

## MDCAT Physics Chapter 8 Heat and Thermodynamics Online Test

Sr	Questions	Answers Choice
1	Electromagnetic waves emitted by hot bodies are called:	A. Photoelectrons B. Alpha rats C. Thermal radiation D. None of these
2	The equation PVr = Constant applies to:	A. Isothermal process B. Adiabatic process C. Isobaric process D. None of these
3	Most motorbikes have cylinder/s engine but cars usually have cylinders on the same crankshaft.	A. Four , Six B. One , four C. two , five D. None of these
4	In thermodynamics, the change in internal energy depends upon:	A. The path taken between initial and final states B. The initial state only C. The final state only D. Initial and final states
5	Thermal radiations are a type of:	A. Mechanical waves B. Electromagnetic waves C. Alpha rays D. Electrons
6	Which of the following does not have the same units:	A. Work B. Heat C. Kinetic energy D. Power
7	As the working substance of a heat engine completes a cycle, there is no change in:	A. Internal energy B. Pressure C. Volume D. All of these
8	The only significant motion possessed by the mono-atomic gas molecules is:	A. Translatory B. Rotatory C. Vibratory D. None of these
9	Brownian motion confirms the truth of :	A. Wave theory of light B. Boyle's law C. Kinetic theory of gases D. Adiabatic process
10	The rate of change of momentum of a molecule is equal to:	A. Pressure B. Work C. Density D. Force
11	First law of thermodynamics is merely a statement of law of conversation of:	A. Energy B. Angular momentum C. Change D. Linear momentum
12	No of spark plugs needed in diesel engine is:	A. Four B. Five C. Six D. None of these
13	In which process the change in internal energy of the system is zero:	A. Isochoric process B. Isobaric process C. Adiabatic process D. Isothermal process
14	When a gas is compressed:	A. Its internal energy decreases     B. Its temperature decreases     C. Its temperature increases     D. None of these
15	If P is the pressure and V is the volume, Then PV will represent:	A. Power B. Work C. Force

		D. None of these
16	The value of universal gas constant R is:	A. 8.314 J/K mole K B. 8314 J/ mole K C. 8.314 J/ mole K D. None of these
17	At constant temperature, if the density of the gas is increased, its pressure will:	A. Decrease B. Increase C. Remain unchanged D. None of these
18	According to boyle's law, volume of a given mass of a gas is	A. Inversely proportional mass at constant pressure B. Directly proportional to pressure at constant temprerature C. Inversely proportional pressure at constant temprature D. None of these
19	What will be efficiency of carnot engine when it is operated between the temperatures $47^{\circ}\text{C}$ and $127^{\circ}\text{C}$ :	A. Reversible B. Irreversible C. Sometimes A and B D. None of these
20	When two objects come to common temperature, the body is said to be in:	A. Static equilibrium     B. Dynamic equilibrium     C. Thermal equilibrium     D. None of these