

# EQUILIBRIUM CLASSES

Sample Paper – 2014  
Class – XI  
Subject – Chemistry

TOPIC – Atomic Structure & Some Basic Concept Of Chemistry

Attempt all questions.

- Q-1 (a) Write electronic Configuration of Cr. & Cu in s.p.d.f.  
(b) What is the value of m, s, and l for n=3 [4]
- Q-2 (a) What is the de Broglie's equation and explain dual nature of electron.  
(b) Calculate the Value of n, l, m & s for last electron of Zn and Vanadium. [4]
- Q-3 Write Short notes on-  
(a) Heisenberg uncertainty principle.  
(b) A Chemical Compound has following% composition-  
K = 22.8%, Fe = 15.2%, C = 19.5%, N = 22.8%  
Calculate simple empirical formula. [4]
- Q-4 (a) 2.8g of KOH is dissolved in water to give 200cc of solution.  
Calculate the molarity of KOH in solution. [2]  
(b) Calculate the molarity of 20% solution of KOH by mass where density is  $1.02\text{ml}^{-1}$ . [2]
- Q-5 (a) How many electrons are present in 1 kg. [1]  
(b) What will be volume of  $\text{H}_2$  measured at STP that would be liberated when 8 g of calcium is completely reacts with water. [3]
- $\text{Ca} + 2\text{H}_2\text{O} \rightarrow \text{Ca}(\text{OH})_2 + \text{H}_2$**

Q-6 Why 2d orbital is not possible.

Q-7 What is Hydrogen Spectrum explain with Lyman, Balmer, Pauchen & Pfund series.

Q-8 Explain Azimuthal Quantum Number.

Q-9 Write main postulates of Bohr's Model.

Q-10 Explain the limitations of Rutherford Model.

**Our aim is to give a right path towards success**

**Contact No- 9 4 1 5 5 7 3 3 4 2**

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