

For a constant volume gas thermometer, one should fill the gas at

- (a) low temperature and low pressure
- (b) low temperature and high pressure
- (c) high temperature and low pressure
- (d) high temperature and high pressure.

A constant-volume gas thermometer should be filled with an ideal gas in which particles don't interact with each other and are free to move anywhere so that the thermometer functions properly.

Also, an ideal gas exist at high temperature and low pressure \Rightarrow Option (c) is correct.