PPSC Physics Topic 3 Thermal Properties of Matter

Sr	Questions	Answers Choice
1	Significant motion for the molecules of a monoatomic gas is.	A. Rotatory B. Vibratory C. Translatory D. Random
2	If two gases have same reduced pressure volume and temperature it is according to	A. Boyle's law B. Charles law C. Law of corresponding state D. Zeroth law
3	Net change in entropy of a system in a Carnot's cycle in	A. Positive B. Negative C. Zero D. Infinite
4	The ration of Universal gas constant and Avogadro's number is called.	A. Equilibrium constant B. Velocity constant C. Boitzmann's constant D. Gravitational constant
5	A Carnot engine can be 100% efficient of the sink is at.	A. 0 k B. 0 oF C. 0 oC D. 273 K
6	Thermodynamics deals with	A. Isolated systems B. The interactions among various parts of the system C. The microscopic behavior of a system D. The interactions between system and surrounding
7	Which quantity is common for systems in thermal equilibrium.	A. Heat B. Temperature C. Momentum D. Specific heat
8	Which of the following has negative specific heat	A. Ne B. CO2 C. O2 D. Sturated vapours
9	Which kind of thermodynamic process is defined as with no heat transfer into or out of a system i.e. Q =0	A. Isobaric process B. Isochoric process C. Isothermal process D. Adiabatic process
10	Below which temperature gas can be liquified by increasing its pressure.	A. Natural temperature B. Boyle temperature C. Critical temperature D. Absolute zero
11	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
12	On which temperature scale a degree is 1/180 of the interval between the freezing point and the boiling point.	A. Celsius scale B. Fahrenheit scales C. Rankine scale D. Kelvin scale
13	Which of the following is defined as the amount of heat required to raise the temperature of 1 g of water by 1 ^{o}C	A. Joule B. BTO C. Electron volt D. Calorie
14	The specific heat capacity of a substance is the amount of heat required to.	A. Raise its temperature by 1 K B. Raise the temperature of 1 kg of the substance by 1 K C. Melt 1 kg of the substance D. Boil 1 kg of the substance

15	What type of process is the Carnot's cycle.	A. Reversible B. Irreversible C. Neither reversible nor irreversible D. May be reversible or irreversible
16	If the pressure in a closed vessel is reduced by drawing some gas the mean free path of the gas molecules.	A. Decreases B. Remains constant C. Increases D. First increases then decreases
17	Which thermometer is called sprint thermometer	A. Alcohol thermometer B. Mercury in glass thermometer C. Gas thermometer D. Radiation thermometer
18	The internal energy of monoatomic gas is.	A. 3/2 RT B. Independent of temperature C. In the form of K.E. D. Partially kinetic and partially potential
19	A gas thermometer is more sensitive than a mercury thermometer because the expansion of gas for 1 o/c rise in temperature is.	A. Five times as much as mercury B. Ten times as much as mercury C. Twenty times as much as mercury D. Hundred times as much as mercury
20	What is the heat required in Kilo joules when the temperature of 100 g of copper is raised thgough 20 K/. Specific heat capacity of copper is 0.4 x 10-3 kg -1 k-1	A. 0.4 kj B. 0.8 kj C. 400 kj D. 800 kj