$\qquad$

## I)Answer the following questions

1. Define $\mathrm{p}^{\mathrm{H}}$ scale
2. Are the concentration of ions increases or decreases in the process of dilution
3. What is neutralization reaction
4. How many water molecules are present in sodium carbonate

## II)Answer the following questions

$5 \times 2=10 \mathrm{M}$
5. Give two daily life uses of calcium sulphate hemi hydrate
6. Raju added an acid to sodium carbonate and observe a gas is released from this what are the questions arise in his mind
7.Complete the following table(Based on neutralization)

| ACIDS/BASES | NaOH | KOH | $\mathbf{H} \mathbf{H} \mathbf{H}$ |
| :---: | :---: | :---: | :---: |
| HCl |  |  |  |
| $\mathrm{H}_{2} \mathrm{SO}_{4}$ |  |  |  |

8. Plaster of Paris should be Store in a moisture proof containers. Explain why?
9.Why does not distilled water conduct electricity?

## III)Answer the following questions

10. What is meant by water of crystallization of a substance describe an activity to show the water of crystallization. (OR)
Show that the reaction of carbonates and metal hydrogen carbonates with acids produces carbon dioxide gas 11. Observe the following answer the questions given below

| $\mathrm{P}^{\mathrm{H}}$ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Substance | A |  |  |  |  | C |  | E |  | B |  |  |  | D |  |

a) Which substance is strong base and weak acid?
b) Which substances give pink colour with phenolphthalein solution?
c) Which substance give colour with methyl orange?
d) Which substance does not react with phenolphthalein and methyl orange?
(OR)
Draw a neat diagram showing acid solution in water conducts electricity
IV)Fill the following blanks
$6 \times 1 / 2=3 M$
12. The process of dissolving an acid or a base in water is an $\qquad$
13. The chlorine gas is used for the manufacture of $\qquad$
14. Tooth decay starts when the pH of the mouth is lower than $\qquad$
15.Acid + metal-- $\rightarrow$ salt + $\qquad$
16. Non metallic acids are in $\qquad$ nature
17. $\mathrm{CaSO}_{4} .2 \mathrm{H}_{2} \mathrm{O}$ is a formula of $\qquad$

