## **Question 1**

When an ideal gas undergoes unrestrained expansion, no cooling occurs because the molecules: (1984 - 1 Mark)

- (a) are above the inversion temperature
- (b) exert no attractive forces on each other
- (c) do work equal to loss in kinetic energy
- (d) collide without loss of energy
- (b) No work is required to tear apart the molecules due to the absence of attractive forces in an ideal gas.