

ECAT Pre General Science Physics Chapter 11 Heat & Thermodynamics

Sr	Questions	Answers Choice
1	Pressure of a gas at constant volume is proportion to	A. Total energy of gas B. Average P.E to molecules C. Average K.E of molecules D. Total internal energy of gas
2	In an ideal gas, the molecules have:	A. Kinetic energy only B. Potential energy only C. Both KE and PE D. None of these
3	The efficiency of diesel engine is	A. 25% B. 25 - 30% C. 35% D. 35 - 40%
4	For making cooking utensils, which of the following pairs of properties is most suited?	A. Low specific heat and high conductivity B. Low specific heat and low conductivity C. High specific heat and high conductivity D. High specific heat and low conductivity
5	In thermodynamics, internal energy is the function of	A. temperature B. pressure C. state D. none of them
6	The nature of thermal radiation is similar to:	A. Ultraviolet rays B. Light rays C. Both of them D. None of these
7	Energy gas behaves like an ideal gas at	A. High temperature and low pressure B. Low temperature and high pressure C. Both A and B D. None
8	While deriving the equation for pressure of a gas we consider the	A. rotational motion of molecules B. vibrational motion of molecules C. linear motion of molecules D. all of them
9	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
10	The curve representing an isothermal process is called	A. adiabat B. isotherm C. fixed temperature D. none of them
11	Generally a temperature scale is established by using certain physical properties of a material which varies	A. nonlinearly with temperature B. linearly with temperature C. either of them D. none of them
12	The pressure of gas everywhere inside the vessel will be the same provided the gas is of	A. Non-uniform density B. uniform density C. high density D. low density
13	The volume of given mass of a gas will be doubled at atmosphere pressure if the temperature of the gas is changed from 150°C to	A. 300 °C B. 573 °C C. 600 °C D. 750 °C

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D. 743°C

14	A gas which strictly obeys the gas laws under all conditions of temperature and pressure is called:	A. Ideal gas B. Inert gas C. Real gas D. None of these
15	What temperature is the same on Celsius scale as well as on Fahrenheit scale?	A. 32°C B. -32°C C. -40°C D. -212°C
16	The volume of a gas will be double of what it is at 0°C (pressure remaining constant) at	A. 546 K B. 273 K C. 546°C D. 273°C
17	In the formula $P = N_0kT$, N_0 denotes:	A. Number of molecules per unit per volume B. Number of moles C. Number of molecules D. None of these
18	Good absorbers of heat are	A. Poor emitters B. Non emitters C. Good emitters D. Highly polarized
19	Sadi carnot described an ideal heat engine in	A. 1820 B. 1840 C. 1860 D. 1880
20	First law of thermodynamics tells us that heat energy can be converted into equivalent amount of work, but it is silent about	A. how heat is absorbed B. how heat extracted C. how this conversion takes place D. none of them