

PPSC Physics Full Book

Sr	Questions	Answers Choice
1	Andrews isothermal helps to measure	A. Boiling point B. Boyle's temperature C. Temperature of inversion D. Critical temperature
2	The ration of Universal gas constant and Avogadro's number is called.	A. Equilibrium constant B. Velocity constant C. Boitzzmann's constant D. Gravitational constant
3	The efficiency of Carnot engine is	A. Less than one B. Zero C. Greeter than one D. Infinite
4	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
5	Net change in entropy of a system in a Carnot's cycle in	A. Positive B. Negative C. Zero D. Infinite
6	When the temperature of source and sink of a heat engine become equal the entropy change will be.	A. Zero B. Maximum C. Minimum D. Negative
7	No entropy change is associated with	A. Isothermal process B. Adiabatic process C. Isochoric process D. Isoteric process
8	If temperature of the sink is decreased the efficiency of a Carnot engine	A. Increases B. Decreases C. Remains constant D. First increases and then decreases
9	An ideal engine can be 100% efficient only if its exhaust temperature.	A. Equal to input temperature B. Less than input temperature C. More than input temperature D. $0 < T_c < T_h$
10	The specific heat of a substance is a function of its	A. mass B. Weight C. Volume D. Molecular structure
11	The specific heat of all gases increases with temperature at high temperature decreases at low temperature expectation is	A. Oxygen gas B. Nitrogen gas C. Mono atomic gas D. Dia atomic gas
12	In ideal gas equation $PV = nRT$, R is	A. Universal gas constant B. Avogadro's number C. Plank's constant D. Gravitational constant
13	Which gas strictly obeys gas laws.	A. Hydrogen gas B. Inert gas C. Ideal perfect gas D. Helium gas
14	The pressure necessary to liquify a gas at the critical temperature is called.	A. Normal pressure B. Atmospheric pressure C. Critical pressure D. Liquid pressure
15	Absolute zero may be regarded as the temperature of which	A. Water freezes B. All substances are solids C. All gases become liquids D. ...

		D. Molecular motioning a gas would ceases
16	Certain gas are called permanent gases because.	A. They cannot be liquified B. They are perfect gases C. The critical temperatures are low D. their boiling points are low
17	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
18	Which one of the following is an example of a reversible process.	A. Work done against friction B. Heat produced by current C. Melting of ice D. See back effect
19	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
20	Temperature of a system remains constant in	A. Adiabatic process B. Isobaric process C. Isothermal process D. Isochoric process
21	The process is which volume of the system remains constant.	A. Isobaric process B. Isochoric process C. Isothermal process D. Adiatatic process
22	The process in which pressure of the system remains constant.	A. Isothermal process B. Isochoric process C. Isobaric process D. Adiabatic process
23	The ration $C_v/C_p = \gamma$ for a diatomic gas like air is	A. 1.29 B. 1.30 C. 1.40 D. 1.67
24	Difference between C_p and C_v is equal to	A. General gas constant B. Planck's conatant C. Molar gas constant D. Boltzmann's constant
25	Which kind of motion is exhibited by molecules of monoatomic gas.	A. Rotatory B. Vibratory C. Translatory D. Random
26	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 $25 \times 10^{-3} \text{ m}^3$ to a volume 50×10^{-3} The change internal energy of the gas is.	A. 500 J B. 1000 J C. -1000 J D. Zero
27	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. $2/3 KT$
28	Temperature of a gas is related to.	A. Total K.E. of the gas molecules B. The K.E. of the centre of mass of the gas C. The P.E. of the centre of mass of the gas D. Total K.E. of the molecules w.r.t the centre of mass of gas
29	Mean free path of gas molecules is inversely proportional to its.	A. Volume B. Pressure C. Temperature D. Weight
30	Gases exert pressure on walls of the vessels because gas molecules.	A. Possess momentum B. Have finite volume C. Collide with each other D. Obey gas laws