

Qo2
(i) COD: - The amount of oxygen which is required for the chemical oxidation of organic matter in sewage is known as chemical oxygen demand.

iv Displacement efficiency:-

$$\text{Displacement efficiency (\%)} = \frac{\text{Flowing through tank}}{\text{Retention period}}$$

(iii) Short circuiting:- It means that effective sedimentation is not taking place in the entire volume of the settling tank; that is a given entering volume of waste water is hindered from spreading uniformly throughout the tank in quiescent manner, so it reaches the effluent weir before the theoretical detention time has been used.

(iv) Non-Carbonate Hardness: In this type of hardness sulphate, chlorides and nitrates of calcium and magnesium are present in water. It is also called permanent hardness cannot be removed by simple boiling.