

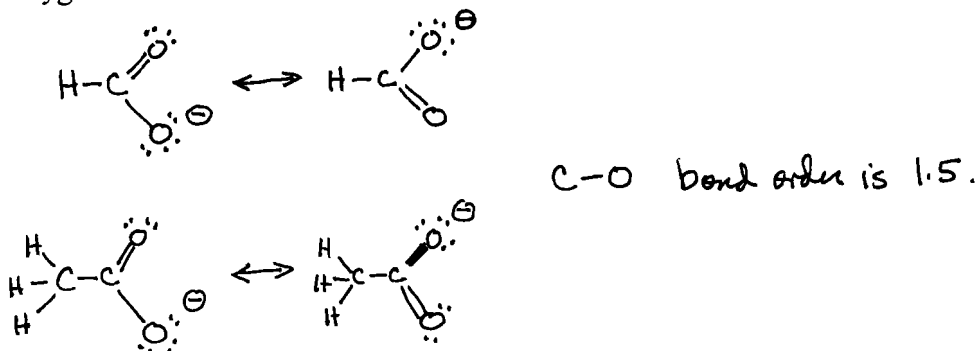
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CHEMISTRY 103
QUIZ #2

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1. Formic acid (HCO_2H) and acetic acid ($\text{CH}_3\text{CO}_2\text{H}$) are the simplest of carboxylic acids (H is bonded to O). Each partially dissociate in water to formate (HCO_2^-) and acetate (CH_3CO_2^-) ions, respectively along with a hydrated proton.

Write Lewis structures of the formate and acetate ions. What is the bond order of the carbon-oxygen bonds?



2. Write Lewis structures, including resonance forms when necessary, and indicate formal charges on all atoms of the following:

