CBSE TEST PAPER-02

CLASS – X Science (Acid, Base and Salt)

1. The H^+ ion concentration of a solution is $1.0\times10^{-5}m$. The solution is (1)
   (a) Acidic (b) Alkaline
   (c) Neutral (d) Amphoteric

2. An aqueous solution with pH-zero is (1)
   (a) Acidic (b) Alkaline
   (c) Neutral (d) Amphoteric

3. Setting of Plaster of Paris takes place due to (1)
   (a) Oxidation (b) Reduction
   (c) Dehydration (d) Hydration

4. The difference of water molecules is gypsum and Plaster of Paris is (1)
   (a) $\frac{5}{2}$ (b) 2
   (c) $\frac{1}{2}$ (d) $\frac{3}{2}$

5. The odour of acetic acid resembles that of (1)
   (a) Rose (b) Burning Plastic
   (c) Vinegar (d) Kerosene

6. Give the name and formula of two (2)
   (i) strong monobasic acids (ii) two weak dibasic acids

7. Why alkalis like sodium hydroxide and potassium hydroxide should not be left exposed to air? (2)

8. Dry ammonia has no action on litmus paper but a solution of ammonia in water turns red litmus paper blue. Why is it so? (2)

9. Bleaching powder forms a milky solution in water. Explain. (2)

10. A first aid manual suggests that vinegar should be used to treat wasp sting and (3)

balking soda for bee stings.

(a) What does this information tell you about the chemical name of the wasp sting?

(b) If there were no baking soda in the house, what other house hold substances would you use to treat as stings?

11. Does Tartaric acid helps in making cake or bread fluffy. Justify. (3)

12. Explain why? (3)

(a) Common salt becomes sticky during the rainy season.

(b) Blue vittriol change to white upon heating.

13. A compound X of sodium is commonly used in kitchen for making crispy pakoras. It is also used for curing acidity in the stomach. Identify 'X'. What is its chemical formula? State the reaction that takes places when it is heated during cooking? (3)

14. (a) Why does an aqueous solution of acid conduct electricity? (5)

(b) How does the concentration of hydrogen ions $[H_3O]^+$ changes when the solution of an acid is diluted with water?

(c) Which has higher pH. A concentrated or dilute solution of HCL?

(d) What would you observe on adding dil HCL acid to

(i) Sodium bicarbonate placed in a test tube.

(ii) Zinc metal in a test tube.