Unique St Point			
ACID BASE AND SALT			
1	What colour do the following indicators turn when added to a base or alkali (such as sodium hydroxide)? (a) methyl orange (b) litmus (c) red cabbage extract		
2	<ul> <li>Fill in the blanks in the following sentences:</li> <li>(a) Acids have ataste and they turnlitmus</li> <li>to</li> <li>(b) Substances do not show their acidic properties without</li> <li>(c) Acids produceions on dissolving in water.</li> <li>(d) Those substances whose smell (or odour) changes in acidic or basic solution are calledindicators.</li> <li>(e) Onion and vanilla extract areindicators.</li> </ul>		
3	<ul> <li>When a piece of limestone reacts with dilute HCI, a gas X is produced. When gas X is passed through lime water then a white precipitate Y is formed. On passing excess of gas X, the white precipitate dissolves forming a soluble compound Z.</li> <li>(a) What are X, Y and Z?</li> <li>(b) Write equations for the reactions which take place.</li> <li>(i) when limestone reacts with dilute HCI</li> <li>(ii) when gas X reacts with lime water to form white precipitate Y is form a soluble compound Z.</li> </ul>		
4	Fill in the following blanks with suitable words:(a) Acids have a pHthan 7.(b) Alkalis have a pH than 7.(c) Neutral substances have a pH of(d) The more acidic a solution, the the pH.(e) The more alkaline a solution, the the pH.		
5	Fill in the following blanks:       (a) Common salt is obtained from sea-water by the process of         (b) Rock salt is mined just like       (c) Chemical formula of washing soda is         (d) Sodium hydrogen carbonate is		
6	<ul> <li>(a) Name a sodium compound used for softening hard water.</li> <li>(b) Which compound of calcium is used for disinfecting drinking water supply?</li> <li>(c) Name a metal compound which has detergent properties (cleansing properties).</li> <li>(d) Name one compound of calcium which is used for removing the colour of a coloured cloth.</li> <li>(e) State a peculiar (or remarkable) property of plaster of Paris.</li> <li>(f) Name the substance obtained by the action of chlorine on solid (dry) slaked lime.</li> </ul>		

7	The metal salt A is blue in colour. When salt A is heated strongly over a burner, then a substance B is eliminated and a white powder C is left behind. When a few drops of a liquid D are added to powder C, it becomes blue again. What could be A, B, C and D?	
8	Consider the following substances: NaCl, Ca(OH) <sub>2</sub> , NaHCO <sub>3</sub> , NH <sub>3</sub> , Na <sub>2</sub> CO <sub>3</sub> , H <sub>2</sub> O, Cl <sub>2</sub> , CO <sub>2</sub> , CaSO <sub>4</sub> .2H <sub>2</sub> O, 2CaSO <sub>4</sub> .H <sub>2</sub> O, CaOCl <sub>2</sub> (a) Which two substance combine to form bleaching powder? (b) Which four substances are utilised in the production of washing soda? (c) Which compound represents plaster of Paris? (d) Which compound is a part of baking powder? (e) Which compound is used as an antacid?	
9	Consider the following salts: Na <sub>2</sub> CO <sub>3</sub> , NaCl, NH <sub>4</sub> Cl, CH <sub>3</sub> COONa, K <sub>2</sub> SO <sub>4</sub> , (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> Which of these salts will give: (a) acidic solutions? (b) neutral solutions? (c) basic solutions (or alkaline solutions)?	
10	Complete and balance the following chemical equations: (a) NaCl $\left(aq\right) + H_2O\left(l\right) \xrightarrow{\text{Electricity}}$ (b) NaHCO <sub>3</sub> $\xrightarrow{\text{Heat}}$ (c) NaCl + NH <sub>3</sub> + H <sub>2</sub> O + CO <sub>2</sub> $\longrightarrow$ (d) Ca $\left(OH\right)_2$ + Cl <sub>2</sub> $\longrightarrow$	
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