

CHEMISTRY-WORK SHEET  
(INTERNATIONAL INDIAN SCHOOL, RIYADH, K.S.A)

STD X - CHAPTER-I, CHEMICAL REACTIONS & EQUATIONS

- Q1. How will you indicate the following effects in a chemical equation?
- A Solution made in water
  - Exothermic reaction
  - Endothermic reaction
- Q2. Translate the following statements into chemical equations and balance them.
- Hydrogen Sulphide gas burns in air to give water and Sulphur dioxide.
  - Phosphorous burns in air to give phosphorous pentoxide.
  - Barium Chloride reacts with zinc sulphate to give zinc chloride and barium sulphate.
- Q3. What are the Various ways in which a chemical equation can be made more informative? Give examples to illustrate.
- Q4. Write any two observations in an activity which may suggest that a chemical reaction has taken place. Give example in support of your answer.
- Q5. A silvery white metal X taken in the form of a ribbon, burns in air with a white dazzling flame to form a white powder Y. When water is added to Y, it dissolves partially to form an other substance Z.
- Name X, Y, and Z.
  - What is the name of element which combines with x to form y?
  - Write one domestic use of substance Z.
  - Write a balanced chemical equation taking place in when (i). X is Changed to Y (ii). Y changed to Z.
- Q6. State the substance (i). Oxidised (ii). Substance reduced in the following reaction  
 $\text{SO}_2 + \text{H}_2\text{S} \rightarrow 2\text{H}_2\text{O} + 3\text{S}$
- Q7. When hydrogen burns in oxygen, water is formed and when water is electrolysed, hydrogen and oxygen are produced write the type of reaction in both cases.

CHAPTER - II - ACID, BASES AND SALTS.

- Q8. What do you mean by (i). Organic acids (ii). Mineral acids, Give two examples each,
- Q9. A Substance x which is used as an antacid reacts with dilute hydrochloric acid to produce a gas Y which used in one type of fire extinguisher. Name the substance x and gas y and write a balanced equation for the reaction.
- Q10. Do basic solutions also have  $\text{H}^+(\text{aq})$  ions? Of yes, then why are they basic?
- Q11. What do you mean by family of salts? Explain with examples.

Q12. What is Plaster of Paris? How it is prepared? State its two uses why plaster of paris should be stored in moisture proof container.

#### CHAPTER - III - METALS AND NON.METALS.

Q13. What are amphoteric oxides? Give two examples.

Q14. Classify the following into (i) acidic oxides (ii). Basicoxides (iii). Neutraloxides,  $\text{Na}_2\text{O}$ ,  $\text{CO}_2$ ,  $\text{CO}$ ,  $\text{SO}_2$ ,  $\text{MgO}$ ,  $\text{N}_2\text{O}$ ,  $\text{H}_2\text{O}$ .

Q15. An element E forms an oxide  $\text{E}_2\text{O}$ , Aqueous solution of  $\text{E}_2\text{O}$  turns red litmus blue.

(I) What is the nature of oxide  $\text{E}_2\text{O}$  (II) E is a metal or a non metal?

Q16. Name a metal for each case.

(i) It does not react with cold as well as hot water but react with steam.

(ii) It does not react with any physical state of water.

Q17. Draw electron dot structures of (i)  $\text{CO}_2$  (ii)  $\text{Al}_2\text{O}_3$  (iii)  $\text{MgCl}_2$

Q18. a) Give the name and chemical formula of one ore of

(i) Copper (ii) Mercury (iii) Zinc

b) How is zinc extracted from its carbonate ore? Explain with equation.

Q19. How does the method used for extracting a metal from its ore depend upon the metal's position in the reactivity series? Explain with examples.

Q20. explain giving examples what happens when.

a)  $\text{ZnCO}_3$  is heated in the absence of air?

b) A mixture of  $\text{Cu}_2\text{O}$  and  $\text{Cu}_2\text{S}$  is heated.

Q21. a) What is an alloy? Give two examples of alloys.

b) How are the properties of an alloy different from those of the constituent elements?

#### CHAPTER - IV

Q22. a) Why do we classify elements?

b) Name the scientists who gave (i) law of triads (ii) law of octaves.

Q23. State Mendeleev's periodic law. What chemical properties were used by Mendeleev in creating his periodic table?

Q24. State any three limitations of Mendeleev's periodic classification.

Q25. State the merits of Mendeleev's classification. Why noble gases are placed in a separate group? Explain.

Q26. What is Newlands law of octaves? State its three limitations.

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