ARJUNA (NEET)

Some Basic Concepts of Chemistry

DPP-3

1. Atomic weight of chlorine is 35.5. It has two isotopes of atomic weight 35 and 37. What is the percentage of the heavier isotope in the sample?
   (A) 5 (B) 10
   (C) 25 (D) 20

2. The number of moles of nitrogen atom in 56 g nitrogen gas is
   (A) 2 mol (B) 4 mol
   (C) 8 mol (D) 10 mol

3. The number of mole of N-atom in 18.066×10^{23} nitrogen atoms is
   (A) 1 mol (B) 2 mol
   (C) 3 mol (D) 4 mol

4. What weight in grams is represented by 1.5 moles of Sulphur dioxide?
   (A) 60 g (B) 74 g
   (C) 96 g (D) 91 g

5. The number of atoms in 20 g of SO_3 is approximately
   (A) 1×10^{23} (B) 1.5×10^{23}
   (C) 2×10^{23} (D) 6×10^{23}

6. The number of particles present in 1 mol of nitrogen atom are
   (A) 6.022×10^{25} (B) 6.022×10^{24}
   (C) 6.022×10^{23} (D) 6.022×10^{22}

7. B has two isotopes ^{10}B (19%) and ^{11}B (81%). The atomic mass of B is
   (A) 10.81 (B) 10^5
   (C) 11 (D) 10.5

8. Mass of 1 amu in g
   (A) 1.66×10^{24} (B) 1.66×10^{-24}
   (C) 1.008 (D) 9.1×10^{-28}

9. One 'u' stands for the mass of
   (A) An atom of carbon-12
   (B) $1/12^{th}$ of carbon-12
   (C) $1/12^{th}$ of hydrogen atom
   (D) One atom of any of the elements

10. The mass of one molecule of water is approximately
    (A) 3×10^{-23} g (B) 18 g
    (C) 1.5×10^{-23} g (D) 4.5×10^{-23} g

ANSWERS KEY

1. (C)
2. (B)
3. (C)
4. (C)
5. (D)
6. (C)
7. (A)
8. (B)
9. (B)
10. (A)

Note - If you have any query/issue

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