

PPSC Physics Chapter 3 Thermal Properties of Matter

Sr	Questions	Answers Choice
1	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
2	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
3	The SI unit of heat capacity is.	A. kg J B. Kg J-1 C. J K-1 D. Kg J-1 K-1
4	Difference between the molar heat capacity constant pressure and that a constant volume is equal to	A. Root mean square velocity B. Mean free path C. Boltzmann's constant D. Universal gas constant
5	Andrews isothermal helps to messure	A. Boiling point B. Boyle's temperature C. Temperature of inversion D. Critical temperature
6	Net change in entropy of a system in a Carnot's cycle in	A. Positive B. Negative C. Zero D. Infinite
7	Which of the following is an example of an irreversible process.	A. Isothermal and adiabatic process B. Melting of ice C. Work done against friction D. Pettier effect
8	What is the mean free path in a gas.	A. The distance travelled by a molecule before hitting a wall B. the average distance travelled by a molecule in one second C. the average distance travelled by molecules in one second D. The root mean square velocity
9	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
10	Which of the following pairs represent units of the same physical quantity.	A. Kelvin and joule B. Kelvin and calrorie C. Newton and calorie D. Joule and calorie
11	Law of increase of entropy is a result of	A. First law of thermodynamics B. Second law of thermodynamics C. Third law of thermodynamics D. Zeroth law of thermodynamics
12	Which of the following can be used visualize the third law thermodynamics	A. Light B. Heat C. Water D. All of these
13	The gas temperature is increased from 27 $^{\rm O}{\rm C}$ to 127 $^{\rm O}{\rm C}$ What is the ratio of mean kinetic energies.	A. 3/4 B. 4/3 C. 9/10 D. 10/9
14	If temperature of the sink is decreased the efficiency of a Carnot engine	A. Increases B. Decreases C. Remains constant D. First increases and thend ecreases
		· - · · · ·

15	At absolute zero of temperature.	A. The molecular energy is zero B. Molecules have translational K.E. C. Molecules have rotational K.E. D. Molecules have maximum energy
16	Pressure of a gas depends upon	A. Only on the molecular speed B. Only on the speed of molecules on a unit volume C. Only on the mass of molecules D. Number of molecules mass and speed in a unit volume
17	The change in entropy for any reversible cycle is identically	A. Infinite B. Positive C. Negative D. Zero
18	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
19	In an isobaric process there is no.	A. Pressure change B. Internal energy change C. Heat exchanged D. volume change or work done
20	The thermal inertia of a thermodynamic system is known as its.	A. Entropy B. Enthalpy C. Isothermal conduction D. Adiabatic conduction