

31. Sodium is not observed in +2 oxidation state because of its
- [A.](#) high first ionization potential
 - [B.](#) high second ionization potential
 - [C.](#) high ionic radius
 - [D.](#) high electronegativity

Answer: Option B

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32. Carnalite has chemical formula
- [A.](#) KCl
 - [B.](#) $\text{KCl} \cdot \text{MgCl}_2 \cdot 6\text{H}_2\text{O}$
 - [C.](#) $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$
 - [D.](#) $\text{CaCO}_3 \cdot \text{MgCO}_3$

Answer: Option B

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33. Magnesium metal does not burn in the vessel containing
- [A.](#) N_2
 - [B.](#) O_2
 - [C.](#) N_2 and O_2
 - [D.](#) Ne

Answer: Option D

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34. Electrolysis of dilute solution of NaCl results at the anode
- [A.](#) sodium
 - [B.](#) hydrogen
 - [C.](#) chlorine
 - [D.](#) oxygen

Answer: Option D

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35. Second ionization potential of alkali metals are very high due to
- [A.](#) being s-block elements
 - [B.](#) inert gas configurations
 - [C.](#) ns1 electronic configuration
 - [D.](#) being metals

Answer: Option B

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36. Which ion will have maximum value of heat of hydration?

A. Al^{+3}

B. Cs^{+}

C. Ba^{+}

D. Mg^{+2}

Answer: Option A

37. Which one can form complex?

A. Na

B. Cr

C. Li

D. K

Answer: Option c

38. Which one is natron?

A. Na_2CO_3

B. $Na_2CO_3 \cdot 10H_2O$

C. $Na_2CO_3 \cdot H_2O$

D. $NaHCO_3$

Answer: Option c

39. Addition of 2% gypsum in cement

A. Triggers hydration

B. Triggers hydrolysis

C. Prevents rapid hardening

D. all of the above

Answer: Option c

40. Which one is least ionic in nature and decompose on heating.

A. $LiOH$

B. $NaOH$

C. KOH

D. $CsOH$

Answer: Option A