

**X STD  
SCIENCE**

**KH BOYS MAT HR.SEC.SCHOOL - THENNANDIYALAM  
CHEMISTRY UNIT WISE TEST - 2019**

**60 MARKS**

**Unit 7,8,& 9**

**I : CREATIVE AND INTERIOR ONE MARKS:**

**15x1=15**

- The process of coating the surface of metal with a thin layer of zinc is called \_\_\_\_\_.  
a) painting b) thinning c) galvanization d) electroplating
- \_\_\_\_\_ is an important metal to form amalgam. a) Ag b) Hg c) Mg d) Al
- When pressure is increased at constant temperature the solubility of gases in liquid \_\_\_\_\_.  
a. No change b. increases c. decreases d. no reaction

**TRUE OR FALSE**

- Moseley's periodic table is based on atomic mass.
- The gram atomic mass of an element has no unit
- 1 mole of Gold and Silver contain same number of atoms
- Ionic radius increases across the period from left to right.
- Solutions which contain three components are called binary solution

**FILL UP:**

- The average atomic mass of hydrogen is \_\_\_\_\_ amu.
- One mole of any gas occupies \_\_\_\_\_ ml at S.T.P
- The sum of the numbers of protons and neutrons of an atom is called its \_\_\_\_\_
- Noble gases show no tendency to accept electrons because the outer s and p orbitals of noble gases are \_\_\_\_\_.
- Example for liquid in solid type solution is \_\_\_\_\_
- Solubility is the amount of solute dissolved in \_\_\_\_\_ g of solvent.
- In exothermic process, solubility of solid solute \_\_\_\_\_ with increase in temperature.

**II : ANSWER BRIEFLY :**

**15x2=30**

- A solution is prepared by dissolving 45 g of sugar in 180 g of water. Calculate the mass percentage of solute.
- 16 grams of NaOH is dissolved in 100 grams of water at 25°C to form a saturated solution. Find the mass percentage of solute and solvent.  
Mass of the solute (NaOH) = 16 g Mass of the solvent H<sub>2</sub>O = 100 g
- Write the different types of isotopes of oxygen and its percentage abundance
- What is Molar volume of a gas?
- Define: Relative atomic mass.
- Calculate the gram molar mass of the following. H<sub>2</sub>O
- Calculate the number of moles in  $1.51 \times 10^{23}$  molecules of NH<sub>4</sub>Cl
- The aquatic animals live more in cold region Why
- Give an example each i) gas in liquid ii) solid in liquid iii) solid in solid iv) gas in gas
- Classify the following substances into deliquescent, hygroscopic.
- Conc. Sulphuric acid, Coppersulphatepenta hydrate, Silica gel, Calcium chloride, and Gypsum salt.

12. What is rust? Give the equation for formation of rust.
13. All ores are minerals; But all minerals are not ores. Why?
14. Define Atomic Radius
15. Write the Action of Acids: a) With dilute HCl and dilute  $H_2SO_4$
16. Name the acid that renders aluminium passive. Why?

**III : LONG ANSWER :-****3x5=15**

1. Derive the relationship between Relative molecular mass and Vapour density.
2. Calculate the number of molecules in 11.2 litre of  $CO_2$  at S.T.P **And** Calculate the % of each element in calcium carbonate. (Atomic mass: C-12, O-16, Ca -40)
3. The electronic configuration of metal A is 2,8,18,1.  
The metal A when exposed to air and moisture forms B a green layered compound. A with con.  $H_2SO_4$  forms C and D along with water. D is a gaseous compound. Find A,B,C and D.
4. Write notes on various factors affecting solubility.
5. 'A' is a blue coloured crystalline salt. On heating it loses blue colour and to give 'B'. When water is added, 'B' gives back to 'A'. Identify A and B, write the equation.



**All the best dears**  
**Prepare well for all the upcoming exams**  
**Try and prepare to get Centum in Science**

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