

# BHARATH COACHING CENTRE

10<sup>th</sup> CBSE

Science

Total: 50

Chemistry

1<sup>st</sup> Unit

Time: 2.00 hrs

## SECTION – A

5 x 1 = 5

1.  $AB + CD \rightarrow AD + BC$  Name of the reaction type.
2. What is known as quick lime?
3. What happens to Copper Sulphate Solution when a piece of iron metal is placed in it?
4. Name the process in which gain of electron takes place.
5. Iron gets corroded in moist air what will happen to gold and silver in similar conditions?

## SECTION – B

5 x 2 = 10

6. What are the two main draw backs of a chemical reaction?
7. Complete and balance the equations  
i)  $\text{NaOH} + ? + \text{Na}_2\text{SO}_4 + ?$       ii)  $\text{Zn} + ? + \text{ZnCl}_2 + \text{H}_2$
8. Give at least four examples of combination reactions.
9. If all containing food material gives a bad taste and smell. Give the reason and the name given to the change taking place?
10. Can a displacement reaction be also redox reaction? Explain with examples?

## SECTION – C

5 X 3 = 15

11. What happens when  $\text{CO}_2(\text{g})$  is passed through slaked lime? Write the balance chemical equation. Write the type of reaction that has occurred.
12. Why respiration considered an exothermic reaction? Explain.
13. Why these colors of copper Sulphate solution change when iron nail dipped in it? Explain the reaction.
14. Balance the equation  
 $\text{Na} + \text{O}_2 \rightarrow \text{Na}_2\text{O}$   
 $\text{Cu} + \text{HNO}_3 \rightarrow \text{Cu}(\text{NO}_3)_2 + \text{NO} + \text{H}_2\text{O}$   
 $\text{Zn} + \text{H}_2\text{SO}_4 \rightarrow \text{ZnSO}_4 + \text{SO}_2 + \text{H}_2\text{O}$
15. What you mean by precipitation reaction explain with example?

## SECTION – D

5 X 4 = 20

16. Write balanced equation for following reaction  
i) Calcium hydroxide + carbon dioxide  $\longrightarrow$  calcium carbonate + water  
ii) Barium chloride + potassium sulphate  $\longrightarrow$  Barium sulphate + Potassium chloride  
iii) Magnesium + Hydrochloric acid  $\longrightarrow$  Magnesium chloride + Hydrogen  
iv) Zinc + silver Nitrate  $\longrightarrow$  Zinc Nitrate + Silver
17. Translate the following statements into chemical equation and balance them.  
i) Hydrogen gas combines with nitrogen to form ammonia.  
ii) Sodium hydroxide reacts with hydrochloric acid to produce sodium chloride and water.

- iii) Ferrous sulphate on heating gives sulphur dioxide, sulphur trioxide, ferric oxide and water.
18. Explain i) oxidation ii) reduction iii) displacement reaction iv) decomposition reaction with example.
19. Explain corrosion, Write the reaction of corrosion takes place iron.  
How can we prevent.

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