Chemistry Fsc Part 1 Chapter 3 Online Test

Sr	Questions	Answers Choice
1	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
2	The number of molecules in one dm^3 of water is close to	
3	Which of the following will have the same number of molecules at STP	A. 280 cm^3 of CO_2 and 280 cm^3 of N_2O B. 11.2 dm^3 of O_2 and 32 g of O_2 C. 44 g of CO_2 and 11.2 dm^3 of CO D. 28 g of N_2 and 5.6 dm^3 of oxygen
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	How should the condition be changed to prevent the volume of a given gas from expanding when its mass is increased	A. Temperature is lowered and pressure is increased B. Temperature is increase and pressure is lowered C. Temperature and pressure both are lowered D. Temperature and pressure both are increased
6	The molar volume of CO_2 is maximum at	A. STP (0°C and 1 atm) B. 127° C and 1 atm C. 0°C and 2 atm D. 273°C and 2 atm
7	the order of the rate of diffusion of gases NH_3, SO_2, Cl_2 and CO_2 is	A. $NH_3 > SO_2 > Cl_2 CO_2$ B. $NH_3 > CO_2 > SO_2 > Cl_2$ C. $Cl_2 > SO_2 > CO_2 > NH_3$ D. $NH_3 > CO_2 > Cl_2 > SO_2$
8	Equal masses of methane and oxygen are mixed in an empty container at 25°C, the fraction of total pressure exerted by oxygen is	A. 1/3 B. 8/9 C. 1/9 D. 16/17
9	Gases deviate from ideal behaviour at high pressure. Which of the following is correct for non-ideal behaviour of gases	A. At high pressure, the gas molecules move in one direction only B. At high pressure, the collisions between the gas molecules are increased C. At high pressure, the volume of the gas becomes insignificant D. At high pressure, the intermolecular attraction becomes significant
10	Normal temperature and pressure (S.T.P) of gas rafers to	A. 273 K and 76 mm Hg B. 273° C and 760 mm Hg C. 273 K and 760 mm Hg D. 273° C and 76 mm Hg
11	Gas equation is derived by combining	A. Avogadro's and Charles's Law B. Boyle's and Charles's Law C. Avogadro's and Boyle's Law D. Avogadro's, Boyle's and Charles's Law
12	In gas occupies a volume of 2 dm^3 at 27°C and I atm pressure. The expression for its volume at S.T.P. is	
13	Rate of diffusion of CO and N_2 are same at room temperature due to the reason, that	A. Both are diatomic molecules B. Both have same multiple bond in them C. Both have lone pairs in them D. Both have same molar masses
14	The free expansion of the gas from high pressure towards the low pressure causes	A. Increase of temperature B. Decrease of temperature C. Grater number of collisions among the molecules

		C. Greater number of collisions among the molecules
		D. Decrease of velocity of gas molecules
15	The molecules of a gas show more deviation from ideal behaviour at low temperature, because	A. Attractive force dominate at low temperature B. Kinetic energies are increased C. Collisions become less frequent D. Densities of the gases increase
16	The highest temperature above which a gas cannot be liquified, no matter how much the pressure is applied is known as	A. Boiling temperature B. Consulate temperature C. Absolute zero D. Critical temperature
17	Noon has low critical temperature and pressure as compared to other gases. the most probable reason is that	A. Its octet is complete B. It is a monoatomic gas C. It has very low polarizability D. It has least forces of attraction
18	Borax has the chemical formula.	A. KNO_3 B. $Na_2B_3O_7.10H_2O$ C. Na_2CO_3 D. $NaNO_3$
19	If absolute temperature of the gas is doubled and the pressure is reduced to one half the volume the gas will.	A. Remains uncharged B. Increase four time C. Reduce to 1/4 D. Be doubled
20	The molar volume of CO_2 is maximum at.	A. STP B. $127\ ^oC$ and 1 atm C. $0\ ^oC$ and 2 atm D. $273\ ^oC$ and 2 atm
21	Mass of 22.4 dm3 of N_2 at STP is.	A. 28 gm B. 14 gm C. 1.4 gm D. 2,8 gm
22	Pressure remaining constant at which temperature the volume of a gas will come twice of what it is at $0\ ^oC$	A. $546\ ^oC$ B. $200\ ^oC$ C. 546 K D. 273 K
23	Partial pressure of oxygen in the air is.	A. 156 torr B. 157 torr C. 158 torr D. 159 torr
24	Vapour pressure of liquid depends upon	A. Amount of liquid B. Surface area C. Temperature D. Size of container
25	The commonly used unit of pressure by meteorologists is.	A. Atmosphere B. Pascal C. Milli D. Pound inch3
26	The partial pressure of oxygen in lungs is	A. 760 torr B. 320 torr C. 159 torr D. 116 torr
27	Feeling uncomfortable breathing in un pressurized cabins is due to	A. High pressure of CO_2 B. Fatigue C. Low pressure of O_2 D. Low presssure of CO_2
28	The spreading of fragrance of a rose or scent in air is due to.	A. Effusion B. Diffusion C. Osmosis D. Evaporation
29	Which of the following will have highest rate of diffusion	A. O_2 B. CO_2 C. NH_3 D. SO_2
30	The deviation of a gas from ideal behavior is maximum at.	A. $-10\ ^oC$ and 5.0 atm B. $-10\ ^oC$ and 2 atm C. $0\ ^oC$ and 2 atm D. $100\ ^oC$ and 2 atm
31	A real gas obeying Van der Waal's equation will resemble ideal gas if.	A. Both a and b are large B. Both a and b are small or zero C. A is small and b is large D. A is large and b is small
		A. $200000\ ^oC$ B. $10000\ ^oC$

32	The temperature of natural plasma is about.	B. 10000 ^oC C. 5000^oC D. 1000^oC
33	Pressure remaining constant, at which temperature the volume of a gas will become twice of what it is at 0 ^{o}C	A. 546 ^{o}C B. 200 ^{o}C C. 546 K D. 273 K
34	Which of the following will have the same number of molecule at STP.	A. 280 cm3 CO2 and 280 cm3 of N2O B. 11.2 dm3 of O2 and 32 g of O2 C. 44 g of CO2 and 11.2 dm3 of CO D. 28 g of N2 and 5.6 dm3 of oxygen
35	If absolute temperature of 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
36	How should the conditions be changed to prevent the volume of a give gas from expanding when its mass is increased.	A. Temperature is lowered and pressure is increased. B. Temperature is increased and pressure is lowered C. Temperature and pressure both are lowered D. Temperature and pressure both are increased
37	The order of the rate of diffusion of gases NH3, SO3, Cl2 and CO2 is.	A. NH3>SO2>CL2>CO2 B. NH3>CO2>Sl2>Cl2 C. Cl2>SO2>CO2>NH3 D. Cl2>SO2>CO2>NH3
38	Equal masses of methane and oxygen are mixed in an empty container at 25 ^{o}C. The fraction of total pressure exerted by oxygen is.	A. 1/3 B. 8/9 C. 1/9 D. 16/17
39	The deviation of a gas from ideal behaviour is maximum at.	A. -10 ^{o}C and 5.0 atm B. -10 ^{o}C and 2.0 atm C. 100 ^{o}C and 2.0 atm D. 0 ^{o}C and 2.0 atm
40	The real gas obeying Van der Waal's equation will resemble ideal gas is.	A. both 'a' and 'b' are large B. both 'a' and 'b' and small C. 'a' is small and 'b' is large D. 'a' is large and 'b' is small
41	Weak intermolecular forces are present in.	A. Only gases B. Only liquid C. Only solids D. gases, liquids and solids
42	Gases of air, always remains in the random motion and do not settle due to.	A. Elastic collision of gas molecules B. Unequal number of different gas molecules C. Difference impartial pressure of gas molecules D. Difference in molecular masses of air gases
43	At constant temperature in a given mass of and ideal gas.	A. The ratio of pressure and volume remains constant B. Volume always remains constant C. Pressure always remains constant D. The product of pressure and volume remains constant
44	For a gas obeying Boyle's law if pressure is doubled, the volume becomes.	A. Double B. One half C. Four times D. Remains constant
45	If the number of gas molecules are doubled in a certain volume of a gas, the pressure is.	A. Decreased to half B. Doubled C. Increased to four time D. Remains unchanged
46	A gas is heated in such a way that its volume and absolute temperature both are doubled. the pressure of the gas	A. Becomes 2 times B. Becomes 4 times C. Become half D. Remain same
47	The volume of a gas at 0 oC is 273 dm3, the pressure remaining constant. At which temperature its volume will be doubled.	A. 273 K B. 273 ^{o}C C. 546 ^{o}C D. 316 K
48	According to Boyle's law which parameters give a straight line parallel to x - axis when we plot a graph between	A. P and V B. P and 1/V C. P and PV D. V and T
49	How many balloon of 0.25 dm3 capacity at 1 atmospheric pressure can be filled from a hydrogen gas cylinder of 5 dm3 capacity at 10 atmospheric pressure.	A. 50 B. 90 C. 180 D. 200

50	If 2 mol of an ideal gas at 546 K occupy a volume of 44.8 dm3, the pressure must be.	A. 1 atm B. 2 atm C. 3 atm D. 4 atm
51	Keeping the temperature constant of the gas is expanded.	A. Pressure will decrease B. Temperature will increase C. Kinetic energy of molecules will increase D. No. of gas molecules increases
52	If we plot a graph between I/V at x-axis and pressure at Y -axis	A. a parabolic graph is obtained B. By increasing temperature straight line move toward x axis C. By increases temperature straight line move toward y axis. D. No. change in line by increasing temperature.
53	Which one of the following expressions is for ideal gas equation.	A. PM= nRT B. PV = nRT C. PV = dRT D. PV= nTP
54	Density of a gas is usually expressed in	A. kg m-3 B. kg dm-3 C. g dm-3 D. g cm-3
55	If temperature of one mole of ideal gas at 273 K and one atmospheric pressure is increased by 1 K, amount of energy absorbed is.	A. 0.082 dm3 atm B. 1.987 cal. C. 8.313 J D. All are correct.
56	At which distance a molecule is present from its neighbor molecules of its own diameter, at room temperature.	A. 100 times B. 200 times C. 300 times D. 400 times
57	Which one of the following gases diffuse more rapidly.	A. Cl2 B. CO2 C. CH4 D. N2
58	The rate of diffusion of a gas is	A. Directly proportional to its density B. Directly proportional to molecular mass C. Inversely proportional to its density D. Inversely proportional to square root of its molecular mass
59	The rate of diffusion of a gas of molar mass 72 as compared to H2 will be.	A. 1/6 times B. 1.4 times C. 6 times D. same
60	The diffusion of gases at absolute zero will be	A. Unchanged B. Zero C. slightly decreases D. Slightly increases
61	Gases exert pressure on the walls of the container becasue the gas molecules.	A. Collide with each other B. Collide with walls of container C. Have definite volume D. Obey the gas laws
62	Which mixture of gases is used by the deep sea divers.	A. Oxygen and nitrogen B. Oxygen and helium C. Oxygen and carbon di oxide D. Oxygen and water vapours
63	Total pressure of mixture of two gases is.	A. The sum of their partial pressures. B. The difference of their partial pressures C. The product of their practical pressures D. The ratio of their partial pressures
64	The total kinetic energy of one mole of an ideal gas is given by	A. 3/2 RT B. 1/2 KT C. 1/2 RT D. 3/2 KT
65	Which is not example of natural plasma.	A. Lightening bolt B. Aurora C. Neon sign D. Sum
66	The concept of distribution of velocities among the gas molecules was given by.	A. Clausius B. Mexwell C. Boltzmann D. Vander waal

67	Under which conditions of temperature and pressure will a real gas behave most like an ideal gas.	A. Low temperature and how pressure B. High temperature and high pressure C. Low temperature and high pressure D. High temperature and low pressure
68	Gas molecules show more deviation from ideal behaviour at high pressure because.	A. Velocity of molecules increases B. Velocity of molecules decreases C. Force of attraction between molecules increases D. Force of collision per unit area increases
69	Which one of the following gases cannot be liquefied by Line's method.	A. Water vapours B. NH_3 C. Nitrogen D. H_2
70	An Ideal gas can not be liquefied because.	A. Its critical temperature is always above 0 ^{o}C B. It molecules are relatively smaller in size C. Its solidify before becoming a liquid D. Force operative between its molecules are negligible
71	A real gas can be liquefied if.	A. Temperature is more than critical temperature. B. Temperature is less than critical temperature C. Pressure is more than critical pressure and temperature is less than critical temperature D. Its pressure is less than critical pressure
72	More ideal gas at room temperature is.	A. CO_2 B. NH_3 C. SO_2 D. N_2
73	Critical temperature of CO_2 gas is.	A. 31.1 ^{o}C B. 13.1 K C. 13.1 ^{o}C D. 1.31 ^{o}C
74	The Van der Waals' equation explain the behaviour of.	A. Ideal gas B. Real gas C. Vapours D. Non ideal gases
75	What are the SI of excluded volume 'b' in Vander waal equation.	A. dm^3 mol -1 B. m3 mol -1 C. mol dm-3 D. mol m-3
76	What are the SI units of Van der Waal constant 'a'	A. atm dm3 mol-2 B. atm dm6 mol-2 C. Nm4 mol-2 D. Nm mol-1
77	Observed pressure is less than ideal pressure for any gas due to	A. Intermolecular forces B. Size of molecules C. Boiling point of molecules D. Both a and c