MDCAT Chemistry Online Test

Sr	Questions	Answers Choice
1	One Pascal is equal to	A. 1 Nm⁻² B. 1 Nm C. 1 Nm⁻¹ D. 1 Nm²
2	One atmosphere is equal _____ Pascal	A. 760 B. 101325 C. 14.7 D. 1.01325
3	How should the conditions be changed to prevent the volume of a given gas from expanding when its mass in increased	A. temperature is lowered and pressure is increased B. temperature is increased and pressured is lowered C. temperature and pressure both are lowered D. temperature and pressure both are increased
4	If absolute temperature of a gas is doubled and the pressure is reduced to one half, the volume of the gas will	A. remain unchanged B. increase four times C. reduce to 1/4 D. be doubled
5	Pressure remaining constant, at which temperature the volume of a gas will become twice of what it is at 0°**C**	A. 546°C B. 200°C C. 546 K D. 273 K
6	Which of the following is the unit for pressure of a gas in system international	A. Nm⁻² B. mm of Hg C. atmosphere D. torrr
7	The graph between P onγ-axis and 1/V at x-axis for a given mass of a gas at temperature T is a	A. straight line B. curved upward C. curved downward D. circular
8	Which of the following laws study the pressure-volume relationship of a gas at constant temperature,we get	A. a straight line B. a curve with different peaks C. straight line parallel to x-axis D. a curve called isotherm
9	According to Boyles law, at constant temperature the product of pressure and volume of a given mass of gas is	A. whole number B. a constant C. fraction D. a multiple
10	Which one the following is not postulated in the kinetic molecular theory of gases	A. molecules of all the gases have same size and same mass B. molecules are in chaotic motion C. all molecular collisions are elastic D. the volume of the molecules is negligible
11	If allowed to expand, the gases suddenly	A. heat up B. move randomly C. react D. cool down
12	As gases can adopt the shape of the container so they have	A. no fixed shapes B. fixed shapes C. different shapes D. definite shapes
13	Considering the physical properties of the gases, which of the following statements about particles of gas is not true. The particles	A. orderly arranged B. randomly moving C. having wide spaces D. causing pressure

14	The critical temperature of CO_2_____°C at 73 atm critical pressure	A. 21.142 B. 28.892 C. 31.142 D. 35.452
15	The mono atomic gas molecules are _____ gas molecules	A. Halogen B. Zero C. Noble D. Both b and c
16	The law of distribution of energy is given by	A. Clausius B. Maxwell C. Bernoulli D. Boltzmann
17	The volume of gas depends upon the _____ molecules	A. Size of B. Molecular weight C. Space between D. Both a and b
18	If the pressure of gas reduced to one half and temperature is increased twice then density of gas will be	A. 4 times B. 2 times C. 1/2 times D. 1/4 times
19	The mass of 8.5 $dm^3$of oxygen gas at 0.0821 atm and -1°C is	A. 100 g B. 10 g C. 1 g D. 0.1 g
20	The value of R in term of dm^3torr $k^{-1}mol^{-1}$	A. 62400 B. 62.4 C. 8.313 D. 0.0821
21	One degree on Celsius scale is _____ time greater then Fahrenheit scale	A. 9/5 B. 5/9 C. 6/5 D. 5/6
22	Charle's law only obeys when temperature takes in _____ scale	A. Celsius B. Fahrenheit C. Kelvin D. Rickey
23	At constant pressure, if the original volume is 546 cm^3at which temperature the volume of gas 552 cm^3	A. 1°C B. 2°C C. 3°C D. 4°C
24	The temperature at which volume of ideal gas is hypothetically zero is called	A. Absolute zero B. 0°C C. OK D. Both a and c
25	If 250 $cm^3$of hydrogen gas is cooled from 127°C to -73°C at constant pressure then new volume of gas is _____ dm^3	A. 0.25 B. 0.375 C. 0.125 D. 0.0625
26	When graph is plot between P and 1/V at constant temperature. A straight line obtains which move toward _____ when temperature increase	A. Pressure axis B. Volume axis C. 1/V axis D. 1/P axis
27	The curve which is obtain from Boyle's law is called as	A. Isochoric B. Isotherm C. Adiabatic D. All of these
28	The pressure of 5dm^3gas increase from 250 torr to 500 torr then new volume of gas	A. 500 cm³ B. 375 cm³ C. 2500 cm³ D. None of these
29	The gases law describe the _____ Behaviour of gases	A. Variable B. Constant C. Uniform D. Best
30	The unit of pressure _____ is commonly used by meteorologists	A. mm of Hg B. Kilopascal C. Millibar D. Pound per square inch
31	The one atmospheric pressure of air in term of pound per square inches is	A. 101.325 B. 1.01325 C. 760 D. 14.7

		D. 14.7
32	The solid particles posses only _____ kinetic energy	A. Translational B. Rotational C. Viberational D. Circular
33	Liquids have definite volume due to	A. Negligible spaces B. Intermolecular force C. Motion D. Both a and b
34	Gases are effused through a whole due to _____ motion	A. Vibration B. Rotaional C. Translational D. Chaotic
35	The state of matter which exist only within a relatively narrow range of temperature and pressure	A. Solid B. Gas C. Liquid D. Plasma
36	Question Image	
37	If v is the volume of one molecule of a gas under given conditions, then Van der Waals constant b is ($N_A$is Avogadro number)	
38	NH_3gas is liquefied more easily than N_2Hence	A. Van der Waals constants a and b of NH₃> that of N₂ B. Van der Waals constants a and b of NH₃< that of N₂ C. a(NH₃) > a (N₂) but b (NH₃) < b(N₂) D. a (NH₃) < a (N₂) but b (NH₃) > b (N₂)
39	Question Image	A. T₁= T₂= T₃ B. T₁< T₂< T₃ C. T₁> T₂> T₃ D. T₁> T₂= T₃
40	Which pair of molecules have debye force	A. Ne and Ne B. Argon and water C. Na⁺ion and water D. Water and water
41	A solid has a sharp melting point slightly above room temperature and is a poor thermal and electrical conductor, its crystal classification by bond type is	A. Ionic B. Metallic C. Molecular D. Covalent
42	In graphite crystal, carbon is	A. sp hybridized B. sp²hybridized C. sp³hybridized D. None
43	Which of the following is a non-crystalline solids pair	A. Diamond, wood B. Glass, table salt C. Wood, glass D. Sucrose, glass
44	Amorphous substance show (i) Short and long range order (ii) Short range order (iii) Long range order (iv) Have no sharp melting point	A. (i) and (ii) are correct B. (ii) and (iv) are correct C. (ii) (iii) and (iv) are correct D. (i) and (iv) are correct
45	Hydrogen bonding is involved in	A. Solubility B. Detergents C. Biological molecules D. All the above
46	The nature of I_2crystals are	A. Metallic B. Covalent C. Ionic D. Molecular
		A. Crystalline

47	Which solids are called true solids	A. Crystalline B. Vitreous C. Amorphous D. Metallic
48	Vapour pressure is not affected by	A. Surface area B. Intermolecular forces C. Temperature D. Nature of liquid
49	Steam causes more seers burns than boiling water. It is due to	A. Latent heat of fusion B. Latent heat of vaporization C. Latent heat of sublimation D. All of above
50	Which of the following has no hydrogen-bonding	A. Diethyl ether B. Water C. Ethyl alcohol D. Phenol
51	When liquid water changes to ice, the volume expands. The expansion in volume is	A. 5% B. 7% C. 9% D. 12%
52	Which of the following molecules should be more volatile	A. HF B. HCl C. HBr D. HI
53	Which one is not related with evaporation	A. Continuous B. Cooling C. Exothermic D. Spontaneous
54	Which element exists as discrete small molecules in the solids state	A. Aluminum B. Silicon C. Iodine D. Sodium
55	Which of the following is not molecular crystal	A. Sugar B. Iodine C. Ice D. Graphite
56	Which of the following liquids have low vapour pressure at 25°C	A. Water B. Ethyl alcohol C. Acetone D. Diethyl ether
57	Covalent solids are composed of	A. Ions B. Different molecules C. Neutral atoms D. Diethyl ether
58	Which one of the following is not true relationship	
59	R = 0.08205:	A. atm dm³mol⁻¹k⁻¹ B. J mole⁻¹k⁻¹ C. Nm mol⁻¹k⁻¹ D. cal. mol⁻¹k⁻¹
60	If V_1= 5 litres, P_1= 2 atm, T_1= T_2= 273°C and V_2= in liter	A. 5 B. 80 C. 125 D. 10