PPSC Physics Topic 3 Thermal Properties of Matter

Sr	Questions	Answers Choice
1	The number of molecules or atoms in a specific volume of a gas is independent of their	A. Volume B. Pressure C. Size D. Temperature
2	Which quantity provides a quantitative measure of disorder.	A. Entropy B. Enthalpy C. Randomness D. Chaos
3	Woolen clothing a effective in keeping us warm because.	A. An trapped int he wool acts as an insulator B. Heat loss by convection and radiation is prevented C. Wool is bad traciator and good absorber of heat D. Wool can retain high temperatures
4	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
5	Let at constant temperature the pressure of an ideal gas be doubled so that the new volume is.	A. Doubled the original volume B. Same as original volume C. Reduced to half the original volume D. Reduced to two times the original volume
6	Difference between Cp and Cv is equal to	A. General gas constant B. Planck's conatant C. Molar gas constant D. Boltzmann's constant
7	A heat engine with 100% efficiency would have to.	A. Do no work B. Be at uniform temperature C. Use no heat D. Discharge of 0 ^oC
8	Mean free path in a gas is the	A. Distance travelled by a molecule before hitting a wall B. Average distance travelled by a molecule in one second C. Average distance travelled between molecules between any two successive collisions D. Root mean square velocity
9	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 original value D. Doubled
10	The transfer of thermal energy between regions of matter due to a temperature gradient is called.	A. Conduction B. Radiation C. Convection D. Sublimation
11	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
12	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
13	An inflated tyre suddenly bursts As a result of this temperature of the surrounding	A. Increases B. Descreases C. Remains constant D. May increase or decrease

14	In general work done on or by a gas depends on.	A. The initial state only B. The final state only C. The initial and final states D. The initial state the final state and the path
15	The process in which pressure of the system remains constant.	A. Isothermal process B. Isochoric process C. Isobaric process D. Adiabatic process
16	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
17	A standard fixed point for calibrating a thermometer is.	A. Boiling point of water B. Melting point of ice C. Temperature of steam D. Triple point of water
18	The ratio between the energy dissipated in some process and the heat that appears as a result is the	A. Specific heat B. Mechanical equivalent of heat C. Kilocalories D. Triple point
19	Which of the following devoices are used for measuring temperature.	A. Thermocouples B. Thermistors C. Thermometers D. All of these
20	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