(ECC02-0001E)

- The collisions between gas molecules are

A) Elastic
B) Inelastic
C) Both a and b
D) None

(ECC02-0002H)

- Different gases with same K.E move with _____ velocities.

A) Same
B) Different
C) Equal
D) None

(ECC02-0003H)

- Ammonia gas diffuse twice time faster than other gas. The most probable gas is:

A) SO_2
B) C_4H_{10}
C) C_5H_8
D) CI_2

(ECC02-0004E)

- If V_1 = 5 litres, P_1 = 2 atm, T_1 = 273 ^oC. T_2 = 0^oC and V_2 =? When P_2 = 1 atm.

A) 5 lit
B) 10 lit
C) 2.5lit
D) 12.5 lit

(ECC02-0005E)

- K.E. α T is expression for

A) Boyle's Law
B) Charles's law
C) Kinetic Molecular Theory
D) None

(ECC02-0006M)

- Absolute zero is equal to

A) 0^oC
B) -459.7^oF
C) -273^oK
D) none

(ECC02-0007E)

- The spontaneous homogenous mixing of molecules of different gases by random motion and collision called

A) Diffusion
B) Effusion
C) Dalton's law
D) None

(ECC02-0008E)

- V α 1/P; is mathematical expression for

A) Charles's Law
B) Avogardo's Law
C) Boyle's Law
D) Brown's Law

(ECC02-0009E)

- Which is correct?

A) 1 mm Hg = 1 torr = 1 atm
B) 1 mm Hg = 760 torr = 1 atm
C) 760 mm Hg = 760 torr = 1 atm
D) 760 mm Hg = 1 torr = 1 atm

(ECC02-0010E)

- The gas law are not obeyed by general gases at

A) Low temp
B) High pressure
C) High temp
D) both a and b

(ECC02-0011M)

- Which is not the state of matter?

A) Plasma
B) Solid
C) Gas
D) None

(ECC02-0012M)

- All gases liquefy before reaching at

A) 273^{o}K
B) 373^{o}K
C) 0 K
D) 73^{o}K

(ECC02-0013M)

- Most ideal gas at room temperature is

A) CO_2
B) NH_3
C) SO_2
D) N_2

(ECC02-0014M)

- Absolute temperature of a gas is proportional to

A) Translational kinetic energy
B) rotational kinetic energy
C) Vibrational kinetic energy
D) Potential energy

(ECC02-0015M)

- Concept of distribution of velocities among the gas molecules was developed by

A) Clausius
B) Maxwell
C) Boltzman
D) Vander wall

(ECC02-0016E)

- Which of the following pair has same numbers of molecules at STP

A) $1000cm^3$ of N_2H_4 and O_2
B) $200cm^3$ of CO_2 and N_2O
C) $50cm^3$ of CO and N_2
D) All above

(ECC02-0017M)

- The deviation of a gas from ideal behavior is maximum at

A) -10°C and 5.0 atm
B) -10°C and 2.0 atm
C) 100°C and 2.0 atm
D) 0°C and 2.0 atm

(ECC02-0018H)

- The molar volume of CO_2 is maximum at

A) STP
B) 127°C and 1 atm
C) 0°C and 1 atm
D) 273°C and 1 atm

(ECC02-0019H)

- If absolute temperature of a gas is doubled and the pressure is reduced to half the volume of gas will

A) Remain unchanged
B) Increases four times
C) Reduce to $1/4^{th}$
D) Be doubled

(ECC02-0020E)

- 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) None of them

(ECC02-0021M)

- Linde's method is employed for.

A) Separation of gases
B) Expansion of gases
C) Compression of gases
D) Liquefaction of gases

(ECC02-0022H)

- 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

(ECC02-0023M)

- Which pair of gases do not obey Dalton's law of partial pressure.

A) H_2 and O_2
B) N_2 and O_2
C) NH_3 and HCl
D) H_2 and He

(ECC02-0024E)

- Pressure remaining constant, at which temperature the volume of a gas will become twice of what is at 0°C.

A) 546°C
B) 200°C
C) 546K
D) 273K

(ECC02-0025E)

- Which of the following gas has the lowest density at s.t.p.?

A) CO
B) Ne
C) N_2
D) NH_3

Answer key	
1	A
2	B
3	C
4	A
5	C
6	B
7	A
8	C
9	C
10	D
11	D
12	C
13	D
14	A
15	B
16	D
17	A
18	D
19	B
20	B
21	D
22	A
23	C
24	C
25	D