1. The symbol of an element signifies the following:
   (A) The element
   (B) An atom of an element
   (C) The same parts by mass of the element as its atomic mass
   (D) All the given

2. The symbol of hydrogen 'H' represents:
   (A) The element hydrogen (B) An atom of hydrogen
   (C) One part by mass of hydrogen in water (D) Both (A) and (B)

3. Sodium is:
   (A) Monovalent (B) Divalent (C) Trivalent (D) Polyvalent

4. The Latin name of silver is:
   (A) Natrium (B) Kalium (C) Argentum (D) Silvery

5. Which of the following elements exhibit variable valency?
   (A) Sodium (B) Copper (C) Hydrogen (D) Gold

6. Atomicity of sulphur is:
   (A) 2 (B) 4 (C) 8 (D) 6

7. Chlorine molecule is a:
   (A) Monoatomic (B) Diatomic (C) Triatomic (D) Tetra atomic

8. Which of the following element forms a triatomic molecule?
   (A) O (B) Cl (C) N (D) Na

9. The symbol of chromium is:
   (A) Cl (B) Cr (C) C (D) CO

10. What is the combining capacity of phosphate ion?
    (A) 4 (B) 3 (C) 2 (D) 1

11. The number of atoms present in a molecule of an element is called:
    (A) Molecularity (B) Valency (C) Atomicity (D) Reactivity

12. Isotopes are:
    (A) Atoms of same element with the same atomic number but different mass number
    (B) Atoms of different elements with the same atomic number but different mass number
    (C) Atoms of same element with the same mass number but different atomic number
    (D) Atoms of different elements with the same mass number but different atomic number

13. The number of valence electrons in neon atom are:
    (A) 10 (B) 8 (C) 2 (D) 6

14. What could be the sum of coefficients (a + b + c + d) of all substances in the balanced equation given?

$aMg(OH)_{2(aq)} + bH_3PO_{4(aq)} \rightarrow cH_2O_{(l)} + dMg_3(PO_4)_{2(aq)}$

(A) 11 (B) 12 (C) 7 (D) 14

15. What is the name of the compound represented by the formula $CaCO_3$?

(A) Calcium oxalate (B) Calcium carbide (C) Calcium carbonate (D) Calcium chromate

16. The number of electrons in the last shell of krypton is:

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

17. The valency of nitrogen in ammonia is:

(A) 2 (B) 0 (C) 3 (D) 4

18. Which of the following atoms do not have neutrons?

(A) He (B) C (C) N (D) H

19. The number of protons in an atom X, with atomic number Z and mass number A is:

(A) A – Z (B) Z – A (C) Z (D) A

20. The atoms N_7^{14} and N_7^{15} represent:

(A) Isotopes (B) Isotones (C) Isobars (D) Isodiaphers

21. The number of valence electrons of oxygen atom could be:

(A) 4 (B) 6 (C) 8 (D) 12

22. The symbol Δ in a chemical change indicates:

(A) Catalyst (B) Light (C) Heat (D) Electricity

23. The chemical formula of zinc hydroxide is:

(A) $Zn(OH)_2$ (B) ZnO_2 (C) ZnO (D) $ZnCO_3$

24. Balance the following equation: $Al_2(CO_3)_{3(s)} \rightarrow Al_2O_{3(s)} + CO_{2(g)}$

(A) $2Al_2(CO_3)_{3(s)} \rightarrow Al_2O_{3(s)} + 3CO_{2(g)}$ (B) $Al_2(CO_3)_{3(s)} \rightarrow Al_2O_{3(s)} + 3CO_{2(g)}$

(C) $2Al_2(CO_3)_{3(s)} \rightarrow 2Al_2O_{3(s)} + 3CO_{2(g)}$ (D) $2Al_2(CO_3)_{3(s)} \rightarrow 2Al_2O_{3(s)} + CO_{2(g)}$

25. All of these radicals have a valency of 2, except:

(A) SO_4 (B) CO_3 (C) NH_4 (D) $MgSO_4$

KEY

1.	**D**	**2.**	**D**	**3.**	**A**	**4.**	**C**	**5.**	**B**
6.	**C**	**7.**	**B**	**8.**	**A**	**9.**	**B**	**10.**	**B**
11.	**C**	**12.**	**A**	**13.**	**B**	**14.**	**B**	**15.**	**C**
16.	**B**	**17.**	**C**	**18.**	**D**	**19.**	**C**	**20.**	**A**
21.	**B**	**22.**	**C**	**23.**	**A**	**24.**	**B**	**25.**	**C**