National Chiao Tung University Department of Electrical Engineering

Robotics: Homework 5
Due 1/5/15 Fall 2014

1. Derive the dynamic equations to compute the torque at each joint utilizing the Newton-Euler formulation for the two-link robot manipulator example in the class with the center of the mass moved to the middle in each link and with a load m held at the tip of the second link. Can the effect of the load m to the manipulator be replaced by an external force mg with the gravity g in the y direction? Discuss it.

