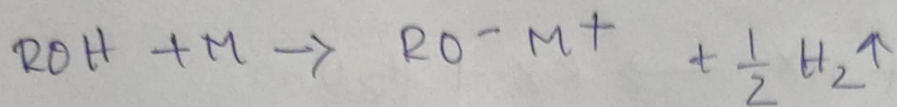
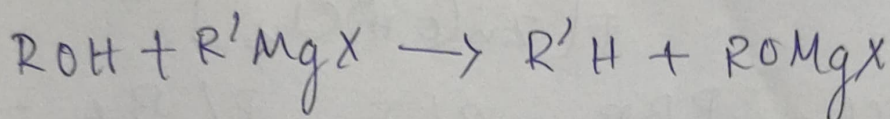


A) Reaction replacing H atom

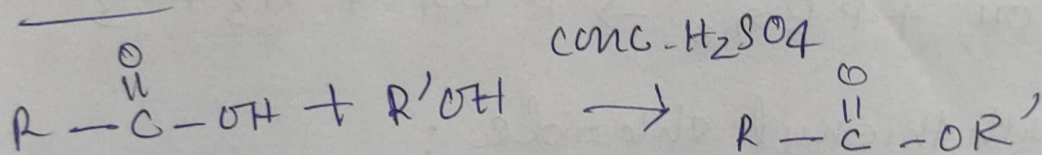
1) With (Na, K, Al)



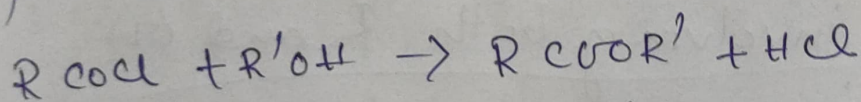
2) With Grignard's reagent:



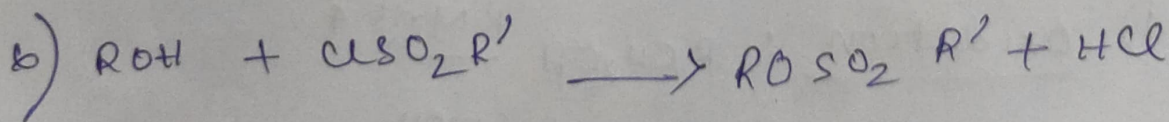
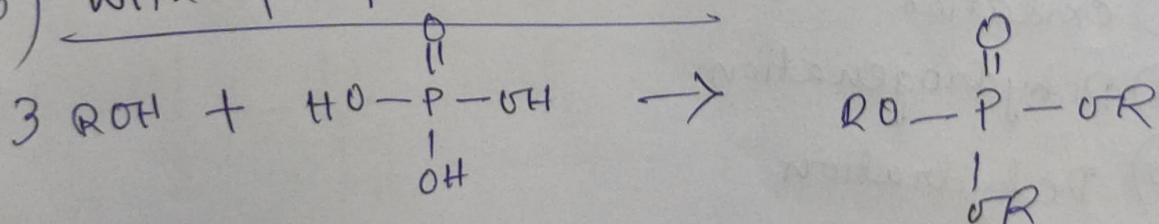
3) With organic acids in presence of conc.  $H_2SO_4$   $\rightarrow$  esters



4) With acid chlorides or anhydride - esters:

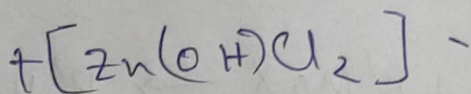
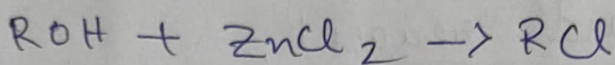
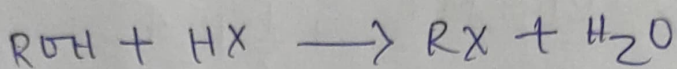


5) With phosphoric acid:

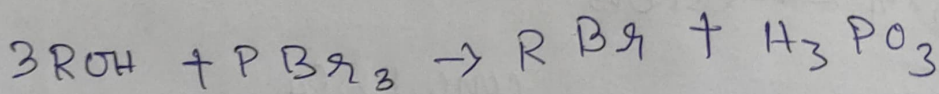
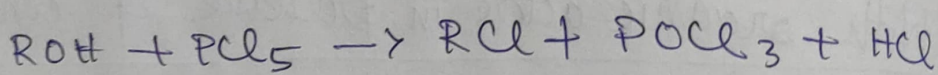


B) Reactions Replacing OH gp:

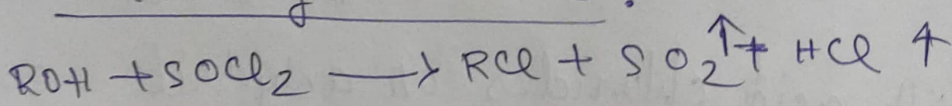
1) With HX (I<sup>-</sup>, Br<sup>-</sup>, Cl<sup>-</sup>)



2) With PCl<sub>5</sub>, PBr<sub>5</sub>, PI<sub>3</sub>, PI<sub>5</sub>:



3) With thionyl chloride:



C) Reaction involving both R and OH groups:

1) Oxidation

2) Dehydrogenation

3) Dehydration

