ECAT Physics Chapter 11 Heat & Thermodynamics

Sr	Questions	Answers Choice
1	In a heat engine, heat is supplied by the	A. cold reservoir B. sink C. hot reservoir D. none of them
2	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
3	The process which is carried out at constant temperature is known as	A. adiabatic process B. isothermal process C. isochoric process D. none of them
4	The unit of thermodynamical scale is	A. centigrade B. fahrenheit C. kelvin D. none of them
5	If N is the total number of molecules and V is the volume of the container, then the expression for the pressure of gas is	A. P=P/V<1/2mv²> B. P=2N/V<1/2mv²> C. P=2/3N/V<1/2mv²> D. P=2/3N/V<mv²>
6	Pressure applied at any point of gas at rest is transmitted equally to all parts of the gas. This is the statement of:	A. Newton's second law B. Pascal's law C. Carnot theorem D. Second law of thermodynamics
7	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
8	The work done on the system by the environment is considered as	A. positive B. negative C. zero D. any one of them
9	If a process cannot be retraced in the backward direction by reversing the controlling factors, it is	A. a reversible process B. an irreversible process C. any one of them D. both of them
10	If denotes the total number of molecules in cubic vessel such that m is mass of each milecule and I is length of each side of vessel, then mN/l^3 gives the:	A. Force B. Density C. Work done D. Pressure
11	The disorder in the system increases due to the	A. removal of heat B. addition of heat C. removal or addition of heat D. none of them
12	Hydrogen and helium of same volume V at same temperature T and same pressure P are mixed to have same volume V. The resulting pressure of the mixtures will be	A. R/2 B. P C. 2P D. Depending on the relative mass of the gases
13	Electromagnetic waves emitted by hot bodies are called:	A. Photoelectrons B. Alpha rays C. Thermal radiation D. None of these
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
		A. isothermal processes

15	Carnot heat engine only used	B. adiabatic processes C. both of them D. none of them
16	The state in which ice, water and vapour coexists in equilibrium is called	A. zero degree celsius B. zero degree fahrenheit C. absolute zero D. 373 K
17	One mole of any substance contain	A. same number of molecules B. different number of molecules C. may be same or different D. none of them
18	We cannot utilize the heat contents of oceans and atmosphere because	A. there is no reservoir at the same temperature B. there is no reservoir at the temperature lower than any one of two C. there is no reservoir at the temperature higher than any one of two D. none of them
19	Triple point of water is	A. 273.16°F B. 372.16K C. 273.16°F D. 273.16
20	While deriving equation of pressure by kinetic theory of gases, we take into account:	A. Only linear motion of molecules B. Only rotational motion C. Only vibratory motion D. All of these