

SUBJECT - CHEMISTRY

CLASS - B.Sc(Hons) PART-II

PAPER - IV GROUP-B

TOPIC The effect of heat on carboxylic acids

Dr Hari Mohan prasad Singh

Department of Chemistry

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

Q Discuss the effect of heat on carboxylic acid indicating the cases falling under Blanc's rule.

or what is Blanc's rule? Illustrate with examples.

Ans Blanc's rule: This rule is applicable to dicarboxylic acid when heated alone or with ethanoic anhydride at  $300^\circ$ , 1,4 or 1,5-dicarboxylic acid when heated undergoes only dehydration ( $-H_2O$ ) forming anhydride whereas 1,6 or 1,7 dicarboxylic acid when heated undergoes dehydration ( $-H_2O$ ) as well as decarboxylation ( $-CO_2$ ) forming a cyclic ketone. In the former case, there is no change in the number of C-atoms whereas in the latter case, the number of C-atoms decreases. However in both, cases we get cyclic compounds.

