



<b>GRADE: IX</b>		<b>MT1 (2024-25)</b> <b>MS SCIENCE</b>	<b>Marks: 20</b> <b>Time: 50</b> <b>minutes</b>
<b>Date:</b>			
<b>Q.No.</b>	<b>Questions</b>	<b>Mark</b>	
<b>I</b>	<b>Choose the correct answer</b>		
1	(d) $m/s^2$	1	
2	d) 802 K	1	
3	c) Sublimation	1	
4	(c) Accelerated	1	
5	Answer: (d) Assertion (A) is false but reason (R) is true. Chloroplasts perform photosynthesis while leucoplasts are storage plastids.	1	
<b>II</b>	<b>Answer The Following</b>		
1	The temperature remains constant during a change of state of matter for any substance. This is because all the energy provided is used up for the conversion of the state of matter, not to increase or decrease the temperature.	2	
2	1. Distance is defined as the length of the path covered by the object to reach from the initial point to the final point. 2. it is a scalar quantity. 3. SI unit m 1. Displacement is defined as the shortest path length between these two points. 2. Vector quantity 3. SI unit m	2	
3	Golgi apparatus is responsible for modification, packaging and transfer of proteins synthesized in a cell. in case the Golgi apparatus is absent none of the structural or functional proteins will reach their destination. Resulting in the dysfunction of the target cell or organ or organelle.	2	
<b>III</b>	<b>Short Answer Questions</b>		
1	Distance =140 m Total round=3.5 Displacement= $10\sqrt{2}$ m=14.14 m	3	

2	<p>a) Diffusion is slower in solids due to the increased force of attraction and decreased movement of particles in solids. This reduces the speed of diffusion.</p> <p>b) Smell of incense stick spreading/ The fragrance of perfume spreading</p> <p>c) Deposition is the change of a gaseous state into a solid state without going through the liquid state.</p>	3
3	<ol style="list-style-type: none"> <li>1. Mitochondria are known as the powerhouses of the cell.</li> <li>2. Mitochondria are tiny organelles present inside the cells that are involved in releasing energy from food as it is responsible for cellular respiration.</li> <li>3. It produces energy which is ATP through respiration and regulates cellular metabolism.</li> <li>4. Since energy gives power to the cell, mitochondria are called the powerhouse of the cell.</li> </ol> <p>b. ATP is known as adenosine triphosphate, and it is a molecule containing carbon, hydrogen, nitrogen, oxygen and phosphorus. ATP is the energy currency of the cell because, it is the most preferred energy molecule in the cell.</p>	3