

43. Correct Answer : D

Answer Justification :



Hence, option (d) is correct.

44. Correct Answer : C

Answer Justification :

SALINITY OF OCEAN WATERS

All waters in nature, whether rain water or ocean water, contain dissolved mineral salts. Salinity is the term used to define the total content of dissolved salts in sea water. It is calculated as the amount of salt (in gm) dissolved in 1,000 gm (1 kg) of seawater. It is usually expressed as parts per thousand (o/oo) or ppt. Salinity is an important property of sea water. **Salinity of 24.7 o/oo has been considered as the upper limit to demarcate 'brackish water'.**

HORIZONTAL DISTRIBUTION OF SALINITY

The salinity for normal open ocean ranges between 33o/oo and 37 o/oo. In the land locked Red Sea, it is as high as 41o/oo, while in the estuaries and the Arctic, the salinity fluctuates from 0 - 35 o/oo, seasonally. In hot and dry regions, where evaporation is high, the salinity sometimes reaches to 70 o/oo. **Hence, statement 2 is incorrect.**

Vertical Distribution of Salinity

Salinity changes with depth, but the way it changes depends upon the location of the sea. Salinity at the surface increases by the loss of water to ice or evaporation, or decreased by the input of fresh waters, such as from the rivers. Salinity at depth is very much fixed, because there is no way that water is 'lost', or the salt is 'added.'

High salinity seawater, generally, sinks below the lower salinity water. This leads to stratification by salinity.