Name: _____	**Subject:** Chemistry	**Class:** 12th	**Time:** 60 minutes	Total Marks:	**30**
Chapter No.2	**MJDexpert.com**			Obtained marks	

Note: Please attempt any 8 short questions from Question 2. Also, attempt both parts (a and b) of Question 3. Cutting and removal of any content is strictly prohibited.

Objective-Section

Q. 1 Encircle the correct answer by filling the appropriate circle. (8x1=8)

1. **Beryllium reacts with sodium hydroxide to form**
   (A) BeO + NaH (B) $Na_2BeO_2 + H_2$ (C) $BeO_2 + H_2$ (D) $Be(OH)_2 + Na$
2. **The oxides of beryllium are**
   (A) Acidic (B) Basic (C) Ionic (D) Amphoteric
3. **Which of the following does not belong to alkaline earth metals?**
   (A) Be (B) Ra (C) Ba (D) Rn
4. **Which of the following do not form oxide of Nitrogen on heating?**
   (A) $LiNO_3$ (B) $NaNO_3$ (C) $Ca(NO_3)$ (D) $Mg(NO_3)_2$
5. **Which gas is evolved at cathode during the electrolysis of brine in diaphragm cell?**
   (A) H_2 (B) Na (C) Cl_2 (D) O_2
6. **Natron has the chemical formula**
   (A) $NaNO_3$ (B) KNO_3 (C) $Na_2CO_3.H_2O$ (D) $CaCO_3$
7. **The element deposited at Cathode during electrolysis of brine in Diaphragm Cell is:**
   (A) Cl_2 (B) Na (C) O_2 (D) H_2
8. **In Nelson's cell for the production of NaOH cathode is made up of**
   (a) Mercury (b) Graphite (e) Steel vessel lined inside with asbestos (d) Iron

Subjective-Section

Q.2 Write short answers of any eight (8) of the following questions: (8x2=16)

1. Write formulas of (i) Colemanite (ii) Cryolite
2. What is the milk of magnesia? Where it is used?
3. What happens when we heat Li_2CO_3 and $CaCO_3$ separately?
4. Discuss in which respect KO_2 can be used by mountaineers.
5. Why the aqueous solution of Na_2CO_3 is alkaline?
6. Give two advantages of Down`s cell process.
7. How lime Mortar is prepared?
8. What is the chemical nature of lime water and milk of magnesia?
9. Why lime is added to acidic soil?

Q.No.3 Long Question: (4+4=8)

a) Write a note on the peculiar behavior of Beryllium
b) Describe the two problems involved in the manufacture of caustic soda by Nelson cell and how these problems were solved?