ECAT Pre General Science Physics Chapter 11 Heat & Thermodynamics

Sr	Questions	Answers Choice
1	In thermodynamics, internal energy is the function of	A. temperature B. pressure C. state D. none of them
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	Truth of kinetic energy is confirmed by:	A. Diffusion of gases B. Brownian motion C. Both A and B D. None of these
4	If a liquid is heated in weightlessness, the heat is transmitted through	A. Conduction B. Convection C. Radiation D. Neither, because the liquid cannot be heated in weightlessness
5	The temperature of gas is produced by	A. At potential energy of its molecules B. The kinetic energy of its molecules C. The attractive force between its molecules D. The repulsive force between its molecules
6	If water in a closed bottle is taken up to the moon and opened, the water gets	A. Freeze B. Boiled C. Dissociated into O₂and H₂ D. Evaporated
7	Adiabatic change occurs when the gas	A. expands B. compressed C. expands or compressed D. expands or compressed rapidly
8	A process is a reversible process, if the entropy of the system	A. increases B. decreases C. remains constant D. none of them
9	Real gases strictly obey gas law at:	A. High pressure and low temperatures B. Low pressures and high temperatures C. High pressures and high temperatures D. None of these
10	The heat required to raise the temperature of one mole of the gas through 1 K at constant volume is called	A. heat capacity B. specific heat capacity C. molar specific heat D. molar specific heat at constant volume
11	R.M.S velocity of a particle is V at pressure P. If pressure increases by two times, then R.M.S velocity becomes	A. 2V B. 3V C. 0.5V D. V
12	On a cold morning a metal surface will fell colder to touch than a wooden surface, because	A. Metal has high specific heat B. Metal has high thermal conductivity C. Metal has low specific heat D. Metal has low thermal conductivity
13	The only significant motion possessed by the mono-atomic gas represented is:	A. Translatory B. Rotatory C. Vibratory D. None of these
		A. same number of molecules

14	One mole of any substance contain	B. different number of molecules C. may be same or different D. none of them
15	The bicycle pump provides a good example of	A. first law of thermodynamics B. second law of thermodynamics C. third law of thermodynamics D. none of them
16	A succession of events which bring the system back to its initial condition is called	A. reversible process B. irreversible process C. a cycle D. none of them
17	According to the second law, which is must to produce work	A. a source contains a large amount of heat energy B. two sources at the same temperature C. two sources at the different temperatures D. a source contains a small amount of energy
18	The ideal gas law is	A. P = nRT B. V = nRT C. PV =RT D. PV =nRT
19	According to kinetic theory of gases, molecules of a gas behave like	A. Inelastic spheres B. Perfectly elastic rigid sphere C. Perfectly elastic non-rigid spheres D. Inelastic non-rigid spheres
20	On colliding in a closed container, the gas molecules	A. Transfer momentum to the walls B. Momentum becomes zero C. Move in opposite directions D. Perform Brownian motion