

Exemplar problem 5

Atmospheric pressures recorded in different cities are as follows:

Cities	Shimla	Bangalore	Delhi	Mumbai
p in N/m^2	1.01×10^5	1.2×10^5	1.02×10^5	1.21×10^5

Consider the above data and mark the place at which liquid will boil first. Δ

- (i) Shimla
- (ii) Bangalore
- (iii) Delhi
- (iv) Mumbai

(i) shimla

A liquid starts boiling when the pressure on its surface is equal to the atmospheric pressure. Thus liquid will boil first at **Shimla** because its atmospheric pressure is minimum.