Your Name: ANSWER KEY [printed]

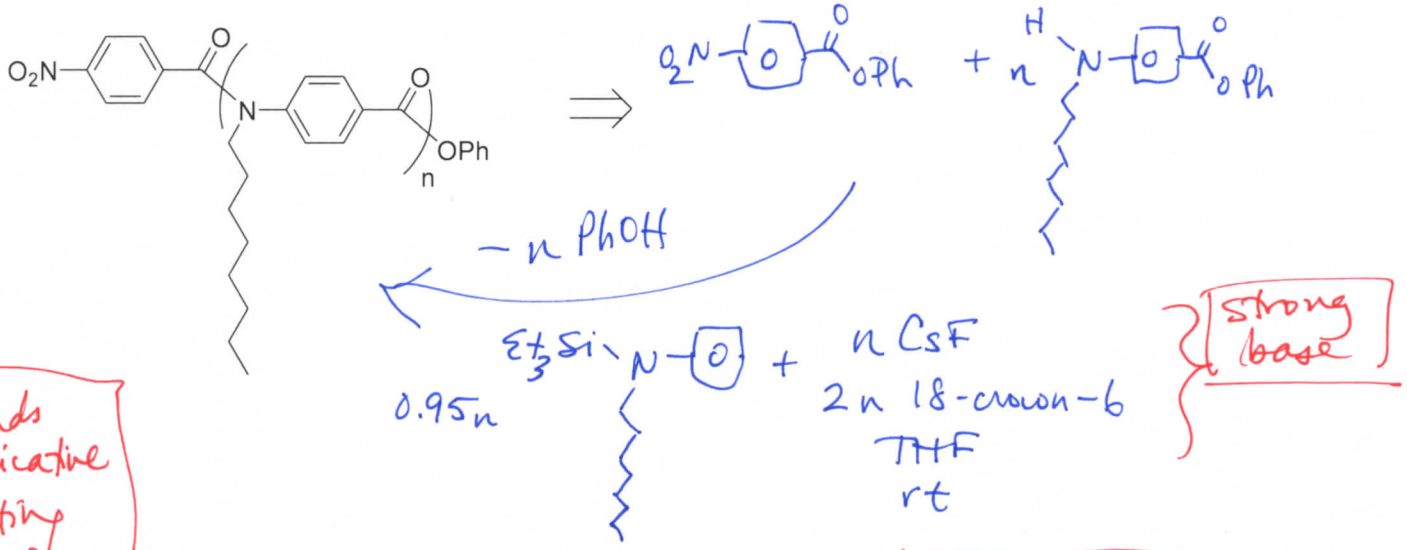
"On my honor, as an Aggie, I have neither given nor received unauthorized aid on this academic work."

_____[signature]

Quiz #6, February 27, 2014, 10 pts
Polymer Chemistry, CHEM 466, Spring 2014
Texas A&M University, College Station, TX, USA

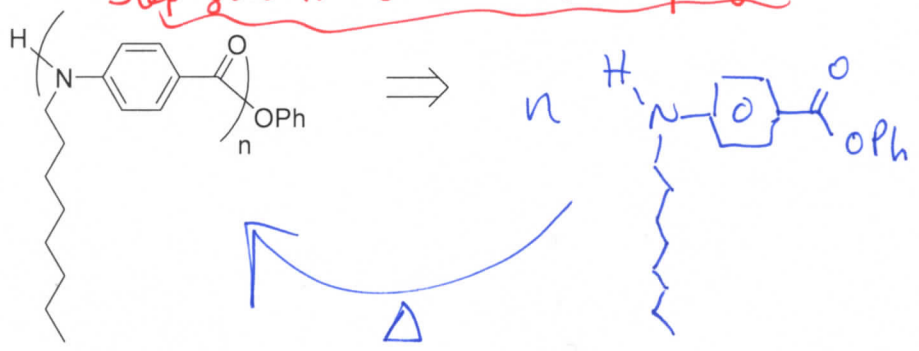
Provide retrosyntheses for the following two polymers. You should begin by recognizing that one of the polyamides is likely to be produced by a chain-growth polycondensation approach, whereas the other could be derived by a step-growth condensation polymerization strategy. [5 points per each]

chain-growth polycondensation



chain ends are indicative of starting materials + polym mechanism

step-growth condensation polym.



− n-1 PhOH