

14 A sample of air contains N molecules. The mean random kinetic energy per molecule is E_k .
The mean intermolecular potential energy per molecule is E_p .

What is the internal energy of the sample?

A $\frac{N}{(E_k + E_p)}$

B $\frac{N}{(E_k - E_p)}$

C $N(E_k + E_p)$

D $N(E_k - E_p)$

15 A sample of gas is compressed slowly in a metal cylinder. M is the amount of work done on the