

Assiut University

Faculty of Engineering

Mechatronics and Robotics

Robotics

Dynamics

Text Book Problems

1. Derive the Euler-Lagrange Equations of Motion for a planar PR robot
2. Derive the Euler-Lagrange Equations of Motion for a planar RP robot
3. Find the torques at all joints of a planar RPR robot when a force of 10N is applied to its end effector. Assume the prismatic joint is horizontal.