

ECAT Pre General Science Online Test

Sr	Questions	Answers Choice
1	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
2	In the reverse process, the working substance passes through the same stages as in the direct process and	A. thermal effects at each stage are exactly reversed B. mechanical effects at each stage are exactly reversed C. thermal and mechanical effects at each stage remain the same D. thermal and mechanical effects at each stage are exactly reversed
3	A process which can be retraced in exactly reverse order, without producing any change in the surroundings is called	A. reversible process B. irreversible process C. any one of them D. none of them
4	Heat required to raise the temperature of one mole of a gas through 1 K at constant pressure is called	A. heat capacity B. specific heat capacity C. specific heat at constant volume D. specific heat at constant pressure
5	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
6	The heat required to raise the temperature of one mole of the substance through 1 K is called	A. heat capacity B. specific heat capacity C. molar specific heat D. all of them
7	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
8	One kilogram of different substances contain	A. same number of molecules B. different number of molecules C. may be same or different D. none of them
9	The curve representing an adiabatic process is called	A. isotherm B. adiabat C. adiabatic D. none of them
10	Which of the following is not an example of adiabatic process	A. the rapid escape of air from a burst type B. the rapid expansion and compression of air through which a sound wave is passing C. cloud formation in the atmosphere D. none of them
11	Adiabatic change occurs when the gas	A. expands B. compressed C. expands or compressed D. expands or compressed rapidly
12	In an adiabatic expansion, the temperature of the gas	A. increases B. becomes zero C. decreases D. decreases rapidly
13	In an adiabatic process the work is done at the expense of the	A. energy supplied to the system B. energy gained from the surroundings C. internal energy D. none of them
		A. isochoric process

14	A process in which no heat enters or leaves the system is called	B. isothermal process C. adiabatic process D. none of them
15	The curve representing an isothermal process is called	A. adiabat B. isotherm C. fixed temperature D. none of them
16	In case of an ideal gas, the P.E associated with its molecule is	A. maximum B. zero C. minimum D. not fixed
17	In which process the condition for the application of Boyle's law on the gas is fulfilled	A. isochoric process B. adiabatic process C. isothermal process D. none of them
18	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
19	If 42 J heat is transferred to the system and the work done by the system is 32 J then what will be the change in internal energy	A. 0 J B. 2 J C. 5 J D. 10 J
20	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
21	A diatomic gas molecule has	A. translational energy B. rotaional energy C. vibrational energy D. all of them
22	We can express the work in term of	A. directly measurable variables B. indirectly measurable variables C. either of them D. both of them
23	If an amount of heat enters the system it could	A. decrease the internal energy B. not change the internal energy C. increase the internal energy D. none of them
24	The work done on the system by the environment is considered as	A. positive B. negative C. zero D. any one of them
25	The work done by the system on its environment is considered as	A. positive B. negative C. zero D. any one of them
26	The internal energy of a system does not depend upon the	A. initial state of the system B. final state of the system C. path D. none of them
27	In thermodynamics, internal energy is the function of	A. temperature B. pressure C. state D. none of them
28	When two objects are rubbed together, their internal energy	A. remains same B. decreases C. remains the same then decreases D. increases
29	The internal energy of an ideal gas system is generally the	A. translational K.E of molecules B. vibrational K.E of molecules C. rotational K.E of molecules D. all of them
30	In the study of thermodynamics, which gas is considered as the working substance	A. real gas B. ideal gas C. any gas may be ideal or real D. none of them