(ECC02-0007E-PMC-02M)

- If the four tubes of a car are filled to the same pressure with N_2, O_2, H_2 and He separately, then which one will be filled first?

  A) N_2

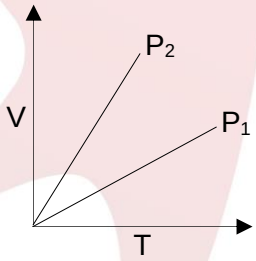
  B) O_2

  C) H_2

  D) He

(ECC02-0028E-PMC-04H)

- "V" versus "T" straight lines at constant pressures P_1 and P_2 for an ideal gas are shown in figure. Which is correct?



  A) $P_1 > P_2$

  B) $P_1 < P_2$

  C) $P_1 = P_2$

  D) Both B & C

(MCC02-UHS-16M)

- Which one of the following statements correct about Charles' law?

  A) Volume is directly proportional to temperature (at constant P)

  B) PV = nRT (at const P)

  C) Reciprocal Volume is inversely proportional to Temperature in Kelvin (at constant P)

  D) The quotient of P and Temperature in kelvin scale is equal to K (K depends on Pressure)

(MCC02-UHS-17M)

- If a gas is warmed by 1°C, it will _____by 1/273 of its original volume
  - A) Contracts
  - B) Expands
  - C) Shrink
  - D) Squeezed

(MCC02-UHS-18M)

- Which one of the following postulates of kinetic molecular theory (KMT) of gases explains Charles's law?
  - A) Gases exert pressure
  - B) With the increase of temperature kinetic energy of the gas molecule increasesc
  - C) Gas molecules show elastic collision
  - D) No attractive forces among gas molecules

(MCC02-UHS-19M)

- If we decrease temperature of a gas 2 times, its volume will.
  - A) Increase 4 times
  - B) Decrease 4 times
  - C) Decrease 2 times
  - D) Increase 2 times

(MCC02-UHS-21M)

- Which of the following statement correct about Avogadro's law?
  - A) Equal volume of real gas contain equal number of molecules at constant pressure and temperature
  - B) Equal volume of ideal gas contain equal number of molecules at constant mole and temperature
  - C) Equal volume of ideal gas contain equal number of molecules at constant pressure and temperature
  - D) Equal volume of real gas contain different number of molecules at constant pressure and temperature.

(MCC02-UHS-22M)

- Which of the following mathematical expression represent the Avogadro's law?
  - A) $V = R\frac{nT}{P}$ (When T and n are constant)
  - B) $V = R\frac{nT}{P}$ (When T and P are constant)
  - C) $V = R\frac{nP}{T}$ (When T and P are constant)
  - D) $V = R\frac{nT}{P}$ (When T, P and n are constant)

(MCC02-UHS-23M)

- Which of the following pairs of gases possess equal volume at STP
  - A) 44g CO_2 and 44g CO
  - B) 16g O_2 and 32g CH_4
  - C) 3.01 x 10^{23} molecules of CO and 3.01 x 10^{23} grams molecules of H_2
  - D) 0.5 mole of NO and 16 g O_2

(MCC02-UHS-24M)

- General gas equation is a combination of:
  - A) Boyle's law and Charle's law
  - B) Boyle's law and Avogadro's law
  - C) Avogadro's law and Charle's law
  - D) Avogadro's law and Graham's law

(MCC02-UHS-25M)

- Which mathematical relationship doesn't correctly represent behavior of an ideal gas?
  - A) $V = R\frac{nT}{P}$
  - B) $\frac{P_1\,T_2}{V_2} = \frac{P_2\,T_1}{V_1}$
  - C) $M = \frac{dRP}{T}$
  - D) $\frac{P_1\,V_1}{T_1 m_1} = \frac{P_2\,V_2}{T_2 m_2}$
  - E) Both C and D

(MCC02-UHS-27M)

- PV/nRT for an ideal gas is called
  - A) Expansion factor
  - B) Depression factor
  - C) Compressibility factor
  - D) Diffusion factor

(MCC02-UHS-28M)

- How will the conditions be changed to prevent the volume of the given gas from expanding when its mass is increased?
  - A) Temperature and pressure increased
  - B) Temperature is lowered, and pressure decreased
  - C) Temperature and pressure increased
  - D) Temperature is lowered, and pressure increased

(MCC02-UHS-29M)

- The molar volume of nitrogen gas is maximum at:
  - A) 25°C and 1 atmc
  - B) 0°C and 2 atm
  - C) 130°C and 1 atm
  - D) 100°C and 2 atm

(MCC02-UHS-30M)

- Gas constant "R" is independent of:
  - A) Pressure of gas
  - B) Volume of gas
  - C) Nature of gas
  - D) Temperature

Answer Key	
1	C
2	A
3	C
4	B
5	B
6	C
7	C
8	B
9	D
10	A
11	E
12	C
13	D
14	C
15	C