



1. Name the elements present in Group 2 [2]
2. The atomic radii of alkaline earth metals are smaller than those of the corresponding alkali metals. Explain why? [2]
3. Why do alkaline earth metals have low ionization enthalpy? [1]
4. The second ionization enthalpy of calcium is more than the first. How is that calcium forms  $\text{CaCl}_2$  and not  $\text{CaCl}$  give reasons. [2]
5. State one reason for alkaline earth metals in general having a greater tendency to form complexes than alkali metals. [1]
6. Name the metal amongst alkaline earth metals whose salt do not impart colour to a non-luminous flame. [2]
7. Compounds of alkaline earth metals are more extensively hydrated than those of alkali metals. Give reason. [1]
8. The melting and boiling points of alkaline metals are higher than alkali metals. Give reason. [1]
9. Which member of the alkaline earth metals family has: [2]  
(i) least reactivity (ii) lowest density (iii) highest boiling point  
(iv) maximum reduction potential
10. The alkaline earth metals are called s - block elements. Give reasons. [2]



1. What is the nature of oxide formed by Be? [1]
2. Why does beryllium show similarities with Al? [1]
3. Why is Calcium preferred over sodium to remove last traces of moisture from alcohol? [2]
4. Why is beryllium carbonate unusually unstable thermally as compared to the other carbonates of this group? [1]
5. Name the metal amongst alkaline earth metals whose salt do not impart colour to a non - luminous flame. [2]
6. Why sulphates of Mg and Be soluble in water? [1]
7. Why does the solubility of alkaline earth metal hydroxides in water increase down the group? [2]
8. Why beryllium is not attacked by an acid easily? [1]
9. Give the reaction of magnesium with air? [2]
10. Beryllium is reducing in nature. Why? [2]