

1. The atomic symbol of silver is _____

- (a) Si
- (b) S
- (c) Au
- (d) Ag

Ans: (d)

Solution: The atomic symbol of silver is Ag

2. A box contains some identical red colour balls labelled as A each weighing 2 g. Another box contains identical blue colored balls, labelled as B, each weighing 5 g. In the combinations AB, AB₂, A₂B and A₂B₃ which is applicable?

- (a) Law of Definite proportion
- (b) Law of multiple proportion
- (c) Law of conservation of mass
- (d) None of the above

Ans: (b)

Solution: According to the law of multiple proportion if an element forms more than one compound with another element for a given mass of an element, masses of other elements are in the ratio of the small whole number.

3. What is the value of Avogadro's number?

- (a) 6.02×10^{-23}
- (b) 6.02×10^{23}
- (c) 6.02×10^{-22}
- (d) 6.02×10^{22}

Ans: (b)

Solution: The value of Avogadro's number is 6.02×10^{23}

4. What is the chemical formula of sodium carbonate?

- (a) Na₂CO₃
- (b) NaHCO₃
- (c) NaCO₃
- (d) Na₂HCO₃

Ans: (a)

Solution: The chemical formula of sodium carbonate is Na₂CO₃

5. Which of the following is the correct pair of atom and its atomic symbol?

- (a) Sulphur – Su
- (b) Potassium – P
- (c) Phosphorus -P

(d) Sodium- S

Ans: (c)

Solution: The correct pair of atom and its atomic symbol is Phosphorus -P

6. How many moles are present in 40 g of He?

(a) 5 moles

(b) 20 moles

(c) 6 moles

(d) 10 moles

Ans: (d)

Solution: 1 mole of He = 4 gm. \Rightarrow 40 gm of He = 10 moles

7. Atomic mass of Chlorine is ——— (u)

(a) 34

(b) 34.5

(c) 35

(d) 35.5

Ans: (d)

Atomic mass of Chlorine is 35.5 u

8. 46 gm of sodium is equal to ———

(a) 7 moles

(b) 1.5 moles

(c) 2 moles

(d) 1 mole

Ans: (c)

Solution: 1 mole of sodium = 23gm, 46 gm of sodium = 2 moles

9. The formula of Ammonium Sulphate is ———

(a) NH_4SO_4

(b) NH_4SO_2

(c) $(\text{NH}_4)_2\text{SO}_4$

(d) NH_2SO_4

Ans: (c)

Solution: The formula of Ammonium Sulphate is $(\text{NH}_4)_2\text{SO}_4$.

10. The atomic symbol of Iron is ———.

(a) I

(b) Fe

(c) Ir

(d) Au

Ans: (b)

Solution: The atomic symbol of Iron is Fe.