

PPSC Physics Chapter 3 Thermal Properties of Matter

Sr	Questions	Answers Choice
1	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
2	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
3	The highest efficiency of a heat engine whose low temperature is 17 oC and the high temperature of 200 oC is.	A. 20% B. 30% C. 35% D. 40%
4	A metallic rod is continuously heated at its two ends, The heat following through the rod does not depend upon.	A. Mass of the upon B. Area of cross section of the rod C. Temperature gradient between two ends D. Time for which heat flow through the rod
5	The term used for heat capacity per unit mass is.	A. Latent heat B. Specific heat C. Energy density D. Specific energy
6	Two stem engine A and B have their sources at 900 K and 600 K and their sinks are at 450 K and 300 K respectively.	A. They are equally efficient B. A is less efficient than B C. a is more efficient than B D. Their efficiencies cannot be determined
7	The temperature of a certain substance in Celsius scale of temperature is 800 $^{\rm o}{\rm C}$ in Kelvin scale it is.	A. 173 K B. 931 K C. 1073 K D. 1193 K
8	Which quantity provides a quantitative measure of disorder.	A. Entropy B. Enthalpy C. Randomness D. Chaos
9	Which of the following gases has the maximum rms speed at STP.	A. O2 B. H2 C. N2 D. CO2
10	The process in which no heat enters or leaves the system is called.	A. Isdobaric B. Isochoric C. Isothermal D. Adiabatic
11	Below which temperature gas can be liquified by increasing its pressure.	A. Natural temperature B. Boyle temperature C. Critical temperature D. Absolute zero
12	Which temperature is the absolute measure of temperature.	A. Thermodynamic temperature B. Freezing point C. Boiling point D. Absolute zero
13	Pressure of a gas depends upon	A. Only on the molecular speed B. Only on the speed of molecules or a unit volume C. Only on the mass of molecules D. Number of molecules mass and speed in a unit volume
14	If the temperature of the source and sink are increased by same amount the efficiency of the engine.	A. Increases B. Decreases C. Remains unchanged

		D. May increases of decrease
15	No entropy change is associated with	A. Isothermal process B. Adiabatic process C. Isochoric process D. Isoteric process
16	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
17	The ration Cv/Cp = y for a diatomic gas like air is	A. 1.29 B. 1.30 C. 1.40 D. 1.67
18	Under an isothermal process internal energy of the system.	A. Increases B. Decreases C. Remain constant D. is Zero
19	Which of the following parameters does not characterize the thermodynamic state of matter.	A. Temperature B. Pressure C. Volume D. work
20	The average K.E. of the molecules of an ideal gas in a closed rigid container is increased by a factor of 4 What happen to the pressure of the gas.	A. It remains the same B. It increases by a factor of 2 C. It increases by a factor of 4 D. It increases by a factor of 8