

TOPIC : S- BLOCK ELEMENTS

- Correct order of densities of alkali metals is :
(A) $\text{Li} < \text{Na} < \text{K} < \text{Rb} < \text{Cs}$ (B) $\text{Na} < \text{Li} < \text{K} < \text{Rb} < \text{Cs}$
(C) $\text{Li} < \text{K} < \text{Na} < \text{Rb} < \text{Cs}$ (D) $\text{Li} < \text{Na} < \text{Rb} < \text{K} < \text{Cs}$
- Basic strength of hydroxides of alkali metals in in the order
(A) $\text{LiOH} < \text{NaOH} < \text{KOH} < \text{RbOH} < \text{CsOH}$
(B) $\text{KOH} < \text{NaOH} < \text{LiOH} < \text{RbOH} < \text{CsOH}$
(C) $\text{LiOH} < \text{KOH} < \text{NaOH} < \text{RbOH} < \text{CsOH}$
(D) $\text{LiOH} < \text{NaOH} < \text{RbOH} < \text{CsOH} < \text{KOH}$
- Ionic mobility of alkali metal ions on hydrations is
(A) $\text{Li}^+ < \text{Na}^+ < \text{K}^+ < \text{Rb}^+ < \text{Cs}^+$ (B) $\text{K}^+ < \text{Na}^+ < \text{Li}^+ < \text{Rb}^+ < \text{Cs}^+$
(C) $\text{Na}^+ < \text{K}^+ < \text{Li}^+ < \text{Rb}^+ < \text{Cs}^+$ (D) $\text{Li}^+ < \text{Na}^+ < \text{Rb}^+ < \text{Cs}^+ < \text{K}^+$
- Solubility of hydroxides of alkaline earth metals is in the order
(A) $\text{Be}^{+2} < \text{Mg}^{+2} < \text{Ca}^{+2} < \text{Sr}^{+2} < \text{Ba}^{+2}$
(B) $\text{Ca}^{+2} < \text{Mg}^{+2} < \text{Be}^{+2} < \text{Sr}^{+2} < \text{Ba}^{+2}$
(C) $\text{Be}^{+2} < \text{Mg}^{+2} < \text{Ca}^{+2} < \text{Ba}^{+2} < \text{Sr}^{+2}$
(D) $\text{Ba}^{+2} < \text{Sr}^{+2} < \text{Ca}^{+2} < \text{Mg}^{+2} < \text{Be}^{+2}$
- Which of the following is polymeric & covalent
(A) BeCl_2 (B) MgCl_2 (C) CaCl_2 (D) RbCl_2
- Which of the following is correct order of increasing thermal stability among the following compounds
 K_2CO_3 (I) ; MgCO_3 (II) ; CaCO_3 (III) ; BeCO_3 (IV)
(A) $\text{I} < \text{II} < \text{III} < \text{IV}$ (B) $\text{IV} < \text{II} < \text{III} < \text{I}$
(C) $\text{IV} < \text{II} < \text{I} < \text{III}$ (D) $\text{II} < \text{IV} < \text{III} < \text{I}$
- Which of the following set of compounds cannot exist in solution?
(A) $\text{NaHCO}_3 + \text{Na}_2\text{CO}_3$ (B) $\text{NaOH} + \text{Na}_2\text{CO}_3$
(C) $\text{NaOH} + \text{NaHCO}_3$ (D) $\text{NaHCO}_3 + \text{H}_2\text{CO}_3$
- Which of the following exists in solid state?
(A) $\text{Ca}(\text{HCO}_3)_2$ (B) $\text{Mg}(\text{HCO}_3)_2$ (C) KHCO_3 (D) LiHCO_3
- Which of the following exists in dimeric form in solid state.
(A) LiHCO_3 (B) NaHCO_3 (C) KHCO_3 (D) $\text{Ca}(\text{HCO}_3)_2$
- Dead burnt plaster is -
(A) CaSO_4 (B) $\text{CaSO}_4 \cdot \text{H}_2\text{O}$ (C) $\text{CaSO}_4 \cdot \text{H}_2\text{O}$ (D) $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$
- Which one is plaster of Paris?
(A) CaSO_4 (B) $\text{CaSO}_4 \cdot 1/2\text{H}_2\text{O}$ (C) $\text{CaSO}_4 \cdot \text{H}_2\text{O}$ (D) $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$
- Which does not impart colour to flame?
(A) Be (B) Ca (C) Ba (D) Sr
- Down's process is used for the extraction of
(A) Li (B) Na (C) Mg (D) Ca
- Which is not an important constituent of cement—
(A) CaO (B) MgO (C) Al_2O_3 (D) Na_2O

15. Slaked lime reacts with chlorine to give
 (A) CaCl_2 (B) CaO (C) CaOCl_2 (D) CaCO_3
16. LiNO_3 on heating gives—
 (A) LiNO_2 & O_2 (B) Li_2O & NO_2
 (C) Li_2O , NO_2 & O_2 (D) Does not decompose
17. Epsom salt is—
 (A) $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$ (B) $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$
 (C) $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ (D) $\text{MgCl}_2 \cdot 2\text{H}_2\text{O}$
18. Which cell is used for the manufacture of caustic soda?
 (A) Nelson Cell (B) Castner Kelner Cell
 (C) Down Cell (D) Both 'A' & 'B'
19. Plaster of Paris is
 (A) $(\text{CaSO}_4)_2 \cdot \text{H}_2\text{O}$ (B) $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$
 (C) $\text{CaSO}_4 \cdot \text{H}_2\text{O}$ (D) CaSO_4
20. Correct increasing order of m.p. is shown in
 (A) $\text{LiI} < \text{LiBr} < \text{LiCl} < \text{LiF}$ (B) $\text{LiF} < \text{LiCl} < \text{LiBr} < \text{LiI}$
 (C) $\text{LiCl} < \text{LiF} < \text{LiBr} < \text{LiI}$ (D) $\text{LiI} < \text{LiCl} < \text{LiBr} < \text{LiF}$
21. Which gives SO_3 on heating?
 (A) $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$ (B) $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$
 (C) $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ (D) All
22. Which is added to cement to delay its setting?
 (A) CaSO_4 (B) CaO (C) $\text{CaSO}_4 \cdot \text{H}_2\text{O}$ (D) $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$
23. Which releases electrons in candle light?
 (A) Li (B) Na (C) K (D) Cs
24. Which sets the earliest in cement?
 (A) Dicalcium silicate (B) Tricalcium silicate
 (C) Tricalcium aluminate (D) Tricalcium aluminoferrite
25. On dissolving moderate amount of Na in liquid NH_3 at low temperature, which one does not occur?
 (A) Blue colour of solution (B) Formation of Na^+
 (C) NH_3 becomes good conductor (D) NH_3 remains diamagnetic

ANSWERS KEY

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