

Std.: 9 Date:	(English) Science 1	Marks: 2 Time: 1 hou
Chapte	er: 5	
Q.1 A)	Choose the correct alternative and rewrite the sentence  On heating blue vitriol, water of crystallization is lost. The number of water molecules present or left after heating are  a. 2 b. 4 c. 5 d. 0	(1)
B)	Answer the following questions.	(2)
1)	Find co-related terms  Acidic solution :<> :: Basic solution : ?	
2)	Find the odd man out:	
2)	Sodium Nitrate, sodium carbonate, sodium sulphate, sodium chloride.	
Q.2 A) 1)	Give scientific reasons (Any one)  Blue vitriol turns white on heating.	(2)
2)	Hydronium ions are always in the form of H <sub>3</sub> O <sup>+</sup> .	
B) 1) 1)	Answer the following questions. (Any two)  Write short notes Universal indicators  Universal indicators	(4)
2)	Chemical Equation.  Give the chemical reaction for following:  Dilute HCl was poured on baking soda.	
3)	Name any four basic metal oxides.	
Q.3 1)	Answer the following questions. (Any two) State Arrhenius Theory with examples	(6)
2)	Write down concentrations of each solution in g/L and mol/L. (H = 1, C=12, Na = 23, O=16, Cl = 35.5, S=32, N=14) 2g NaOH in 50ml solution	
3)	Complete the table and answer the following questions. i. When the compounds $NH_3$ , $Na_2O$ , and $CaO$ are mixed with water they combine with water. Complete the following table by writing the ions formed by their combination with water	

$NH_3(g) + H_2O(l) \longrightarrow NH_4^+(aq) + OH^-(aq)$	
Na <sub>2</sub> O(s) + → 2Na <sup>+</sup> (aq) + —	
CaO(s) + H <sub>2</sub> O(l) → +	

ii. What are the names of the above compounds?

iii. Into which type will you classify the above compounds - acid, base, or salt? Why?

## Q.4 Answer the following questions. (Any one)

(5)

- 1) Explain Formation of a magnesium chloride from magnesium and chlorine.
- 2) Obtain a sample of rainwater. Add to it a few drops of universal indicator. Meausre its pH. Describe the nature of the sample of rainwater and explain the effect if it has on the living world.

