

Organic chemistry II workshop

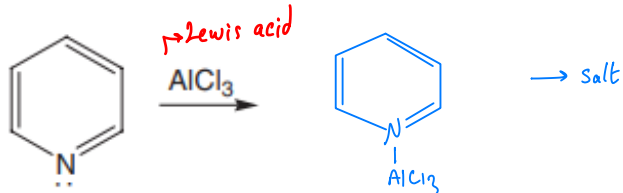
student name (in Arabic):

sec.#

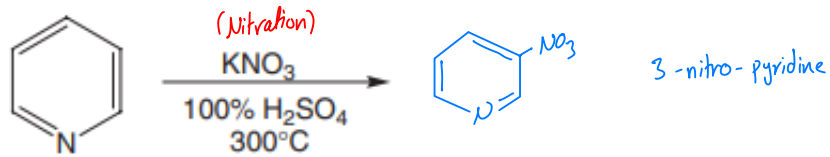
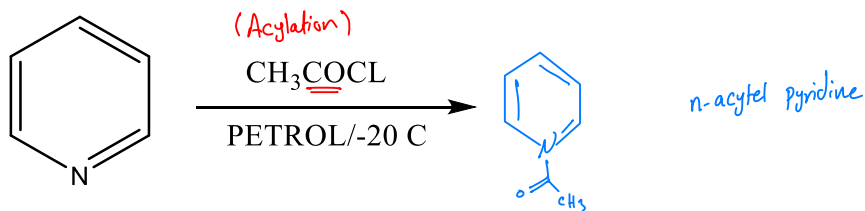
seat no.:

instructor: Dr. Dana Atoum

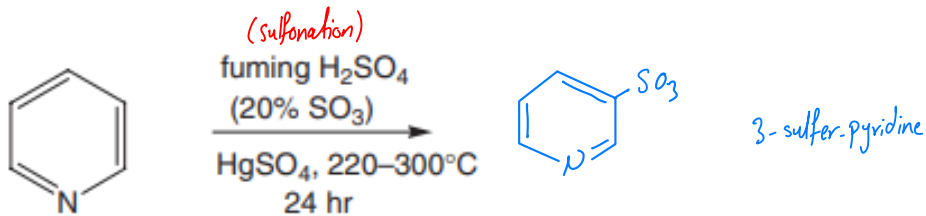
Q1: Complete the following reaction with the correct answer:



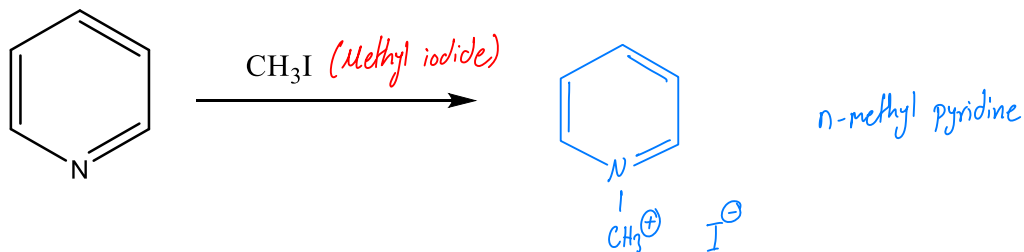
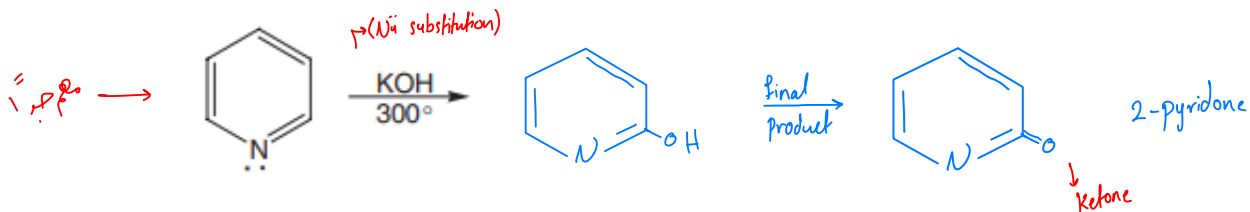
Carbonyl group \rightarrow acylation

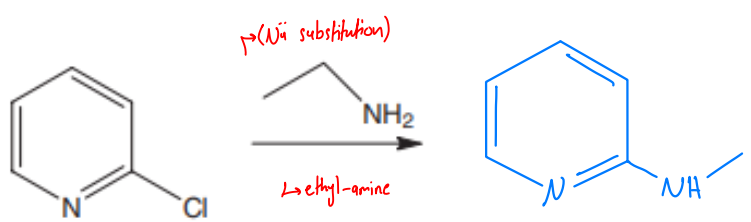
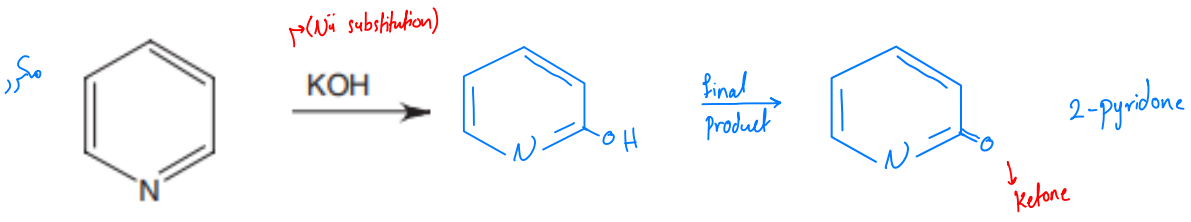
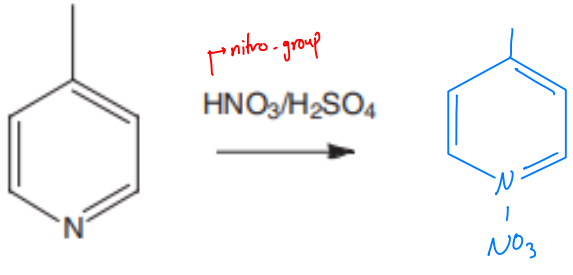
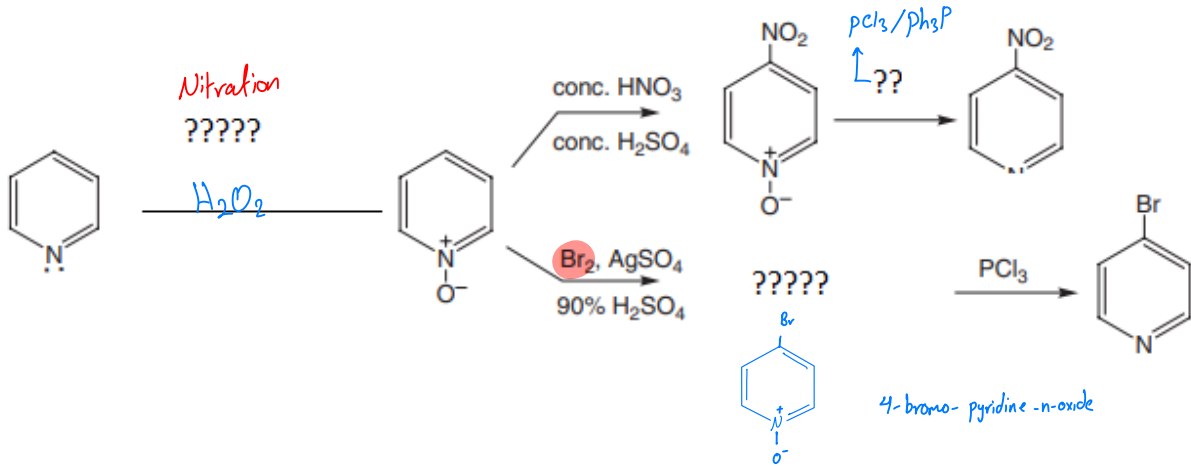


على ال meta position



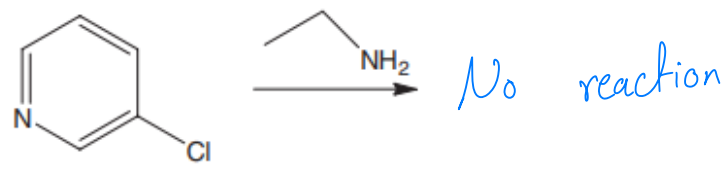
على ال meta position



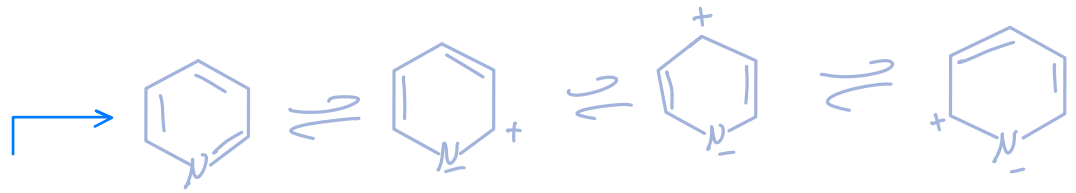


رج محل مکان ال Cl

2-chloro-pyridine

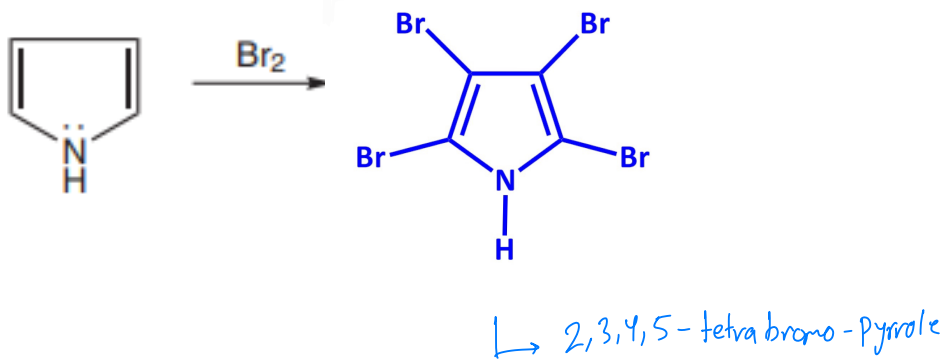
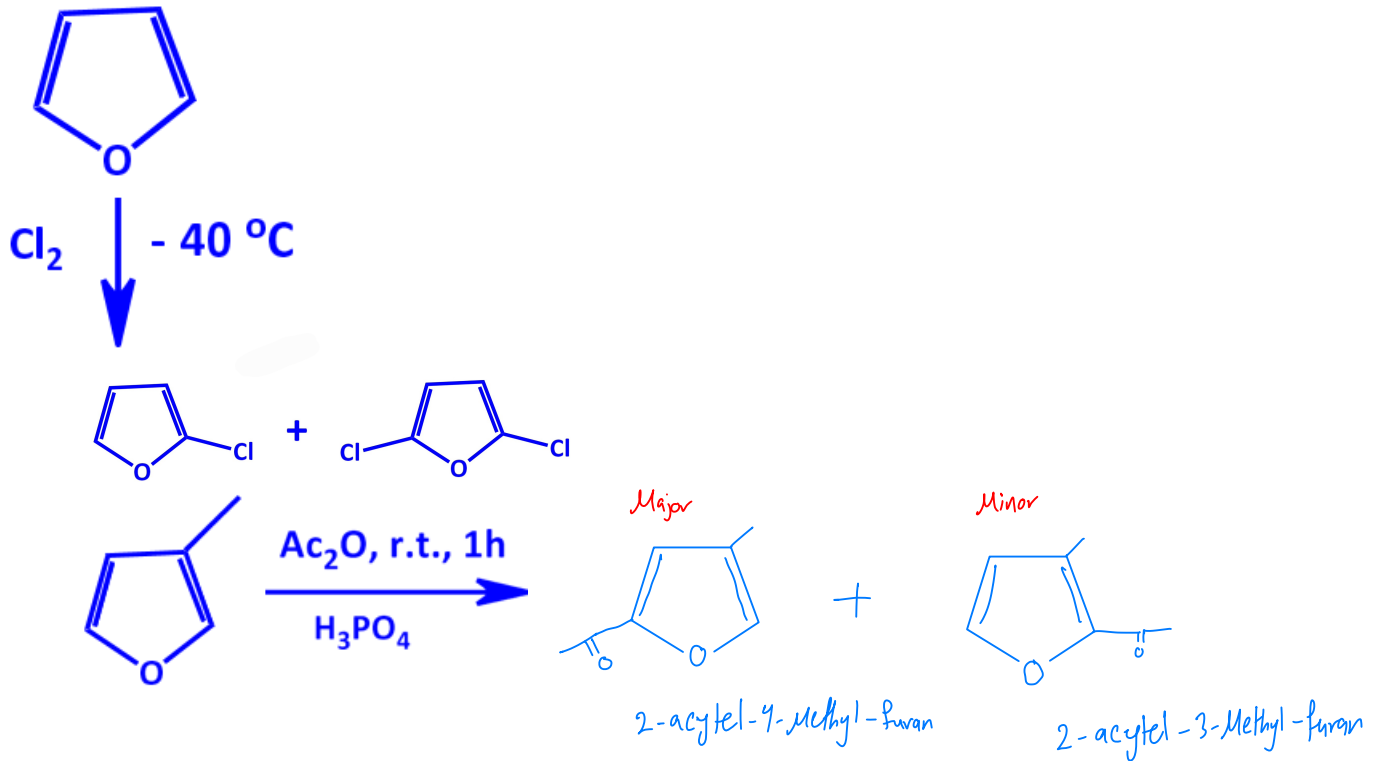
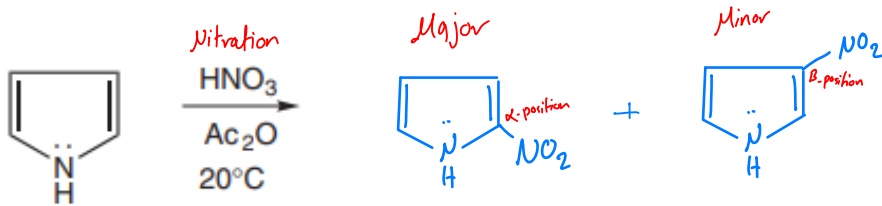


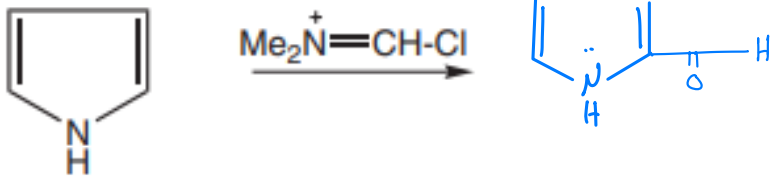
على ال meta position



Q2: Draw 3 resonance forms for pyridine

Q2: Draw 3 resonance forms for pyrrole





Vilsmeier-Haack reaction

