PPSC Physics Chapter 3 Thermal Properties of Matter

Sr	Questions	Answers Choice
1	Mean free path of gas molecules in inversely proportional to its.	A. Weight B. Temperature C. Pressure D. Volume
2	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
3	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
4	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
5	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
6	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
7	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
8	Under an isothermal process internal energy of the system.	A. Increases B. Decreases C. Remain constant D. is Zero
9	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
10	In an isochoric process.	A. Volume changes B. Pressure changes C. Temperature changes D. Volume remains constant
11	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
12	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
13	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
		A. Brownian motion is a form of

14	Which statement about convection is correct.	convection B. Convection occurs only in gas C. Convection results from a density change D. Evaporation is a form of convection
15	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
16	What happens to Carnot efficiency if the source temperature increases.	A. Decreases B. Increases C. Remain the same D. Becomes zero
17	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
18	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
19	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%
20	Contrivances for converting heat into work are called.	A. Heat pumps B. Heat engines C. IC engines D. Jet engine