PPSC Physics Full Book

Sr	Questions	Answers Choice
1	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
2	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
3	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
4	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.	A. PAD B. PA/d C. Pd/A D. Pd/A2
5	When ever a system is made to complete a cyclic process the work done during the complete cycle.	A. Is zero B. Is negative C. Is positive D. Depends upon the path followed
6	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
7	The process in which no heat enters or leaves the system is called.	A. Isdobaric B. Isochoric C. Isothermal D. Adiabatic
8	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
9	Which law states that two given samples of an ideal gas at the same temperature pressure and volume contain the same number of molecules.	A. Charles law B. Avogadro's C. Boyles law D. Boizmann law
10	How many calories of heat are required to evaporate completely 1 g of ice at 0 ^{O}C	A. 480 calories B. 720 calories C. 940 calories D. 1170 calories
11	The change in entropy for any reversible cycle is identically	A. Infinite B. Positive C. Negative D. Zero
12	The term used for heat capacity per unit mass is.	A. Latent heat B. Specific heat C. Energy density D. Specific energy
13	What is a thermal properly of a material that determines the quantity of energy required to change the phase of a unit mass of that substance.	A. Specific heat B. Latent heat C. Internal energy D. Specific energy
14	On which parameter internal energy of an ideal gas depends upon.	A. Volume B. Mass C. Pressure D. Temperature
		A. Adiabatic process

15	Most cooking involves	B. Isothermal process C. Isobaric process D. Isochoric process
16	A 4 kJ mass of copper of specific heat capacity of 400 J kg-1k-1 is heated for 160 s by a heater of power 200 W what is the rise in temperature.	A. 10 K B. 16 K C. 100 K D. 160 K
17	A cup of coffee at 80 ^{o}C is left to cool to 30 oc if the heat capacity of the cup and coffee is 2.0 kJ k-1 how much heat is released during the cooling.	A. 0.04 kJ B. 100 KJ C. 60 kJ D. 160 kJ
18	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
19	When heat a supplied to a metallic sphere which one of the following changes will occur.	A. the mass of the sphere increases B. The volume of the sphere increases C. The density of the sphere increases D. The internal energy of the sphere increases
20	In which thermodynamic process enthalpy of the system remains constant.	A. Isenthalpic process B. Isolated process C. Isobaric process D. Isochoric process
21	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
22	If a gas does 10 J of external work white expanding then the change in internal energy is equal to.	A. 0 J B. 10 J C. -10 J D. 100 J
23	On what factor the internal energy of a thermodynamic system depend upon.	A. History B. State C. Process D. Surroundings
24	Which law states that a change in the internal energy of a closed thermodynamic system is equal to the difference between the heat supplied to the system and teh amount of work by the system on the surrounding.	A. Zeroth law of thermodynamics B. First law of thermodynamics C. Second law of thermodynamics D. Third law of thermodynamics
25	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
26	The follow of heat from hot body to cold body is an example of	A. Adiabatic process B. Isothermal process C. Reversible process D. Irreversible process
27	By definition a gas is said to be have undergone adiabatic compressing when	A. No heat exchange occurs between the gas and its surroundings B. The gas is compressed quickly C. The gas is compressed slowly D. The temperature of the gas remains constant
28	A diatomic gas contains only	A. Translational K.E. B. Rotational K.E. C. Vibrational K.E. D. All of these
29	A frictionless heat engine can be 100% efficient only if its exhaust temperature is	A. Equal to the input temperature B. Less than the input temperature C. 0 ^oC D. 0 K
30	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