

Properties of Water

Solution 1.a:

Water shows anomalous expansion. As the temperature increases from 0°C to 4°C, the density of water increases. The density of water is maximum at 4°C. The surface layer of water in a reservoir freezes at 0°C. However, the temperature of water below the ice is about 4°C. Hence, the water stays below the ice and the aquatic animals in the reservoir can survive in it.

Solution 1.b:

Seawater consists of about 35 grams of salt per litre. Thus, the density of seawater is more than that of the ordinary water. Hence, this makes a person to swim with more ease in the seawater than in the ordinary water.

Solution 1.c:

Water is said to be a universal solvent because many substances dissolve in it.

Solution 1.d:

Water is a colourless, odourless, transparent liquid at normal temperature. It is a chemically neutral substance which makes it an ideal medium for most chemical reactions.

Solution 2:

- The density of water is 1 g/cc.
- A substance that dissolves in a liquid is called a solute.
- When a solute and a solvent mix in each other completely, we get a solution.

Solution 3:

Group 'A'	Group 'B'
(a) Anomalous expansion	2. Water
(b) Density	1. Mass/Volume
(c) Dead Sea	4. 25% salt
(d) Water	3. Compound