

## MDCAT Physics Chapter 8 Heat and Thermodynamics Online Test

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Sr	Questions	Answers Choice
1	A process which is carried at constant temperature and Boyle's law can be applied is called:	A. Adiabatic process     B. Isothermal process     C. Isochoric process     D. None of these
2	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
3	When a gas is compressed:	A. Its internal energy decreases     B. Its temperature decreases     C. Its temperature increases     D. None of these
4	Number of spark plugs needed in diesel engine is:	A. Four B. Five C. Six D. None of these
5	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
6	The ratio of output work per cycle to input energy per cycle is called:	A. Entropy B. Internal energy C. Efficiency D. None of these
7	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
8	Avogadro number is known as number of molecules in:	A. One kg of a substance B. Unit volume of a substance C. One mole of a substance D. None of these
9	No entropy change is associated with:	A. Isothermal B. Adiabatic process C. Isobaric process D. None of them
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	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
12	Tick which of the following is not state variable:	A. Heat energy B. Pressure C. Entropy D. Volume
13	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
14	If the temperature difference between hot and cold body is greater the heat engine is:	A. Not efficient B. Less efficient C. More efficient D. NOne of above
15	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

16	Thermal radiations are a type of:	A. Mechanical waves     B. Electromagnetic waves     C. Alpha rays     D. Electrons
17	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
18	Petrol engine coverts of available heat energy into work.	A. 20% to 25% B. 25% to 30% C. 30% to 35% D. 35% to 40%
19	Steam engine is:	A. An optical system B. A thermal system C. A thermodynamic system D. None of these
20	Truth of kinetic energy theory is confirmed by:	A. Diffusion of gases B. Brownian motion C. Both A and B D. None of these