

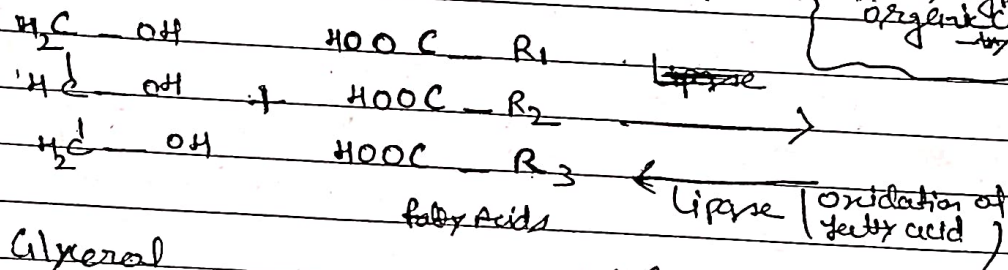
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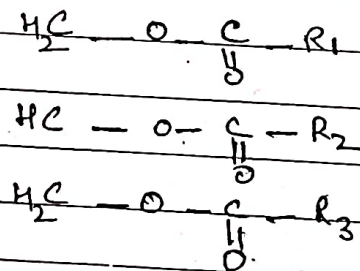
- Anaplastic cells → 1) Acetyl CoA → Cholesterol synthesis
 2) α -Ketoglutarate (2-oxoglutarate) → Amino acid synthesis
 3) Succinyl CoA → Porphyrin synthesis
 involved in the synthesis of Cytochromes - Chlorophyll

Lipid Metabolism → Lipids are stored in plants in oil or oil body.

→ Lipids are triglycerides of fatty acids.
 → fatty acids are long hydrocarbon chains with a carboxylic acid group at the end.

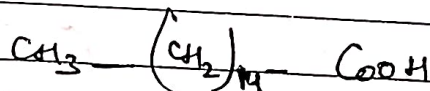


R - remainder
 R - alkyl group in organic chemistry



triglyceride

Palmitic Acid



non-polar

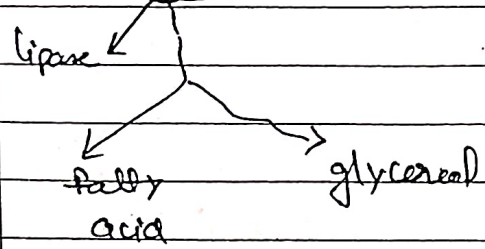
polar

hydrophobic group

hydrophilic group

→ Fatty acids are hydrophobic due to long non-polar hydrocarbon chain & require minimum energy in space & are regarded as amphipathic (hydrophobic)

oligosome lipid → lipid storage organelle inside plant

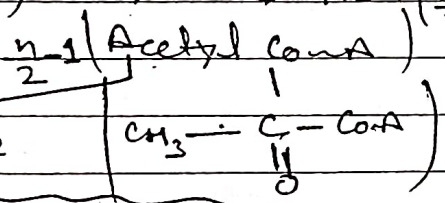


β oxidation of fatty Acid Glyoxisomes

one Acetyl gp. $(\frac{n}{2}-1)$ not FAD $(\frac{n}{2}-1)$
 as $(\frac{n}{2}-1)$ not $(\frac{n}{2}-1)$ $\rightarrow$ FADH $(\frac{n}{2}-1)$

In fats carbon is present in most reduced state because more no. of H atom

Now this Acetyl CoA enters in to TCA cycle



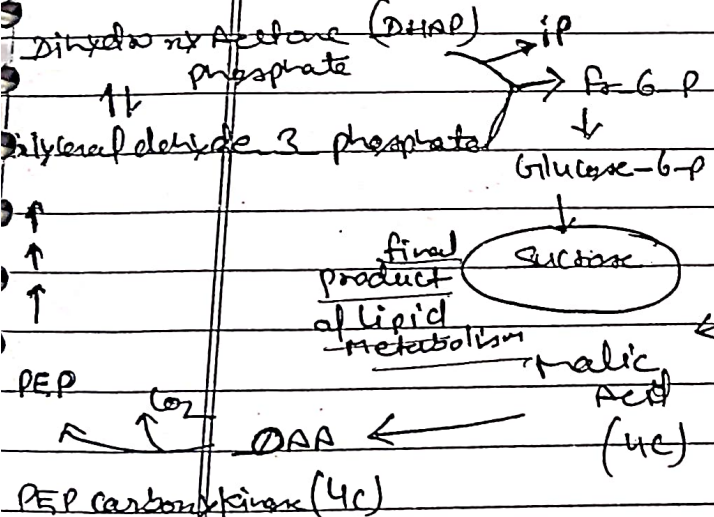
fatty acid ~~oxidation~~ activation
 fatty acid + ATP

CoA → fatty acyl Synthetase

Acyl CoA + AMP + Pyrophosphate
 (16C) (2ip)

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Sucrose is mostly transported food in plants



- Lipids stored in Endosperm or Cotyledons of Sunflower, Peanut (Groundnut) Castor seed.
- During seed germination fats can not be transported to growing parts due to hydrophobic nature. So they are first converted into Carbohydrate i.e. sucrose which can be easily transported.
- By one Glyoxylate cycle 4C are provided for Carbohydrate synthesis

Q. Which of the following