

Question: What is the atomic number of oxygen?

Options:

- a) 6
- b) 7
- c) 8
- d) 9

Answer: c

Question: Which of the following has the highest electronegativity?

Options:

- a) Fluorine
- b) Oxygen
- c) Nitrogen
- d) Chlorine

Answer: a

Question: What is the shape of the methane (CH₄) molecule?

Options:

- a) Linear
- b) Trigonal planar
- c) Tetrahedral
- d) Square planar

Answer: c

Question: What is the value of Avogadro's number?

Options:

- a) 6.022×10^{22}
- b) 6.022×10^{23}
- c) 6.022×10^{24}
- d) 6.022×10^{21}

Answer: b

Question: Which gas is commonly known as "laughing gas"?

Options:

- a) Carbon dioxide
- b) Nitrous oxide
- c) Sulfur dioxide
- d) Ammonia

Answer: b

Question: Which of the following is the strongest acid?

Options:

- a) HCl
- b) H_2SO_4
- c) HNO_3
- d) HF

Answer: b

Question: The pH of a neutral solution at 25°C is:

Options:

- a) 0
- b) 7
- c) 10
- d) 14

Answer: b

Question: Which law states that the total pressure exerted by a mixture of gases is equal to the sum of partial pressures of individual gases?

Options:

- a) Boyle's Law
- b) Charles's Law
- c) Dalton's Law

d) Avogadro's Law

Answer: c

Question: Which metal is extracted using the Hall-Héroult process?

Options:

a) Copper

b) Zinc

c) Aluminum

d) Iron

Answer: c

Question: What is the general formula of alkanes?

Options:

a) C_nH_{2n}

b) C_nH_{2n+2}

c) C_nH_{2n-2}

d) C_nH_{2n+1}

Answer: b