

## MDCAT Physics Chapter 5 Thermodynamics Online Test

Sr	Questions	Answers Choice
1	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
2	While dealing with the processes i thermodynamics, the working substances is usually:	A. Oxygen gas B. Hydrogen gas C. Ideal gas D. None of these
3	If P is the pressure and V is the volume, Then PV will represent:	A. Power B. Work C. Force D. None of these
4	Tick which of the following is not state variable:	A. Heat energy B. Pressure C. Entropy D. Volume
5	In which process, the change in internal energy of the system of zero:	<ul><li>A. Isochoric process</li><li>B. isobaric process</li><li>C. Adiabatic process</li><li>D. Isothermal process</li></ul>
6	First law of thermodynamics is merely a statement of law of conversation of:	A. Energy B. Angular momentum C. Change D. Linear momentum
7	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
8	When a gas is compressed:	A. Its internal energy decreases B. Its temperature decreases C. Its temperature increases D. None of these
9	The ideal gas obey gas law at:	A. Low tempratures and high pressures B. High temperatures and low pressures C. All temperatures and pressures D. None of these
10	Thermal radiations are a type of:	A. Mechanical waves B. Electromagnetic waves C. Alpha rays D. Electrons
11	For a gas obeying Boyle's law, if the pressure is doubled the volume becomes:	A. One half B. Double C. Four times D. None of these
12	The temperature at which all the gases become liquid is called:	A. 273 K B273 K C. Absolute Zero D. Both (B) and (C)
13	The number of molecules in one mole of gas is equal to:	A. Avogadro number N <sub>A</sub> B. Gas constant R C. Boltzmann constant k D. None of these
14	Brownian motion confirms the truth of :	A. Wave theory of light B. Boyle's law C. Kinetic theory of gases D. Adiabatic process
		A. Inversely proportional mass at

15	According to boyle's law, volume of a given mass of a gas is	constant pressure B. Directly proportional to pressure at constant temperature C. Inversely proportional pressure at constant temprature D. None of these
16	The pressure exerted on the walls on the vessel by gas molecules is defined as:	A. Force per unit volume B. Energy per unit area C. mass per unit volume D. None of these
17	Change in momentum per second is:	A. Product force and time B. Product of pressure and area C. Ratio of pressure and area D. None of these
18	The rate of change of momentum of a molecule is equal to:	A. Pressure B. Work C. Density D. Force
19	If a molecule with momentum mv strikes a wall and rebound then the change in momentum will be:	A2 mv B. Zero C. 2 mv D. mv
20	Pressure may be defined asper second per unit area:	A. Change in force B. Change in momentum C. Change in energy D. Work done