

Which of the following is a SI unit of amount of substance?

- A) Kilogram
- B) Mole
- C) Liter
- D) Gram

*Answer: B) Mole*

1 mole of any substance contains:

- A)  $6.022 \times 10^{22}$  atoms
- B)  $6.022 \times 10^{23}$  particles
- C)  $6.022 \times 10^4$  molecules
- D)  $6.022 \times 10^2$  molecules

*Answer: B)  $6.022 \times 10^{23}$  particles*

The number of protons in an atom is called:

- A) Atomic number
- B) Mass number
- C) Neutron number
- D) Valency

*Answer: A) Atomic number*

The total number of orbitals in a third shell is:

- A) 4
- B) 9
- C) 16
- D) 3

*Answer: B) 9*

The shape of methane ( $\text{CH}_4$ ) molecule is:

- A) Trigonal planar
- B) Linear

- C) Tetrahedral
- D) Bent

**Answer: C) Tetrahedral**

**Which of the following has a triple bond?**

- A)  $O_2$
- B)  $Cl_2$
- C)  $N_2$
- D)  $HCl$

**Answer: C)  $N_2$**

**The coordination number of  $Na^+$  in  $NaCl$  crystal is:**

- A) 4
- B) 6
- C) 8
- D) 2

**Answer: B) 6**

**A crystal with particles arranged in repeating pattern is called:**

- A) Amorphous solid
- B) Crystalline solid
- C) Isotropic solid
- D) Supercooled liquid

**Answer: B) Crystalline solid**

**Which of the following is used in the construction of a dry cell?**

- A) Zn and Cu
- B) Zn and  $MnO_2$
- C) Cu and Ag
- D) Pb and  $PbO_2$

**Answer: B) Zn and MnO<sub>2</sub>**

**The unit of cell potential is:**

- A) Ohm
- B) Volt
- C) Ampere
- D) Coulomb

**Answer: B) Volt**

**The IUPAC name of CH<sub>3</sub>CH<sub>2</sub>OH is:**

- A) Methanol
- B) Ethanol
- C) Propanol
- D) Ethyl alcohol

**Answer: B) Ethanol**

**Phenol is:**

- A) Acidic
- B) Basic
- C) Neutral
- D) Amphoteric

**Answer: A) Acidic**