

1. Symbol of mercury is
a) Mn b) Mg c) Hg d) Ag
2. Latin name of Tin is
a) Plumbum b) Stannum c) Stibium d) Wolfram
3. Atomicity of ozone is
a) 1 b) 2 c) 3 d) 4
4. Molecules of elements are
a) Homo atomic b) Hetero atomic c) Triatomic d) None
5. Cation is formed by _____ from neutral atom
a) Loss of electron b) Addition of proton c) Gain of electron d) Sharing of electron
6. Negatively charged ion is called
a) Anion b) Cation c) Electropositive ion d) b and c
7. Formula of sulphuric acid is
a) HNO₃ b) H₂SO₄ c) HCl d) HClO₄
8. Valency of plumbic ion is
a) 1 b) 2 c) 3 d) 4
9. Ammonium ion is
a) NH₄⁺ b) Al³⁺ c) N³⁻ d) PH₄⁺
10. Peroxide ion contains _____ number of oxygen atoms
a) 1 b) 2 c) 3 d) 4
11. Formula for aluminium sulphate is
a) AlSO₄ b) Al₂(SO₄)₃ c) Al₂SO₄ d) Al(SO₄)₃
12. 5N₂ represents:
a) 5 nitrogen atoms b) 5 nitrogen molecules
c) 10 nitrogen atoms d) 10 nitrogen molecules
13. The number of oxygen atom in calcium carbonate is
a) 1 b) 3 c) 5 d) 7
14. Valency of sodium is
a) 1 b) 2 c) 3 d) 4
15. X has valency 2 and Y has valency 3. What is the formula of compound formed from X and Y?
a) X₂Y₃ b) X₃Y₂ c) XY d) None
16. Polyatomic molecule is
a) S₈ b) H₂ c) O₂ d) N₂
17. Heteroatomic molecule is/are
a) CO₂ b) NH₃ c) P₄ d) a and b

18. Chemical formula represents
 a) Shortest notation of an element or compound
 b) The types of elements in a compound
 c) Number of atoms of each element present in the compound
 d) All the above
19. The correct representation of symbol of cobalt is
 a) cO b) Co c) CO d) All
20. Formula of sodium peroxide is
 a) NaO b) Na₂O₂ c) Na₂O d) NaO₂
21. Which of the following element show variable valency?
 a) Sodium b) Magnesium c) Aluminium d) Iron
22. Sulphate ion is
 a) SO₃²⁻ b) SO₄⁻ c) SO₄²⁻ d) SO₃⁻
23. An element which exhibits more than one valency is said to have
 a) Multiple vacancy b) Variable valency c) Bivalent valency d) Trivalent valency
24. Which of the following is not a balanced chemical equation?
 a) 2H₂O + 2Cl₂ → 4HCl + O₂ b) Cu₂S + CuSO₄ → Cu + SO₂
 c) BCl₃ + 3H₂O → H₃BO₃ + 3HCl d) Cl₂ + 2HI → 2HCl + I₂
25. Choose the correct formula for the following radicals.
 i) Phosphate ii) Phosphite iii) Phosphide iv) Nitride
 a) N⁻, PO₃³⁻, PO₄³⁻, P³⁻ b) PO₄³⁻, PO₃³⁻, P³⁻, N³⁻
 c) PO₃³⁻, N³⁻, P³⁻, PO₄³⁻ d) P³⁻, PO₃³⁻, PO₄³⁻, N⁻
26. Nucleus of an element has nine protons. Its valency would be
 a) 1 b) 9 c) 3 d) 5
27. Element A having 5 valency electrons combines with element B having 6 valency electrons. The formula of the resulting compound is
 a) A₃B₂ b) AB c) AB₂ d) A₂B₃
28. Two atoms X and Y have 2 and 6 electrons respectively in outermost shell. The formula of the compound formed between X and Y is
 a) X₂Y b) XY₂ c) XY d) X₂Y₃
29. $xK_2Cr_2O_7 + yH_2SO_4 \rightarrow zK_2SO_4 + pCr_2(SO_4)_3 + qH_2O + rO_2$ from the above equation find the values of $x + y + z + p + q + r$
 a) 20 b) 24 c) 15 d) 25
30. $C_4H_{10} + O_2 \rightarrow CO_2 + H_2O$. Find the ratio of sum of the coefficients of products and reactants in the balanced equation.
 a) 15:18 b) 18:15 c) 18:18 d) 15:15
31. $x_1Cu + x_2HNO_3 \rightarrow x_3Cu(NO_3)_2 + x_4NO + x_5H_2O$
 Find the value of $\frac{x_1 + x_2 + x_3 + x_4 + x_5}{x_1 + x_2}$
 a) 1 b) 2 c) 3 d) 4

32. $x\text{Br}_2 + y\text{NaOH} \rightarrow p\text{NaBr} + q\text{NaOBr} + r\text{H}_2\text{O}$. What are x, y, p, q, r in the above equation?
 a) 1, 1, 1, 1, 1 b) 1, 2, 2, 1, 2 c) 1, 2, 1, 1, 1 d) 2, 1, 2, 2, 1
33. The tetra atomic element, among the following is
 a) Oxygen b) Nitrogen c) Phosphorus d) Sulphur
34. The number of neutrons in an atom is equal to
 a) $A + Z$ b) $A - Z$ c) $Z - A$ d) $A \times Z$
35. The valency of carbon in CH_4 is
 a) 1 b) 2 c) 4 d) 6

36. Match the following

	Element		Valency
A)	Silicon	1)	1
B)	Magnesium	2)	2
C)	Potassium	3)	3
D)	Aluminium	4)	4

- a) A-4, B-2, C-3, D-1 b) A-4, B-2, C-1, D-3 c) A-4, B-3, C-1, D-2 d) A-4, B-1, C-2, D-3
37. Compound ion among the following is
 a) Ag^+ b) O_2^{-2} c) SO_4^{-2} d) S^{-2}
38. The formula of magnesium chloride is
 a) MgCl b) Mg_2Cl c) MgCl_2 d) None of these
39. The formula of ferrous ion is
 a) Fe^{+2} b) Fe^+ c) Fe^{+3} d) Fe^{+4}
40. The charge of ammonium ion is
 a) +1 b) +2 c) +3 d) -1
41. Zinc metal 3.25 gm of zinc metal reacted with dil. HCl. Find the mass of H_2 – gas liberated during the reaction. (Atomic mass of Zn=65 grams, H=1 gm)
 $\text{Zn} + 2\text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2$
 a) 1 gm b) 0.1 gm c) 0.01 gm d) 10 gm
42. Find the mass of CaCO_3 required to produce 1.1 gm of CO_2 on decomposition (at. Mass of Ca=40, C=12, O=16) $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$
 a) 0.25 gm b) 25 gm c) 2.5 gm d) 0.025 gm
43. Find the mass of 40% pure sample of Sulphur need to produce 3.2 gm of SO_2 (at. Mass of S=32, O=16)
 $\text{S} + \text{O}_2 \rightarrow \text{SO}_2$
 a) 2 gm b) 3 gm c) 5 gm d) 4 gm
44. Find the molecular mass of glucose molecule ($\text{C}_6\text{H}_{12}\text{O}_6$)
 a) 18 amu b) 44 amu c) 327 amu d) 180 amu
45. Atomic mass of Aluminium metal is
 a) 24 amu b) 27 amu c) 30 amu d) 39 amu

KEY

1. c	2. b	3. c	4. a	5. a	6. a	7. b	8. d	9. a	10. b
11. b	12. b	13. b	14. a	15. b	16. a	17. d	18. d	19. b	20. b
21. d	22. c	23. b	24. b	25. b	26. a	27. d	28. c	29. d	30. a
31. b	32. c	33. c	34. b	35. c	36. b	37. c	38. c	39. a	40. a
41. b	42. c	43. d	44. d	45. b					

* *Wish You^{ost} all the Best* *