but not clearly, are known as translucent. **b)** An opaque white paper can be converted into translucent paper by spreading some oil on it. **c)** The systematic arrangement of things based on certain similarities and differences is called sorting or classification. Classification helps in the systematic study of objects, in identifying and locating things, to study the properties of objects of one kind and also helps to understand similarities and dissimilarities among objects.	1 1 1 + 1

39	**a)**	India became the first country in the world to achieve a landing near the little explored Moon's south pole. To mark this success, the Government of India declared August 23 to be celebrated as 'National Space Day' in India.	1
	b)	The Chandrayaan-3 mission with the Vikram-lander and the Pragyan rover landed near the south pole of the Moon.	1
	c)	The primary objective of Chandrayaan-3 mission was to demonstrate a safe and soft landing on Lunar Surface, to demonstrate Rover exploring the Moon's surface, and to conduct in-situ scientific experiments.	1 + 1