

## Class 9 Atoms and Molecules MCQs

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, AB<sub>2</sub>, A<sub>2</sub>B and A<sub>2</sub>B<sub>3</sub> 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)  $6.02 \times 10^{-23}$             (b)  $6.02 \times 10^{23}$   
(c)  $6.02 \times 10^{-22}$             (d)  $6.02 \times 10^{22}$

Ans: (b)

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

4. What is the chemical formula of sodium carbonate?  
(a) Na<sub>2</sub>CO<sub>3</sub>                            (b) NaHCO<sub>3</sub>  
(c) NaCO<sub>3</sub>                            (d) Na<sub>2</sub>HCO<sub>3</sub>

Ans: (a)

Solution: The chemical formula of sodium carbonate is Na<sub>2</sub>CO<sub>3</sub>

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

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.