PPSC Physics Full Book

Sr	Questions	Answers Choice
1	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
2	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
3	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.
4	Mean free path of gas molecules in inversely proportional to its.	A. Weight B. Temperature C. Pressure D. Volume
5	Gas exert pressure on walls of the visual because gas molecules.	A. Posses momentum B. Have finite volume C. Collide with each other D. Obey gas laws
6	The pressure of a gas is directly proportions 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
7	According to kinetic theory of gases one assumes that the collisions between molecules are.	A. Perfectly elastic B. Perfectly inelastic C. Partly elastic D. Partly inelastic
8	At absolute zero of temperature.	A. The molecular energy is zero B. Molecules have translational K.E C. Molecules have rotational K.E. D. Molecules have maximum energy
9	Pressure of a gas depends upon	A. Only on the molecular speed B. Only on the speed of molecules on a unit volume C. Only on the mass of molecules D. Number of molecules mass and speed in a unit volume
10	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
11	Under an isothermal process internal energy of the system.	A. Increases B. Decreases C. Remain constant D. is Zero
12	The process in which a system undergoes a change of state at constant volume.	A. Isobaric process B. Isochoric process C. Isothermal process D. Adiabatic process
13	In an isochoric process.	A. Volume changes B. Pressure changes C. Temperature changes

		D. Volume remains constant
14	If T1 and T2 are source and sink temperature respectively Carnot efficiency is.	A. T1+T2/T1 B. T1-T2/T1 C. T1+T2/T2 D. T1-T2/T2
15	Which quantity must be the same for two bodies if they are to be in thermal equilibrium.	A. Internal energy B. P.E C. Temperature D. Mass
16	Thermal conduction in metals differs from thermal conduction in insulators,. The reasons for this is that , in metals heat can be transported by.	A. Electrons B. Lattice vibrations C. Photons D. Positive ions
17	Which statement about convection is correct.	A. Brownian motion is a form of convection B. Convection occurs only in gas C. Convection results from a density change D. Evaporation is a form of convection
18	An ice making machine extracts energy at the rate of 500 W The specific latent heat of fusion of ice is 300 kj kg-1. How long does it take to freeze 2 kg of water at 0 oC.	A. 120 s B. 150 s C. 1200 s D. 1500 s
19	What happens to Carnot efficiency if the source temperature increases.	A. Decreases B. Increases C. Remain the same D. Becomes zero
20	What happen to entropy in an irreversible cycle.	A. No gain in entropy B. No change in entropy C. Loss of entropy D. A net gain of entropy
21	What is the represented by the area inside the Carnot cycle.	A. Heat taken to increase the body temperature. B. Energy loss due to leakage C. Useful work done D. Heat rejected by the system
22	The practical efficiency of a heat engine is	A. 25% to 30.5 % B. 35% to 45% C. 30% to 45% D. 15% to 25%
23	Contrivances for converting heat into work are called.	A. Heat pumps B. Heat engines C. IC engines D. Jet engine
24	Which of the following is an example of irreversible process.	A. Melting of ice B. Work done against friction C. Pettier heating and cooling D. All isothermal and adiabatic changes
25	Heat Carnot be transferred from a colder to a hotter region unless work is done This is the statement of.	A. Firs law of thermodynamics B. Second law of thermodynamics C. Third law of thermodynamics D. Zeroth law of thermodynamcis
26	Which of the following should not change in an Isothermal process.	A. Volume B. Pressure C. Temperature D. All of these
27	In order of a cyclic heat engine operating between two heat reservoirs to be as efficient as a Carnot engine. It must be.	A. A gas engine B. Adiabatic C. Reversible D. A refrigerator
28	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
29	Which of the following phenomenon gives evidence of the molecular structure of mater	A. Evaporation B. Diffusion C. Brownian movement D. All of the above

		D. All of the above
30	Difference between the molar heat capacity constant pressure and that a constant volume is equal to	A. Root mean square velocity B. Mean free path C. Boltzmann's constant D. Universal gas constant