

Physics ICS Part 1 Chapter 6 Online Test

Sr	Questions	Answers Choice
1	Boyle's law states that " The volume of a given mass of a gas is....."	<p>A. <p>Directly proportional to absolute temperature</p></p> <p>B. <p>Invesely proportional to absolute temperature</p></p> <p>C. <p>Directly proportional to density</p></p> <p>D. <p>Inversely proportional to pressure</p></p>
2	In all natural processes where heat flow from one system to another there is always a net increase in	<p>A. <p>Pressure</p></p> <p>B. <p>Entropy</p></p> <p>C. <p>Work</p></p> <p>D. <p>Volume</p></p>
3	First law of thermodynamics is based upon law of conservatio of.	<p>A. <p>Mass</p></p> <p>B. <p>Momentum</p></p> <p>C. <p>Energy</p></p> <p>D. <p>Charge</p></p>
4	The efficiency of carnot engine depends upon	<p>A. <p>Sink temperature</p></p> <p>B. <p>Source temperature</p></p> <p>C. <p>Both a and b</p></p> <p>D. <p>The working substance</p></p>
5	No entropy change is associated with	<p>A. <p>isothermal process</p></p> <p>B. <p>Adiabatic process</p></p> <p>C. <p>Isobaric process</p></p> <p>D. <p>Isochoric process</p></p>
6	No entropy change is associated with	<p>A. <p>Isothermal process</p></p> <p>B. <p>Adiabatic process</p></p> <p>C. <p>Isobaric process</p></p> <p>D. <p>Isochoric process</p></p>
7	In an adiabatic process, there is no.	<p>A. <p>Change in temperature</p></p> <p>B. <p>Exchange of heat</p></p> <p>C. <p>Change in internal energy</p></p> <p>D. <p>Work done</p></p>
8	Adiabatic change occurs when the gas expands or compressed.	<p>A. <p>Rapidly</p></p> <p>B. <p>Slowly</p></p> <p>C. <p>Gradually</p></p> <p>D. <p>Moderately</p></p>
9	Internal energy is similar to the	<p>A. <p>Vibrational K.E.</p></p> <p>B. <p>Gravitational P.E.</p></p> <p>C. <p>K.E.</p></p> <p>D. <p>All of these</p></p>
10	In an isothermal change, internal energy.	<p>A. <p>Decrease</p></p> <p>B. <p>Increase</p></p> <p>C. <p>Remain same</p></p> <p>D. <p>Becomes zero</p></p>
11	Pressure of a gas is directly proportional to average.	<p>A. <p>Potential energy</p></p> <p>B. <p>Rotational energy</p></p> <p>C. <p>Translation K.E.</p></p> <p>D. <p>Compressed P.E.</p></p>
12	'R' is called	<p>A. <p>Universal constant</p></p> <p>B. <p>Universal per molecule constant</p></p> <p>C. <p>Universal gas constant</p></p> <p>D. <p>All of the above</p></p>
13	An addition of 400 J of heat causes the increase in internal energy of system is equal	<p>A. <p>100 J</p></p> <p>B. <p>200 J</p></p>

13	to 300 J, then work done will be	<p>C. $>300 \text{ J}$</p> <p>D. $>400 \text{ J}$</p>
14	Carnot Cycle is	<p>A. Reversible</p> <p>B. Irreversible</p> <p>C. Both</p> <p>D. $C_p - C_v = R$</p>
15	The change in internal energy is defined as.	<p>A. $Q - W$</p> <p>B. $Q - T$</p> <p>C. $Q + P$</p> <p>D. $Q - P$</p>
16	According to kinetic theory of gases, a finite volume of a gas consists of very	<p>A. $\text{Large number of molecules}$</p> <p>B. $\text{Small number of molecules}$</p> <p>C. Both a and b</p> <p>D. $\text{Large number of ions}$</p>
17	A device which converts thermal energy into mechanical energy is called.	<p>A. Turbine</p> <p>B. Heat engine</p> <p>C. Carnot engine</p> <p>D. Refrigerator</p>
18	Efficiency of a Carnot engine is.	<p>A. Infinite</p> <p>B. T_{en}</p> <p>C. $\text{Greater than } 1$</p> <p>D. Less Than</p>
19	Work done by the system is taken as	<p>A. Positive</p> <p>B. Negative</p> <p>C. Undefined</p> <p>D. None of these</p>
20	When the system is expanded by adding heat energy, then the work done will be	<p>A. $\text{Positive and on the system}$</p> <p>B. $\text{Negative and on the system}$</p> <p>C. $\text{Positive and by the system}$</p> <p>D. $\text{Negative and by the system}$</p>