

PPSC Physics Chapter 3 Thermal Properties of Matter

Sr	Questions	Answers Choice
1	The ratio of specific heat capacity to motor heat capacity of a body	A. Is a universals cantante B. Depends upon the mass of the body C. Depends upon the molecular weight of the body D. Is dimensionless
2	What is the average K.E. of gas molecules at temperature equal to K.	A. kt/3 B. 3/2 KT C. 1/2 KT D. 2/3 KT
3	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
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	What is the internal energy of a mono atomic ideal gas.	A. Potential only B. Parity kinetic and parity potential C. Kinetic only D. Neither kinetic nor potential
6	Which of the following is the ideal gas equation.	A. PV -n RT B. P/V = n RT C. V/P = nR/T D. PV = T/nR
7	Because of second law of thermodynamics about the direction of energy flow what is possible.	A. Heat B. Light C. Energy D. life
8	Below which temperature gas can be liquified by increasing its pressure.	A. Natural temperature B. Boyle temperature C. Critical temperature D. Absolute zero
9	The process is which volume of the system remains constant.	A. Isobaric process B. Isochoric process C. Isothermal process D. Adiatatic process
10	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
11	Difference between Cp and Cv is equal to	A. General gas constant B. Planck's conatant C. Molar gas constant D. Boltzmann's constant
12	If the temperature of the source and sink are increased by same amount the efficiency of the engine.	A. Increases B. Decreases C. Remains unchanged D. May increases of decrease
13	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
14	A fixed mass of an ideal gas absorbs 1000 J of heat and expands under a constant pressure of 20 kPa from a volume of 25 x 10-3 m3 to a volume 50 x 10-3 The change internal energy of the gas is.	A. 500 J B. 1000 J C1000 J D. Zero

15	The thermal inertia of a thermodynamic system is known as its.	A. Entropy B. Enthalpy C. Isothermal conduction D. Adiabatic conduction
16	First law of thermodynamics is a	A. Boyle 's law B. Charles' law C. Law of energy conservation D. Steffen Boltzmann law
17	Efficiency of a Carnot engine depends on	A. Temperature B. Pressure C. Volume D. The nature of working substance
18	Which of the following measures how quickly the thermometer liquid mainly because it	A. Is coloriess B. Is a bad conductor of heat C. Does not expand linearly D. Has a low boiling point
19	Absolute zero may be regarded as the temperature of which	A. Water freezes B. All substances are solids C. All gases become liquids D. Molecular motioning a gas would ceases
20	The mechanical equivalent of heat	A. Has the same dimension as hea B. Has the same dimension as worl C. Has the same dimensions as energy D. Is dimensionless