PPSC Physics Chapter 3 Thermal Properties of Matter

Sr	Questions	Answers Choice
1	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
2	Absolute zero may be regarded as the temperature of which	A. Water freezes B. All substances are solids C. All gases become liquids D. Molecular motioning a gas would ceases
3	Certain gas are called permanent gases because.	A. They cannot be liquified B. They are perfect gases C. The critical temperatures are low D. their boiling points are low
4	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
5	Which one of the following is an example of a reversible process.	A. Work done against friction B. Heat produced by current C. Melting of ice D. See back effect
6	Which of the following is an example of an irreversible process.	A. Isothermal and adiabatic process B. Melting of ice C. Work done against friction D. Pettier effect
7	Temperature of a system remains constant in	A. Adiabatic process B. Isobaric process C. Isothermal process D. Isochoric process
8	The process is which volume of the system remains constant.	A. Isobaric process B. Isochoric process C. Isothermal process D. Adiatatic process
9	The process in which pressure of the system remains constant.	A. Isothermal process B. Isochoric process C. Isobaric process D. Adiabatic process
10	The ration Cv/Cp = y for a diatomic gas like air is	A. 1.29 B. 1.30 C. 1.40 D. 1.67
11	Difference between Cp and Cv is equal to	A. General gas constant B. Planck's conatant C. Molar gas constant D. Boltzmann's constant
12	Which kind of motion is exhibited by molecules of monoatomic gas.	A. Rotatory B. Vibratory C. Translatory D. Random
13	A fixed mass of an ideal gas absorbs 1000 J of heat and expands under a constant pressure of 20 kPa from a volume of 25 x 10-3 m3 to a volume 50 x 10-3 The change internal energy of the gas is.	A. 500 J B. 1000 J C. -1000 J D. Zero
14	What is the average K.E. of gas molecules at temperature equal to K.	A. kt/3 B. 3/2 KT C. 1/2 KT D. 2/3 KT

15	Temperature of a gas is related to.	A. Total K.E. of the gas molecules B. The K.E. of the centre of mass of the gas C. The P.E. of the centre of mass of the gas D. Total K.E. of the molecules w.r.t the centre of mass of gas
16	Mean free path of gas molecules is inversely proportional to its.	A. Volume B. Pressure C. Temperature D. Weight
17	Gases exert pressure on walls of the vessels because gas molecules.	A. Possess momentum B. Have finite volume C. Collide with each other D. Obey gas laws
18	The pressure of a goas is directly proportion to	A. Mean velocity of the molecules B. Mean square velocity of the molecules C. Root mean square velocity of the molecules D. Instantaneous velocity of the molecules
19	According to kinetic energy of gases one assumes that the collisions between the molecules are.	A. Perfectly elastic B. Perfectly inelastic C. Partly elastic D. Partly inelastic
20	Which following properties of molecules of a gas is same for all gases at a particular temperature.	A. Momentum B. Mass C. velocity D. K.E.