

Time – 1 1/2 hrs

Std:V11

Marks -80

Question 1

- a. Define atomicity [2]
- b. Give the formulae of the following molecules - [1]
1. Ozone 2. Bromine
- c. Write the latin names and symbols of the following elements [4]
1. lead 2. Iron 3. Gold 4. Tin
- d. Give the difference between 2O and O₂ . [2]

Question 2

The symbolic representation of potassium is ${}_{19}^{39}\text{K}$

- a. What is its atomic number and mass number? [2]
- b. Differentiate between atomic number and mass number. [2]
- c. Give the electronic configuration of potassium and draw the atomic structure . [5]

Question 3

- a. What is electrovalent bond ? [2]
- b. With the help of diagram show the bond formation in sodium chloride . [3]
[At. Number of Na =11, Cl = 17]
- c. Name the cation and anion formed . [1]
- d. How does a covalent bond differ from an electrovalent bond ? [2]

Question 4 [12]

Give reasons;

- Acids are good conductors of electricity.
- Copper cannot replace hydrogen from acid.
- Noble gases are monoatomic.
- Acetic acid is considered as a monobasic acid.
- Zinc hydroxide is a base but not an alkali.
- An atom is electrically neutral.

Question 5

A reaction is occurring between silver nitrate and sodium chloride.

- Name the chemical reaction taking place here and define it. [3]
- Give a balanced chemical equation for the above reaction. [2]
- Name the products formed in this reaction. [2]
- Define 1] a catalyst 2] a precipitate [2]

Question 6

- How do we represent a hydronium ion? How is it formed? [3]
- Differentiate between a dilute acid and concentrated acid? [3]
- Water should never be poured into an acid directly. why? [2]
- Balance the following equations [3]
 - $P_2O_5 + H_2O \longrightarrow H_3PO_4$
 - $Na + O_2 \longrightarrow Na_2O$
 - $NaOH + CuSO_4 \longrightarrow Cu(OH)_2 + Na_2SO_4$

Question 7

- a. List two uses each of sulphuric acid sodium hydroxide [2]
- b. What is aquaregia? [2]
- c. what is neutralisation reaction? Explain with an example [3]
- d. Define antacid . Give an example [1]
- e. Define acidity of a base [2]

Question 8

- a. What do you understand by the PH value of a solution ? PH value of some substances are given as 2,7 and 13. Classify them into acidic basic and neutral. [3]
- b. Name any two common indicators used in our laboratory . Explain their colour change in acidic and basic medium. [3]
- c. Give the chemical name and formulae of the following salts [3]
 - 1. Washing soda 2. Nitre 3. Smelling salt
- d. Identify and write basic and acidic radicals present in each salt given below [3]
 - 1. potassium sulphate 2. Ammonium chloride 3. sodium phosphate