

CHEM UN2045 – TPS 5

Circle the Date: Apr 23rd 2024

*Instructions: The assignment is designed to take 20 min to complete. However, you have until the end of class (1:10-2:25 PM) to complete the assignment. There is **no discussion** with partners or any other classmates during the class period for the assignment. You will **submit only 1 copy with only your name on it to ltf2126@columbia.edu by 2:25PM. This is a closed note assignment.** You may only use pen or pencil, and paper. Clarity in your 3-D drawings is required – ambiguous or unclear drawings will be given no credit. It is strongly suggested that you work your answers out on scratch paper and then transfer them to the TPS packet.*

Name (please print): _____

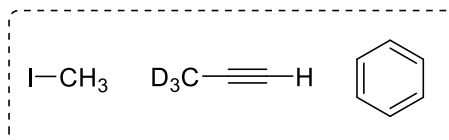
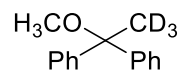
Honor pledge: I have neither given nor received aid on this examination.

Signature: _____

TOTAL (25 pts): _____

(1) Using **only the three compounds in the box** (iodomethane, deuterated propyne, and benzene), synthesize the product shown below. You may use any organic or inorganic *reagents* necessary.

Synthesize:



BLANK. Indicate if needed.