

**Topic: Krebs Cycle**  
**Class: B.Sc Part –III (Hons.)**  
**Paper- V**  
**Group – A**


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## Krebs Cycle

- Krebs cycle is also known as TCA cycle
- Krebs cycle essentially involves the oxidation of acetyl CoA to CO<sub>2</sub> and H<sub>2</sub>O.
- Krebs cycle –the central metabolic pathway
- The Krebs cycle is the final common oxidative pathway for carbohydrates, fats, amino acids.

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- Krebs cycle supplies energy & also provides many intermediates required for the synthesis of amino acids, glucose, etc.
  - Krebs cycle is the most important central pathway connecting almost all the individual metabolic pathways.

- Definition
- Citric acid cycle or TCA cycle or tricarboxylic acid cycle essentially involves the oxidation of acetyl CoA to  $\text{CO}_2$  &  $\text{H}_2\text{O}$ .
- Location of the TCA cycle
- Reactions of occur in mitochondrial matrix, in close proximity to the ETC.

## Reactions of TCA cycle

- Oxidative decarboxylation of pyruvate to acetyl CoA by PDH complex.
- This step is connecting link between glycolysis and TCA cycle.