PPSC Physics Topic 3 Thermal Properties of Matter

Sr	Questions	Answers Choice
1	A sample of an ideal gas may i) energy adiabatically, or ii) Expand isothermally. the net flow of heat into the gas from the exterior is.	A. Positive is each case B. Negative for i) and positive for ii) C. Zero for i) and positive for ii) D. Positive for i) and negative for ii)
2	In which thermodynamic process enthalpy of the system remains constant.	A. Isenthalpic process B. Isolated process C. Isobaric process D. Isochoric process
3	How much Ice will melt by 50,000 J of heat.	A. 120 J B. 130 g C. 140 J D. 150 g
4	Net change in entropy of a system in a Carnot's cycle in	A. Positive B. Negative C. Zero D. Infinite
5	A given quantity of an ideal gas is at pressure P and temperature T What is the isothermal bulk modulus of the gas.	A. 2/3 P B. P C. 2P D. 3/2 P
6	The kinetic molecular model of matter describe matter an being made up of molecules in continuous.	A. Vibratory motion B. Random motion C. rotatory motion D. Linear motion
7	To which law of thermodynamics, the concept of temperature is related to.	A. Zeroth law B. First law C. Second law D. Third law
8	Which of the following should not change in isothermal operation.	A. Heat constant B. Volume C. Pressure D. Temperature
9	One calorie equals to	A. 1.2 J B. 2.2 J C. 3.2 J D. 4.2 J
10	Which one of the following temperature scales is independent of the properties of any particular substance.	A. Kelvin scale B. Gas scale C. Thermodynamic scale D. Celsius scale
11	The gas thermometer is taken as the primary standard because.	A. Thermometers are easily reproducible B. Readings can be accurately taken C. No correction are necessary D. It produces he thermodynamic scale
12	The amount of heat needed per unit mass to raise the temperature of a system one degree at constant pressure is numerically aqual to	A. The specific heat B. The specific thermal energy C. The specific heat at constant pressure D. the internal energy of the gas
13	A Carnot engine can be 100% efficient of the sink is at.	A. 0 k B. 0 oF C. 0 oC D. 273 K
14	Which quantity provides a quantitative measure of disorder.	A. Entropy B. Enthalpy C. Randomness D. Chaos
		A. PAD

15	When a fluid in a cylinder expands through a distance 'd' against a piston of area 'A' which is exerting a constant pressure 'P' the work done is equal by.	B. PA/d C. Pd/A D. Pd/A2
16	The internal energy of an isolated system	A. Is zero B. Keeps on changing C. Remains constant D. Cannot be judged
17	Which of the following is a thermodynamic temperature scale.	A. Celsius scale B. Fahrenheit scale C. Kelvin scale D. Rankine scale
18	Which of the given geometries will result in the largest convection consfficient.	A. Vertical plate B. Diagonal plate C. horizontal plate facing upwards D. Horizontal plate facing downwards
19	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
20	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