(i) Natural and man-made catalysts:

(a) Natural catalysts: Enzymes and their types, co-enzymes, co-factor and prosthetic group, Denatination of enzymes.

(b) Man-made catalysts: Raney Nickel, vanadium peroxide

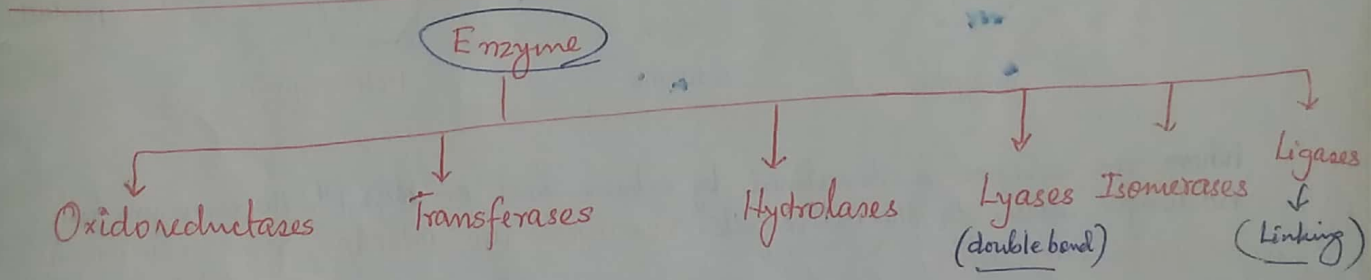
(c) Polymers: natural polymers and synthetic polymers

(d) Natural polymers: carbohydrates, proteins, and rubber
Synthetic polymers: Synthetic rubber, nylon, polyethylene polytetrafluoroethylene, Polyester, Rayon

(e) Metals and Metallurgy: Role of metals in our life with special mention of iron, recovery of iron from its ores, stainless steel, rusting of iron and its prevention.

Enzymes are macromolecular biological catalysts. Enzymes are protein

Based on the chemical reactions:



EC Numbers: Enzyme Commission - Nomenclature of enzymes by International ~~body~~ "Union of Biochemistry and Molecular Biology"

EC 1: Oxido-reductases: catalyze oxidation/reduction reactions
EC 2: Transferases: transfer of a functional group
EC 3: Hydrolases: catalyze the hydrolysis of various bonds
EC 4: Lyses: cleavage of bonds by means other than hydrolysis and oxidation
EC 5: Isomerases, catalyse isomerization changes within a single molecule
EC 6: ligases: Join two molecules with a ~~single~~ covalent bond.