

MDCAT Physics Chapter 8 Heat and Thermodynamics Online Test

Sr	Questions	Answers Choice
1	No entropy change is associated with:	A. Isothermal B. Adiabatic process C. Isobaric process D. None of them
2	A gas which strictly obeys the gas laws under all conditions of temperatures and pressure is called:	A. Ideal gas B. Inert gas C. Real gas D. None of these
3	If temperature of the sink is decreased, efficiency of a carnot engine.	A. Remains constant B. Decreases C. Increases 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	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
6	Number of spark plugs needed in diesel engine is:	A. Four B. Five C. Six D. None of these
7	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%
8	The rate of change of momentum of a molecule is equal to:	A. Pressure B. Work C. Density D. Force
9	When a gas is compressed:	A. Its internal energy decreases B. Its temperature decreases C. Its temperature increases D. None of these
10	The nature of thermal radiation is similar to:	A. Ultraviolet rays B. Light rays C. Both of them D. None of them
11	Carnot engine is _____ heat engine.	A. A reversible B. An irreversible C. An ideal D. Both A and C
12	In an ideal gas, the molecules have:	A. Kinetic energy only B. Potential energy only C. Both KE and PE D. None of these
13	First law of thermodynamics is merely a statement of law of conversation of:	A. Energy B. Angular momentum C. Change D. Linear momentum
14	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
15	Electromagnetic waves emitted by hot bodies are called:	A. Photoelectrons B. Alpha rats C. Thermal radiation D. None of these

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16	Truth of kinetic energy theory is confirmed by:	A. Diffusion of gases B. Brownian motion C. Both A and B D. None of these
17	The only significant motion possessed by the mono-atomic gas molecules is:	A. Translatory B. Rotatory C. Vibratory D. None of these
18	The efficiency of a practical heat engine:	A. Can be 100% B. Can not be 100% C. Is always Zero D. None of these
19	The temperature scale approved in SI units is:	A. Celsius scale B. Kelvin scale C. Fahrenheit scale D. None of these
20	If P is the pressure and V is the volume, Then PV will represent:	A. Power B. Work C. Force D. None of these