

When a hot liquid is mixed with a cold liquid, the temperature of the mixture _____ .

first decreases then becomes constant

first increases then becomes constant

continuously increases

is undefined for some time and then becomes nearly constant

When hot liquid is mixed with cold liquid, molecules collide and transfer heat. When heat is transferred, temperature can't be defined. Once the energy is shared by molecules, system reaches equilibrium and then becomes nearly constant.

⇒ Option (d) is correct.