PPSC Physics Full Book

Sr	Questions	Answers Choice
1	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
2	Which of the following is heat transfer by means of the emission or absorption of electromagnetic radiation such as sunshine.	A. Conduction or diffusion B. Convection C. Radiation D. Mass transfer
3	Which is the heat transfer mode between an object and its environment due to circular fluid motion.	A. Conduction B. Convection C. Radiation D. Mass transfer
4	The transfer of thermal energy between regions of matter due to a temperature gradient is called.	A. Conduction B. Radiation C. Convection D. Sublimation
5	The temperature of 1 kg of hydrogen gas is the same as that of 1 kg of helium gas if.	A. The gases have the same internal energy B. The gas molecules occupy equal volumes C. The gas molecules have the same root mean square speed D. The gas molecules have same mean translational K.E.
6	The temperature of a certain substance in Celsius scale of temperature is 800 ^{O}C in Kelvin scale it is.	A. 173 K B. 931 K C. 1073 K D. 1193 K
7	The SI unit of heat capacity is.	A. kg J B. Kg J-1 C. J K-1 D. Kg J-1 K-1
8	One calorie equals to	A. 1.2 J B. 2.2 J C. 3.2 J D. 4.2 J
9	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
10	Which law states that if two systems are in thermal equilibrium with a third system they are also in the thermal equilibrium with each other.	A. Third law of thermodynamics B. Second law of thermodynamics C. First law of thermodynamics D. Zeroth law of thermodynamics
11	Which of the following is the science of measuring the heat of chemical reactions or physical changes.	A. Thermometry B. Calorimetry C. Telemetry D. Photometry
12	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
13	The actual gas can behave like an ideal gas at	A. Low density and high pressure B. High density and high pressure C. Low density and low pressure D. High density and low pressure
14	A perfect gas is one whose	A. Molecules are masless B. Molecules are energetic C. Molecules are perfectly elastic D. Molecules are at rest

15	The door of an operating refrigerator in a closed room is opened after sometime the temperature of the room will be	A. Lowered B. Raised C. Unaffected D. Become zero
16	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
17	The volume of a goas at constant pressure is directly proportional to the temperature as measured on the.	A. Celsius scale B. Kelvin scale C. Fahrenheit scale D. Baume scale
18	From any substance the temperature and pressure at which the material can coexist in all three states in equilibrium is called.	A. Critical point B. Triple point C. Initial point D. Final point
19	In which temperature range water decreases in volume with increasing temperature.	A. From 0 ^oC to 4 ^oC B. from 0 ^oC to 10 ^oC C. from 50 ^oC to 100 ^oC D. from 75 ^oC to 100 ^oC
20	Which of the following is a thermodynamic temperature scale.	A. Celsius scale B. Fahrenheit scale C. Kelvin scale D. Rankine scale
21	What is the SI unit for thermal conductivity.	A. W m-1 K-1 B. W m-2 k-2 C. W m-3 k-1 D. J kg -1 k-1
22	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
23	Which temperature is the absolute measure of temperature.	A. Thermodynamic temperature B. Freezing point C. Boiling point D. Absolute zero
24	The Fahrenheit and Kelvin scales intersect at	A. 40 B. -40 C. 140 D. -140
25	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
26	Real gases obey gas laws only at	A. Low pressure and high temperature B. High pressure and low temperature C. High pressure and high temperature D. Low pressure and low temperature
27	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
28	The efficiency of a diesel engine is about	A. 15% to 35 5 B. 355 to 40% C. 45% to 655 D. 505 to 65 %
29	Efficiency of a Carnot engine can never be 1 or 100% unless cold reservoir is at absolute temperature.	A. 0 K B. 100 K C. 273 K D. 373 K
30	Efficiency of a Carnot engine depends on	A. Temperature B. Pressure C. Volume

C. Volume
D. The nature of working substance