



B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL



PERIODIC TEST-I 2026-27 SCIENCE MARKING SCHEME SET-II

Class: IX

Time: 1 hour

Date: 16.06.25

Max Marks: 25

Section A (Biology)											
1.	a) Enzymes packed in Lysosomes are made through RER (rough endoplasmic reticulum)	1									
2.	b) Rudolf Virchow	1									
3.	a) <table border="1"> <thead> <tr> <th>Feature</th><th>Prokaryotic</th><th>Eukaryotic</th></tr> </thead> <tbody> <tr> <td>Nucleus</td><td>Absent</td><td>Present</td></tr> <tr> <td>Size</td><td>Small</td><td>Larger</td></tr> </tbody> </table> b) Unicellular- single cell, example-bacteria. Multicellular- many cells, example-plants	Feature	Prokaryotic	Eukaryotic	Nucleus	Absent	Present	Size	Small	Larger	
Feature	Prokaryotic	Eukaryotic									
Nucleus	Absent	Present									
Size	Small	Larger									
4.	Main parts: Nuclear membrane: Double-layered, with pores for exchange Nucleoplasm: Jelly-like fluid inside nucleus Nucleolus: Produces ribosomes Chromatin: DNA + protein material	2									
5.	Hypotonic solution: Water enters the cell → cell swells and may burst Isotonic solution: No net movement of water → cell remains normal Hypertonic solution: Water leaves the cell → cell shrinks	3									
Section B (Chemistry)											
6.	d) Light	1									
7.	a) A dish of water	1									
8.	Solids have a definite shape and volume with tightly packed particles. Liquids have a definite volume but take the container's shape, featuring loosely bound particles. Gases have neither fixed shape nor volume, with particles moving freely to fill space. Solids are rigid, liquids flow, and gases are highly compressible.	3									
9.	a) A wooden table is classified as a solid because it exhibits the key physical properties of the solid state: it possesses a definite shape, a distinct boundary, and a fixed volume. It is rigid, hard, cannot be compressed, and does not flow, with its particles being tightly packed. b) CNG :- Compressed natural gas and LPG:- Liquefied petroleum gas c) Convert : $127^{\circ}\text{C} + 273 = 400\text{ K}$	3									
Section C (Physics)											
10.	(d) Velocity of a moving body is its speed in a given direction.	1									
11	(i) Speed is a scalar quantity that measures how fast something is moving, whereas velocity is a vector quantity that considers both speed and direction.	2									

	(ii) Speed is always positive or zero. It does not have a directional component. On the other hand, velocity can be negative if the motion is in the opposite direction.	
12.	Total distance travelled by the object = $16\text{ m} + 16\text{ m} = 32\text{ m}$ Total time taken = $4\text{ s} + 2\text{ s} = 6\text{ s}$ Average speed = $\text{Total distance travelled} / \text{Total time taken} = 32\text{ m} / 6\text{ s} = 5.33\text{ m s}^{-1}$ Therefore, the average speed of the object is 5.33 m s^{-1}.	2
13.	(i) Uniform acceleration is the motion of an object where its velocity changes by equal amounts in equal time intervals, Non-uniform acceleration occurs when an object's velocity changes by unequal amounts in equal time intervals. (ii) Change in velocity = $(40-0)\text{ km/hr} = 200/18\text{ m/s}$ Time interval = $10\text{ min} = 600\text{ s}$ acceleration = $(200/18)/600 = 0.0185\text{ m/s}^2$.	3

*****ALL THE BEST*****