

BHARATH COACHING CENTRE

10th CBSE

Science

Total: 50

Chemistry

1st 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 drawbacks 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 balanced chemical equation. Write the type of reaction that has occurred.
12. Why is respiration considered an exothermic reaction? Explain.
13. Why do the colors of copper Sulphate solution change when an iron nail is 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 do you mean by precipitation reaction? Explain with an 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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