

Physics ICS Part 1 Chapter 11 Online Test

Sr	Questions	Answers Choice
1	According to first law of thermodynamics the quantity which is conserved.	A. Force B. Momentum C. Energy D. Power
2	A system does 600 J of work and at the same time has its internal energy increased by 320 J. How much heat has been supplied.	A. 280 J B. 920 J C. 600 J D. 200 J
3	Pascal is the unit of	A. Pressure B. Force C. Tension D. Weight
4	The internal energy of system does not depend on	A. Temperature B. Pressure C. Path D. Final and initial state
5	A diatomic gas molecules has	A. Translational energy only B. Rotational energy only C. Vibrational energy only D. All translational, Rotational and vibrational energy
6	A gas performs 10 J of work while expanding adiabatically. the change in its internal energy is.	A. 10 J B. -10 J C. 100 J D. -200 J
7	In thermodynamics system internal energy decrease by 100 J and 100 J of work done on the system then heat lost will be.	A. Zero B. 100 J C. 200 J D. -200 J
8	At which of the following temperature a body has maximum internal energy.	A. -273°C B. 0 K C. 273 K D. -273 K
9	For an ideal gas, the internal energy is directly proportional to.	A. Pressure B. volume C. Mass D. Temperature
10	The internal energy of a piece of lead when beaten by hammer will.	A. Increase B. Decrease C. Remains constant D. Increases and then decrease
11	The mean kinetic energy of gas is at.	A. 0°C B. -273°C C. 100 K D. 100°C
12	If the temperature of a gas is constant then $\langle \frac{1}{2} mv^2 \rangle$ of the molecules of gas will be.	A. Constant B. Zero C. Increase D. Decrease
13	Boltzman constant 'k' has same unit as.	A. Temperature B. Energy C. Entropy D. Pressure
14	Temperature of a gas is increased from 27 °C to 127 °C. The ratio of its mean K.E. will be	A. $\frac{3}{4}$ B. $\frac{9}{16}$ C. $\frac{4}{3}$ D. $\frac{10}{9}$
15	At constant temperature and pressure, if volume of given mass of a gas is doubled then density is.	A. Doubled B. 1/4 original C. 1/2 of original D. 1/4 of original

D. Unchanged

16 The potential energy to the molecules of an ideal gas is considered to be.

- A. Maximum
- B. Zero
- C. $\frac{1}{2} kx^2$
- D. $\frac{1}{2} kx$

17 A constant temperature, if pressure of a given mass of gas is halved, then its volume becomes.

- A. Halve
- B. Doubled
- C. Four time
- D. Constant