

ALKALI METALS

Q.1 Alkali metals are characterised by-

- (i) Good conductor of heat and electricity
- (ii) High oxidation potential
- (iii) High melting point
- (iv) Solubility in liquid ammonia

(A) i, ii, iv (B) i, iii, iv (C) ii, iii, iv (D) i, ii, iii

Q.2 The pair of compounds which cannot exist together in aqueous solution are-

- (i) NaH_2PO_4 and Na_2HPO_4
- (ii) Na_2CO_3 and NaHCO_3
- (iii) NaOH and NaH_2PO_4
- (iv) NaHCO_3 and NaOH

(A) iii, iv (B) i, iv (C) i, ii (D) ii, iv

Q.3 Highly pure dilute solution of sodium in liquid ammonia-

- (i) Shows blue colour
- (ii) Exhibits electrical conductivity
- (iii) Produces sodium amide
- (iv) Produces hydrogen gas

(A) i, ii (B) i, iv (C) i, iii (D) ii, iv

Q.4 A solution of sodium metal in liquid ammonia is strongly reducing due to the presence of-

- (A) Sodium atoms
- (B) Sodium hydride
- (C) Sodium amide
- (D) Solvated electrons.

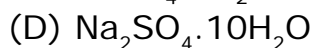
Q.5 Molten sodium chloride conducts electricity due to the presence of-

- (A) Free electrons
- (B) Free ions
- (C) Free molecules
- (D) Atoms of sodium and chlorine

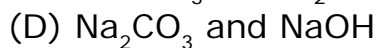
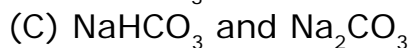
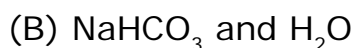
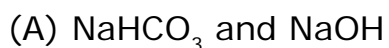
Q.6 Nitrogen dioxide cannot be prepared by heating-

(A) KNO_3 (B) $\text{Pb}(\text{NO}_3)_2$ (C) $\text{Cu}(\text{NO}_3)_2$ (D) AgNO_3

Q.7 Molecular formula of Glauber's salt is-



Q.8 The pair of compounds which cannot exist together in solution is-



Q.9 The metallic lustre exhibited by sodium is explained by-

(A) Diffusion of sodium ions

(B) Oscillation of loose electrons

(C) Excitation of free protons

(D) Existence of body centred cubic lattice

Q.10 An aqueous solution of sodium sulphate is electrolysed using inert electrodes. The products at the cathode and anode are respectively-

