CBSE Class 12 Chemistry – Quick Formula Sheet (Last Minute Revision)

Quick Formula Sheet for CBSE Class 12 Chemistry 2026

Molarity (M)

M = Number of moles of solute / Volume of solution (in litres)

Molality (m)

m = Moles of solute / Mass of solvent (kg)

Mole Fraction

X_a = Moles of component / Total moles

Raoult's Law

$P_1 = X_1 \times P°_1$

Relative Lowering of Vapour Pressure

$(P° – P) / P° = X_2$

Electrochemistry

Nernst Equation

$E = E° – (0.0591 / n) \log Q$

Cell Potential

Ecell = E°cathode − E°anode

Conductivity

$\kappa = 1 / R \times (l / A)$

Molar Conductivity

$\Lambda m = \kappa \times 1000 / C$

Chemical Kinetics

Rate Law

$Rate = k[A]^n$

First Order Reaction

$k = 2.303 / t \log (a / a – x)$

Half-Life (First Order)

$t_{1/2} = 0.693 / k$

Surface Chemistry

Freundlich Adsorption Isotherm

$x/m = kP^{1/n}$

Coordination Compounds

Effective Atomic Number (EAN)

EAN = Atomic number − Oxidation state + Electrons donated

Important Organic Conversions to Revise

- Alcohol → Aldehyde/Ketone (Oxidation)
- Aldehyde → Carboxylic Acid
- Haloalkane → Alcohol (Hydrolysis)
- Benzene → Nitrobenzene (Nitration)
- Carboxylic Acid → Ester (Esterification)

Important Named Reactions

- Aldol Condensation
- Cannizzaro Reaction
- Friedel–Crafts Reaction
- Sandmeyer Reaction
- Rosenmund Reaction

Electrochemical Series Trend

- More negative E° → stronger reducing agent
- More positive E° → stronger oxidizing agent