

# SUCCESS KEY TEST SERIES

## Work Sheet

Std: 11th Science

Subject: Chemistry

Time: 1Hrs

Date :

## 8.Elements of Group 1 and 2

Max Marks: 35

**Q.1 Select and write the most appropriate answers from given alternatives:**

5

- 1) Which of the following compounds is most stable?  
(a) LiF (b) LiCl  
(c) LiBr (d) LiI
- 2) Identify the odd one-  
(a) Be (b) Ba  
(c) Cs (d) Ra
- 3) Which of the following is used as a moderator in nuclear reactors  
(a) Be (b) Mg  
(c) Ca (d) Sr
- 4) The alkali metals are low melting. Which of the following alkali metal is expected to melt if the room temperature rises to 30°C?  
(a) Na (b) K  
(c) Rb (d) Cs
- 5) Alkali metals react with water vigorously to form hydroxides and dihydrogen. Which of the following alkali metals reacts with water least vigorously?  
(a) Li (b) Na  
(c) K (d) Cs

**Q.2 Answer the following very short questions:**

5

- 1) Why are alkali metals difficult to be reduced?
- 2) Name the following:  
The most abundant element in the universe.
- 3) Name the following:  
Alkali metal with smallest atom.
- 4) Write the balanced chemical equation for the following:  
Magnesium is heated in air.
- 5) Sodium dissolves in liquid ammonia to form a solution which shows electrical conductivity.

**Q.3 Answer the following Questions:**

10

- 1) Write the balanced chemical equation for the following:  
A 50% solution of sulphuric acid is subjected to electrolyte oxidation and the product is hydrolysed.
- 2) Alkaline earth metals have low values of electro negativity; which decrease down the group
- 3) Mention the uses of NaOH.
- 4) Why are Be & Mg inert to O<sub>2</sub> & H<sub>2</sub>O?
- 5) Why potassium carbonate can not be prepared by solvay process?.

**Q.4 Answer the following Questions:**

**15**

- 1) Magnesium strip slowly tarnishes on keeping in air but metallic calcium is readily attacked by air. Explain.
- 2) In which group should hydrogen be placed ? In group 1 or group 17 ? Why ?
- 3) Lithium floats on water while sodium floats and catches fire when put in water.
- 4) What happens when dihydrogen react with halogens?
- 5) Explain the reactions of group 1 and group 2 elements with oxygen.

----- All the Best -----