

**BCM SCHOOL, BASANT AVENUE, DUGRI,
LUDHIANA**

**CLASS- IX
SUBJECT- SCIENCE ANSWER KEY**



1 C. Centrifugation

2 A. Both A and R are true and R is the correct explanation of A.

3

Basis	True Solution Suspension	Suspension
Visibility of particles Particles are visible	Particles are not visible	Particles are visible
Settling of particles	Particles do not settle down Particles settle down on standing	Particles settle down on standing

4

Magnetic separation – Use a magnet to remove iron filings.
Property used: Magnetic nature of iron.
Dissolution – Add water to dissolve salt. Sand remains undissolved.
Property used: Solubility of salt in water.
Filtration – Filter the mixture to separate sand from salt solution.
Property used: Difference in particle size/insolubility.
Evaporation – Heat the salt solution to obtain salt.
Property used: Difference in boiling point/evaporation of water.

5

A. Extra outer covering: Cell wall
B. It is absent in cheek cells because cheek cells are animal cells and animal cells do not have a cell wall.
C. Cheek cells are more flexible because they lack a rigid cell wall.
D. Similarity: Both contain a cell membrane, cytoplasm, and nucleus.

6	<p>A. Process: Osmosis B. Raisins swelled in Bowl A because water entered the raisins through osmosis (endosmosis). C. Raisins shrank in Bowl B because water moved out of the raisins into the concentrated sugar solution (exosmosis).</p>
7	<p>A boy walks 40 m east and then 30 m west Total Distance $40 + 30 = 70\text{m}$ Answer: 70 m Displacement $40 - 30 = 10 \text{ m east}$ Answer: 10 m east</p>
8	<p>This is uniform motion. In uniform motion, an object covers equal distances in equal intervals of time.</p>
9	<p>Acceleration due to change in direction occurs when the direction of motion changes even if speed remains constant. Example: A car moving in a circular path experiences acceleration because its direction changes continuously.</p>
10	<p>Velocity-time graph is a straight line parallel to time axis A-It indicates that the body is moving with constant velocity. B. Acceleration is zero because velocity is constant. C. Distance travelled is obtained by calculating the area under the velocity-time graph.</p>