

MDCAT Physics Chapter 8 Heat and Thermodynamics Online Test

Sr	Questions	Answers Choice
1	The nature of thermal radiation is similar to:	A. Ultraviolet rays B. Light rays C. Both of them D. None of them
2	Truth of kinetic energy theory is confirmed by:	A. Diffusion of gases B. Brownian motion C. Both A and B D. None of these
3	The ideal gas obey gas law at:	A. Low tempratures and high pressures B. High tempratures and low pressures C. All tempratures and pressures D. None of these
4	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
5	Only those processes are probable to take place for which entropy os the system:	A. Increases B. Remains constant C. Both A and B are correct D. None of above
6	The nature of thermal radiation is smaller to:	A. Ultraviolet rays B. Light rays C. Both of them D. None of these
7	The relationship between Boltzmann constant K with R and N_A is given as:	A. $k = \frac{R}{N_A}$ B. $k = \frac{R}{N_A}$ C. $k = \frac{R}{N_A}$ D. None of these
8	First law of thermodynamics is merely a statement of law of conversation of:	A. Energy B. Angular momentum C. Change D. Linear momentum
9	The rate of change of momentum of a molecule is equal to:	A. Pressure B. Work C. Density D. Force
10	A process in which no heat enters or leaves the system is called.	A. Adiabatic process B. Isothermal process C. Isochoric process D. None of these
11	The equation $PV = \text{Constant}$ applies to:	A. Isothermal process B. Adiabatic process C. Isobaric process D. None of these
12	The efficiency of a practical heat engine:	A. Can be 100% B. Can not be 100% C. Is always Zero D. None of these
13	Steam engine is:	A. An optical system B. A thermal system C. A thermodynamic system D. None of these
14	The motion of molecules in gases i:	A. Orderly B. Random C. Circular D. All of these
15	Diesel engine coverts _____ of available heat energy into work.	A. 20% to 25% B. 25% to 30% C. 30% to 35% D. 35% to 40%

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16	Hotness and coldness of an object is represented in terms of:	A. Heat B. Temperature C. Chemical D. None of these
17	The temperature at which all the gases become liquid is called:	A. 273 K B. -273 K C. Absolute Zero D. Both (B) and (C)
18	Real gases strictly obey gas laws at:	A. High pressures and low temperatures B. Low pressures and high temperatures C. High pressures and & temperatures D. None of these
19	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
20	No entropy change is associated with:	A. Isothermal B. Adiabatic process C. Isobaric process D. None of them