

CONSTITUTIONAL ISOMERIS

CONSTITUTIONAL ISOMERISM [STRUCTURAL]

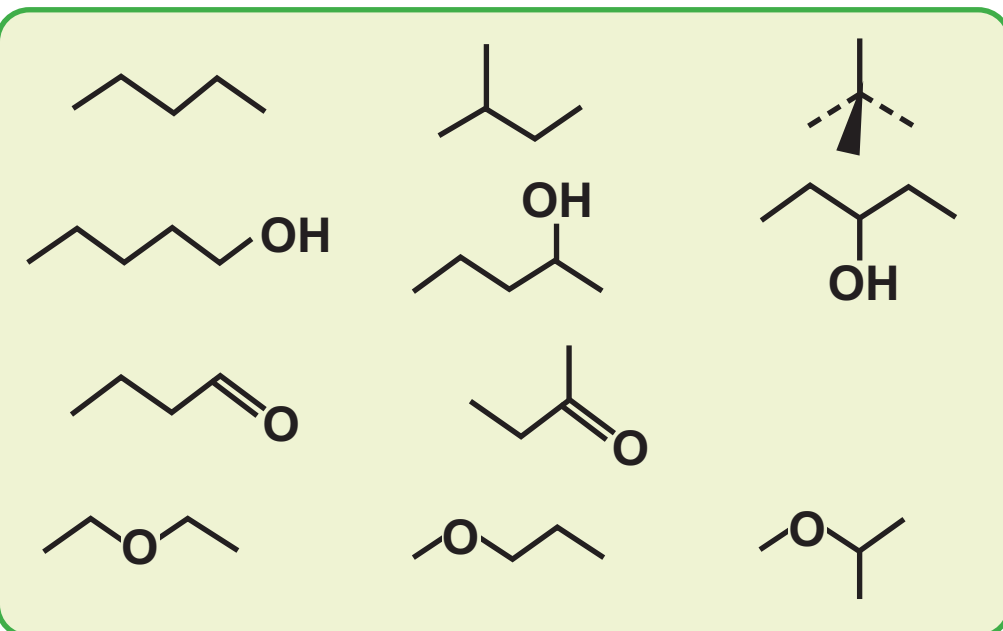
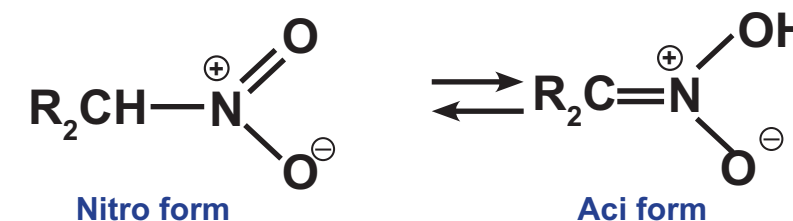
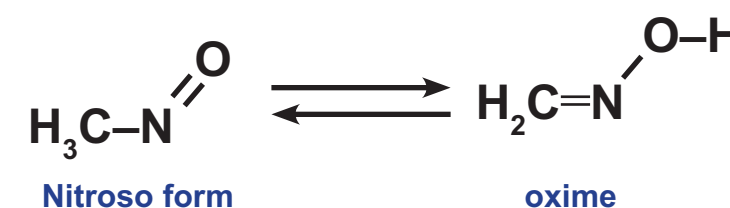
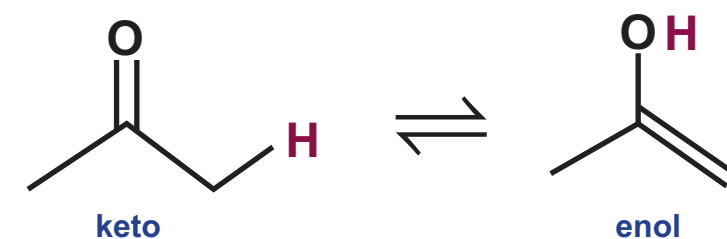
CHAIN [SKELETAL] ISOMERISM

POSITION ISOMERISM [REGIOISOMERISM]

FUNCTIONAL ISOMERISM

METAMERISM

PROTOTROPIC TAUTOMERISM [PROTOTROPY]



Pair of functional isomers:

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

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

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 [NEET 2015 (Re)]

- (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