



# B.K. BIRLA CENTRE FOR EDUCATION

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



PT-II -2025

SCIENCE

## MARKING SCHEME

Class: IX  
Date: 11.11.25

Time: 1hr  
Max Marks: 25

### Section A (Biology)

1. c) kidney (1)
2. Fats are stored in: Adipose tissue (a type of connective tissue). (2)  
Usefulness:  
Acts as an energy reserve.  
Provides insulation and helps maintain body temperature.  
Cushions and protects internal organs.
3. Differentiate between cartilage and bone. (3)  
Feature Cartilage Bone  
Hardness Soft and flexible Hard and rigid  
Blood supply Lacks blood vessels (avascular) Rich blood supply  
Cells Chondrocytes Osteocytes
4. Differentiate between tendons and ligaments. (3)  
Feature Tendons Ligaments  
Function Connect muscles to bones Connect bones to bones  
Elasticity Less elastic More elastic  
Injury Healing Heal slowly (less blood supply) Heal slowly (low blood supply)

### Section-B (Chemistry)

5. b) Atom 1
6. a)  $\text{AlCl}_3$   
b)  $\text{Na}_2\text{O}$  2
7. An ion is an atom or group of atoms that has a net electrical charge due to the loss or gain of one or more electrons. Examples of ions include the  $\text{Na}^+$ ,  $\text{Ca}^{2+}$ ,  $\text{S}^{2-}$ ,  $\text{CO}_3^{2-}$  2
8. o All matter is composed of extremely small particles called atoms.  
o Atoms are indivisible, meaning they cannot be created or destroyed.  
o Atoms of a given element are identical in mass and properties.  
o Atoms of different elements have different masses and different chemical properties.  
o Atoms of different elements combine in fixed, simple whole-number ratios to form compounds.

o In chemical reactions, atoms are combined, separated, or rearranged, but they are neither created nor destroyed. 3

**Section-C (Physics)**

9. (c) Remains the same 1
10. Pressure is the force acting per unit area perpendicular to the surface. S.I unit Pascal. (1+1)
11.  $P = F/A$ . 1  
=  $200 / (0.5) = 400 \text{ Pa}$  1
12. (a)  $F_b = 60 - 40 = 20 \text{ N}$  1  
(b) Weight of water displaced = Buoyant force = **20 N** 1  
(c) Since apparent weight  $\neq 0$  ( $40 \text{ N} > 0$ ), the object **sinks**. 1
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