Chemistry Fsc Part 1 Chapter 3 Online Test

Sr	Questions	Answers Choice
1	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
2	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
3	Which of the following will have the same number of molecules at STP	A. 280 cm³of CO₂and 280 cm³of N₂O B. 11.2 dm³of O₂and 32 g of O₂ C. 44 g of CO₂and 11.2 dm³of CO D. 28 g of N₂and 5.6 dm³of oxygen
4	Borax has the chemical formula.	A. KNO3 B. Na2B3O7.10H2O C. Na2CO3 D. NaNO3
5	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
6	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
7	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.
8	Weak intermolecular forces are present in.	A. Only gases B. Only liquid C. Only solids D. gases, liquids and solids
9	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
10	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
11	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
12	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
13	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
14	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
15	The number of molecules in one dm^3 of water is close to	
16	The spreading of fragrance of a rose or scent in air is due to.	A. Effusion B. Diffusion C. Osmosis D. Evaporation
17	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
18	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
19	Which one of the following gases cannot be liquefied by Line's method.	A. Water vapours B. NH3 C. Nitrogen D. H2
20	Which of the following will have highest rate of diffusion	A. O2 B. CO2 C. NH3 D. SO2
21	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
22	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
23	The concept of distribution of velocities among the gas molecules was given by.	A. Clausius B. Mexwell C. Boltzmann D. Vander waal
24	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
25	More ideal gas at room temperature is.	A. CO2 B. NH3 C. SO2 D. N2
26	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
27	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
28	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
29	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
30	The temperature of natural plasma is about.	A. 200000 ^oC B. 10000^oC C. 5000^oC D. 1000^oC
31	Which one of the following gases diffuse more rapidly.	A. Cl2 B. CO2 C. CH4 D. N2

32	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
33	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
34	Feeling uncomfortable breathing in un pressurized cabins is due to	A. High pressure of CO2 B. Fatigue C. Low pressure of O2 D. Low presssure of CO2
35	The diffusion of gases at absolute zero will be	A. Unchanged B. Zero C. slightly decreases D. Slightly increases
36	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
37	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
38	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
39	Density of a gas is usually expressed in	A. kg m-3 B. kg dm-3 C. g dm-3 D. g cm-3
40	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
41	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
42	Vapour pressure of liquid depends upon	A. Amount of liquid B. Surface area C. Temperature D. Size of container
43	The Van der Waals' equation explain the behaviour of.	A. Ideal gas B. Real gas C. Vapours D. Non ideal gases
44	The partial pressure of oxygen in lungs is	A. 760 torr B. 320 torr C. 159 torr D. 116 torr
45	What are the SI of excluded volume 'b' in Vander waal equation.	A. dm³ mol -1 B. m3 mol -1 C. mol dm-3 D. mol m-3
46	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
47	The deviation of a gas from ideal behaviour is maximum at.	A. -10 ^oC and 5.0 atm B. -10 ^oC and 2.0 atm C. 100 ^oC and 2.0 atm D. 0 ^oC and 2.0 atm
48	Partial pressure of oxygen in the air is.	A. 156 torr B. 157 torr C. 158 torr D. 159 torr
49	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
50	Mass of 22.4 dm3 of N2 at STP is.	A. 28 gm B. 14 gm C. 1.4 gm D. 2,8 gm
51	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
52	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
53	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
54	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
55	The molar volume of CO2 is maximum at.	A. STP B. 127 ^oC and 1 atm C. 0 ^oC and 2 atm D. 273 ^oC and 2 atm
56	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
57	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
58	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
59	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
60	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
61	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.
62	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
63	Pressure remaining constant, at which temperature the volume of a gas will become twice of what it is at 0 ^{o}C	A. 546 ^oC B. 200 ^oC C. 546 K D. 273 K
64	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
65	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
66	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 ^oC C. 546 ^oC D. 316 K
		A. Increase of temperature

67	The free expansion of the gas from high pressure towards the low pressure causes	B. Decrease of temperature C. Grater number of collisions among the molecules D. Decrease of velocity of gas molecules
68	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
69	The commonly used unit of pressure by meteorologists is.	A. Atmosphere B. Pascal C. Milli D. Pound inch3
70	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
71	Critical temperature of CO2 gas is.	A. 31.1 ^oC B. 13.1 K C. 13.1 ^oC D. 1.31 ^oC
72	In gas occupies a volume of 2 dm^3at 27°C and I atm pressure. The expression for its volume at S.T.P. is	
73	An Ideal gas can not be liquefied because.	A. Its critical temperature is always above 0 ^oC B. It molecules are relatively smaller in size C. Its solidify before becoming a liquid D. Force operative between its molecules are negligible
74	the order of the rate of diffusion of gases NH_3, SO_2, $Cl_2$and CO_2 is	A. NH₃> SO₂>Cl₂CO₂ B. NH₃> CO₂> SO₂> Cl₂ C. Cl₂> SO₂> CO₂> NH₃ D. NH₃> CO₂> Cl₂> SO₂
75	Which is not example of natural plasma.	A. Lightening bolt B. Aurora C. Neon sign D. Sum
76	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
77	Which one of the following expressions is for ideal gas equation.	A. PM= nRT B. PV = nRT C. PV = dRT D. PV= nTP