

SUBJECT - CHEMISTRY

CLASS - B.Sc (Hons) PART - I

PAPER - IV GROUP - B

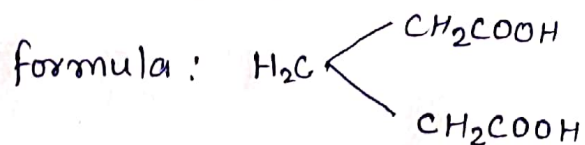
TOPIC - The Preparation and Properties of Glutaric acid

Dr Hari Mohan Prasad Singh

Department of Chemistry

Dr. L.K.V.D College Tejpur Samastipur

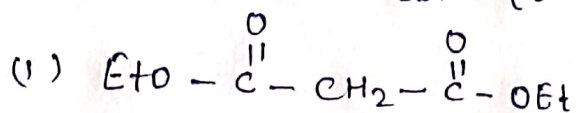
### GLUTARIC ACID



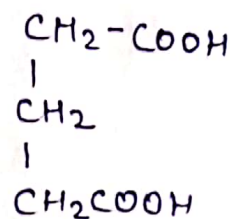
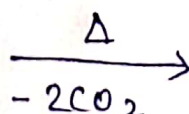
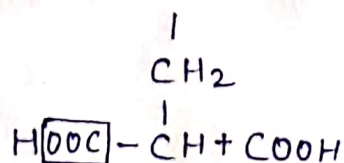
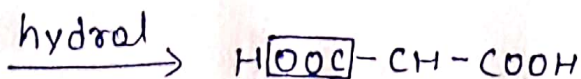
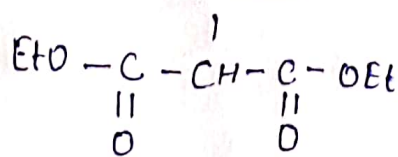
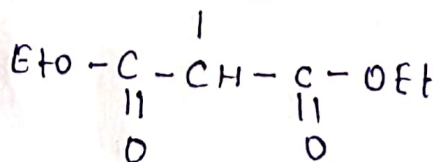
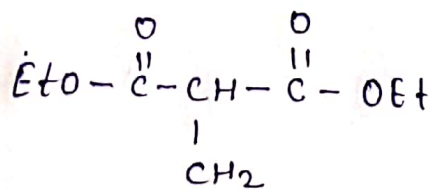
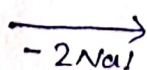
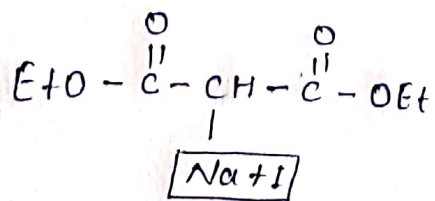
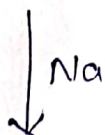
IUPAC name: Pentane dioic acid

Preparation:

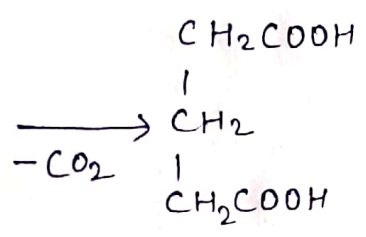
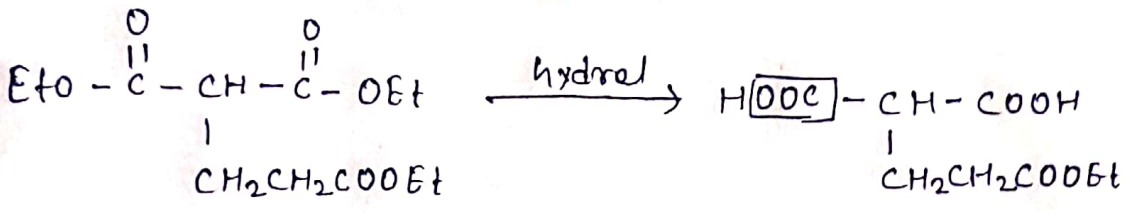
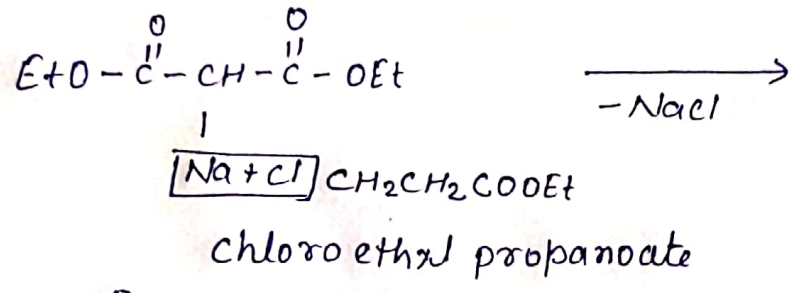
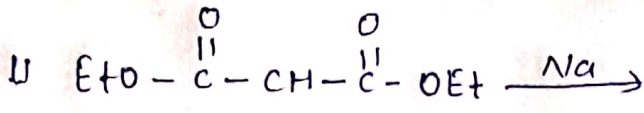
(a) from Malonic ester (or Diethyl malonate)



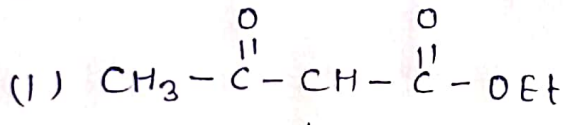
Malonic ester



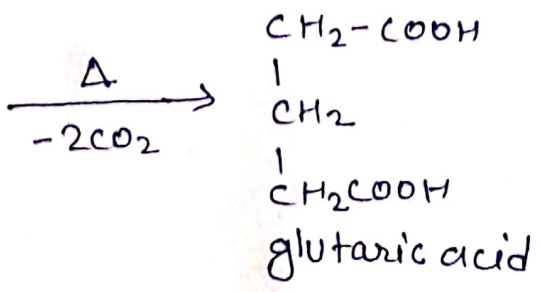
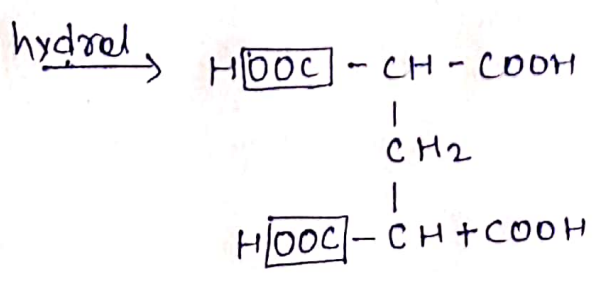
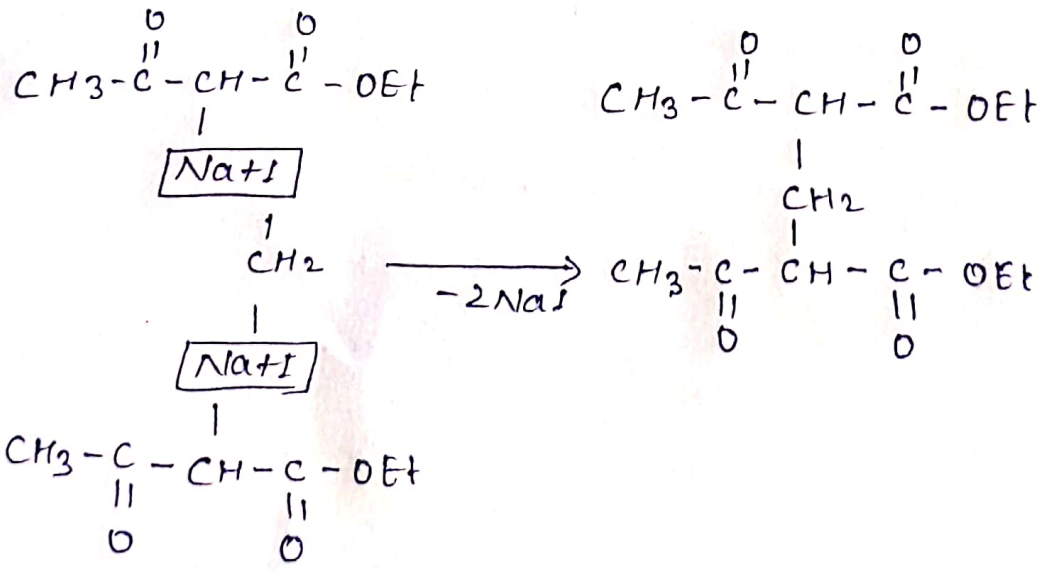
glutaric acid

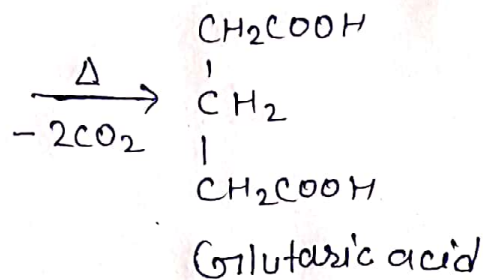
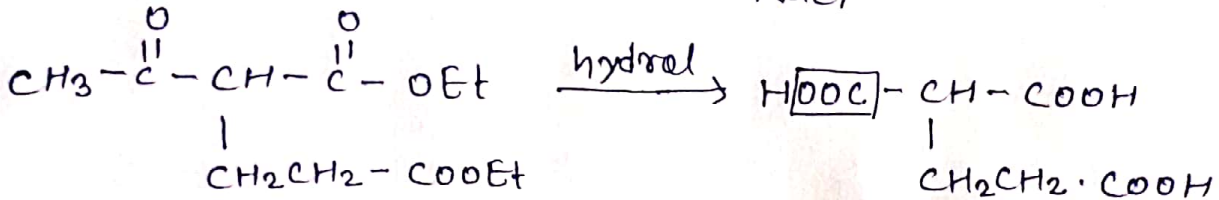
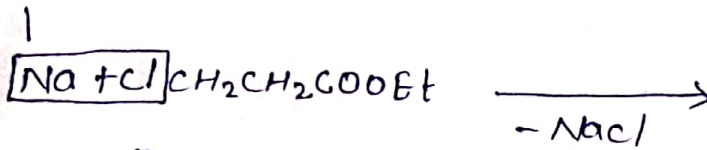
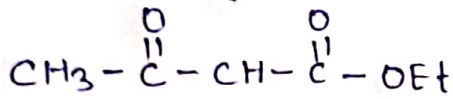
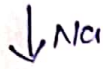
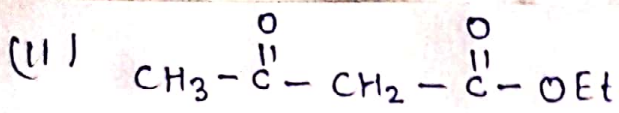


(b) from aceto acetic ester (or ethyl acetoacetate):



↓ Na Ethylacetoacetate





Properties:

(1) It is a crystalline solid having m.p.  $97^\circ$  Soluble in water and alcohol

(2) Being a dibasic acid, it forms two series of acid derivatives

