

MDCAT Physics Chapter 8 Heat and Thermodynamics Online Test

Sr	Questions	Answers Choice
1	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
2	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
3	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
4	The equation PVr = Constant applies to:	A. Isothermal process B. Adiabatic process C. Isobaric process 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	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
7	When heat is added to the system, the entropy change is:	A. Positive B. Negative C. Zero D. None of these
8	If temperature of the sink is decreased, efficiency of a carnot engine.	A. Remains constant B. Decreases C. Increases D. None of these
9	When a gas is compressed:	A. Its internal energy decreases B. Its temperature decreases C. Its temperature increases D. None of these
10	In which process, the change in internal energy of the system of zero:	A. Isochoric process B. isobaric process C. Adiabatic process D. Isothermal process
11	The nature of thermal radiation is similar to:	A. Ultraviolet rays B. Light rays C. Both of them D. None of them
12	At constant temperature, if the volume of a given mass of a gas is doubled, then the density of gas becomes:	A. Double B. Remains constant C. Half D. None of these
13	Carnot cycle is:	A. Reversible B. Irreversible C. Sometimes A, Sometimes B D. None of these
14	Pressure may be defined asper second per unit area:	A. Change in force B. Change in momentum C. Change in energy D. Work done
		A. Force per unit volume

15	The pressure exerted on the walls on the vessel by gas molecules is defined as:	B. Energy per unit area C. mass per unit volume D. None of these
16	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
17	The temperature scale approved in SI units is:	A. Calslus scale B. Kelvin scale C. Fehrenhelt scale D. None of these
18	Real gases strictly obey gas laws at:	A. High pressures and low temperatures B. Low pressures and high temperatures C. High pressures and & D. None of these
19	A certain engine coverts 20% of available heat energy into work. Then its efficiency will be:	A. 20% B. 80% C. 50% D. None of these
20	The nature of thermal radiation is smaller to:	A. Ultraviolet rays B. Light rays C. Both of them D. None of these