## MMC HW 8 continued in HW7

## [Extra Pts prob]

5) For real parameter  $m_1=5{\rm kg}$ ,  $m_2=5{\rm kg}$ , the known mass parameter is assumed to be  $\widehat{m_1}=7{\rm kg}$   $\widehat{m_2}=3{\rm kg}$ , Do computed torque control. and In order to reduce the position error, design adaptive controller or sliding mode controller