



## DEPARTMENT OF CHEMISTRY

Course Code & Name: **23CHT101-ENGINEERING CHEMISTRY**

Course Faculty : Dr. M. Manjuladevi

## Puzzles/In Class Activities

### UNIT -I-ELECTROCHEMISTRY

#### Topic: Over view of Electrochemistry

Electrochemistry Quick Match Challenge!

Game Rules:

You're a budding electro chemist racing against the clock! Match the 8 key terms (left column) to their correct descriptions (right column) as fast as you can. Aim to finish in under 60 seconds to "unlock" expert status. Write down your matches like A-3, B-1, etc. (Answers revealed at the bottom— no peeking!)

Terms (A-H):

- A. Nernst equation
- B. Standard hydrogen electrode
- C. Calomel electrode
- D. Glass electrode
- E. Electro chemical series
- F. Galvanic cell
- G. Electrolytic cell
- H. Electroplating

Descriptions (1-8):

1. A reference electrode using mercury and mercury (I)chloride,often used in pH measurements.
2. The process of depositing a metal layer (like gold)on a surface using electrolysis.
3. A cell that uses electrical energy to drive a non-spontaneous chemical reaction.
4. A reference electrode with a potential defined as zero, used to measure other electrode potentials.
5. An equation that relates electrode potential to concentration and temperature.
6. A voltaic cell that converts chemical energy to electrical energy spontaneously.
7. A list of elements arranged by their standard electrode potentials.
8. An ion-selective electrode used specifically for measuring pH.

Answers(Spoiler-Scroll to reveal):

A-5,B-4,C-1,D-8,E-7,F-6,G-3,H-2.