

PPSC Physics Chapter 3 Thermal Properties of Matter

Sr	Questions	Answers Choice
1	Gas law PV = constant is for	A. Adiabatic change B. Isothermal changes C. Isobaric changes D. Isochoric changes
2	Which kind of motion is exhibited by molecules of monoatomic gas.	A. Rotatory B. Vibratory C. Translatory D. Random
3	Specific heat a different substances varies becouse of	A. Same number of molecules in unit mass B. Different number of molecules in unit mass C. Different K.E. of molecules in unit mass D. Same K.E. of molecules in unit mass
4	Mean free path of gas molecules in inversely proportional to its.	A. Weight B. Temperature C. Pressure D. Volume
5	The ideal thermal efficiency of a cyclic heat engine is limited by	A. Friction in the engine B. Amount of heat in the engine C. Difference between input temperature and output temperature. D. Amount of work
6	Mean free path in a gas is the	A. Distance travelled by a molecule before hitting a wall B. Average distance travelled by a molecule in one second C. Average distance travelled between molecules between any two successive collisions D. Root mean square velocity
7	Diffusion of gases occurs because the molecules of the	A. Gas present in a higher concentration exerts a high pressure B. Gases are different C. Gasses attract each other D. Gasses over about randomly
8	A heat engine with 100% efficiency would have to	A. Do no work B. Be at a uniform temperature C. Use no heat D. Discharge at 0 ^o C
9	What is the triple point of water.	A. 273 .15 K B. 0 K C. 100 K D. 0 oC
10	What is the mean free path in a gas.	A. The distance travelled by a molecule before hitting a wall B. the average distance travelled by a molecule in one second C. the average distance travelled by molecules in one second D. The root mean square velocity
11	The specific heat of liquid	A. Decreases with temperature B. Increases with temperature C. Remains constant with change in temperature D. Increases with pressure
12	The heat accepted and rejected by a Carnot engine operating between two heat reservoirs defines.	A. The efficiency of the working substance of the engine B. the ideal gas scale of temperature C. The ratio of the absolute temperature of the reservoirs D. The thermal capacity of the

		working substance
13	If volume of the gas doubled without changing its temperature the pressure of the gas is	A. Reduced to half of original value B. Not changed C. Reduced to one fourth of origina value D. Doubled
14	Which is the heat transfer mode between an object and its environment due to circular fluid motion.	A. Conduction B. Convection C. Radiation D. Mass transfer
15	Under an isothermal process internal energy of the system.	A. Increases B. Decreases C. Remain constant D. is Zero
16	The pressure necessary to liquify a gas at the critical temperature is called.	A. Normal pressure B. Atmospheric pressure C. Critical pressure D. Liquid pressure
17	Which quantity is common for systems in thermal equilibrium.	A. Heat B. Temperature C. Momentum D. Specific heat
18	In four stroke cycle the crank makes	A. One complete revolution B. Two complete revolutions C. three complete revolutions D. Four complete reveolutions
19	Which of the following should not change in an Isothermal process.	A. Volume B. Pressure C. Temperature D. All of these
20	The SI unit of heat capacity is.	A. kg J B. Kg J-1 C. J K-1 D. Kg J-1 K-1