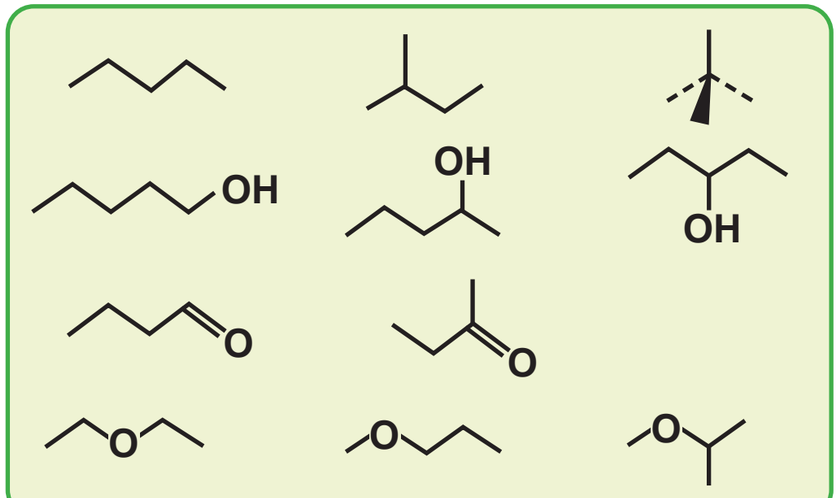
PHYSICS WALLAH

CONSTITUTIONAL ISOMERISM

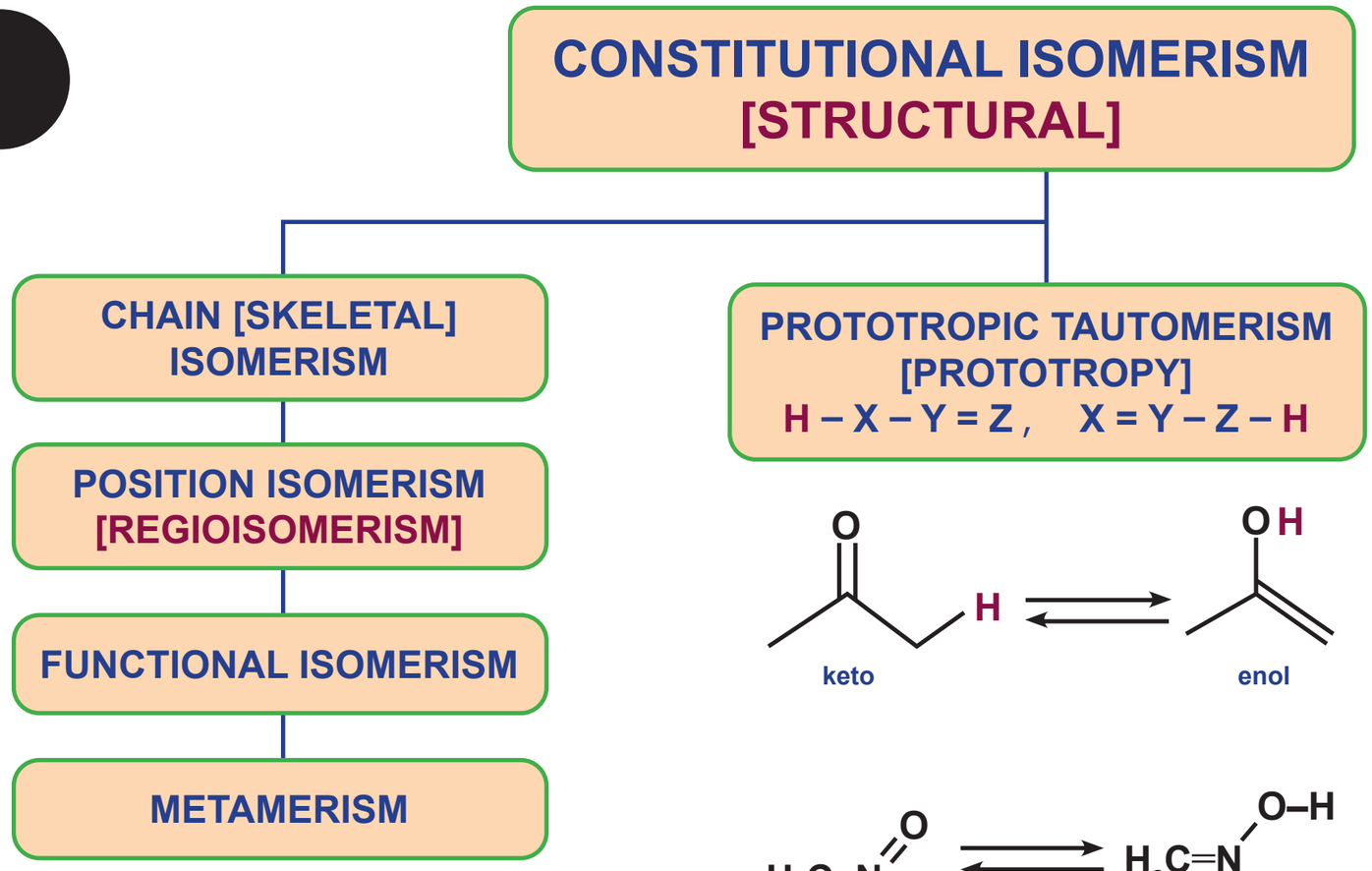


Pair of functional isomers:

- Alcohols and ethers ($C_nH_{2n+2}O$)
- Aldehydes and ketones ($C_nH_{2n}O$)
- Carboxylic acids and esters ($C_nH_{2n}O_2$)
- 1°, 2° & 3° amines ($C_nH_{2n+3}N$)

$$DBE = \frac{\sum n\,(v-2)}{2} + 1 = \text{sum of no. of } \pi \text{ bonds + rings in the molecule}$$

(n is no of atoms of particular element & v is corresponding valency in given molecule).



Q. The number of structural isomers possible from the molecular formula is

(a) 4 (b) 5 (c) 2 (d) 3

Q. Identify the compound that exhibits tautomerism

(a) 2-Pentanone (b) Phenol
(c) 2-Butene (d) Lactic acid

Q. The number of structural isomers for C_6H_{14} is

(a) 3 (b) 4 (c) 5 (d) 6