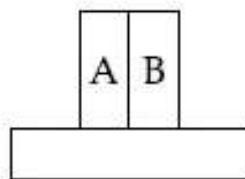


A bimetallic strip consists of metals A and B. It is mounted rigidly as shown. The metal A has higher coefficient of expansion compared to that of metal B. When the bimetallic strip is placed in a cold bath, it will :



- A Neither bend nor shrink
- B Bend towards the left
- C Not bend but shrink
- D Bend towards the right

$$\Delta L = L \alpha \Delta T$$

Here, $\Delta L \rightarrow$ expands (if ΔT is positive)

$\Delta L \rightarrow$ contracts (if ΔT is negative)

It is given that bimetallic strip is dipped in cold bath $\Rightarrow \Delta T$ is negative

\Rightarrow Large value of $\alpha \Rightarrow$ More contraction

As $\alpha_A > \alpha_B$ (given)

\Rightarrow A will contract more. Hence, bend towards left.

