College of Engineering & Technology

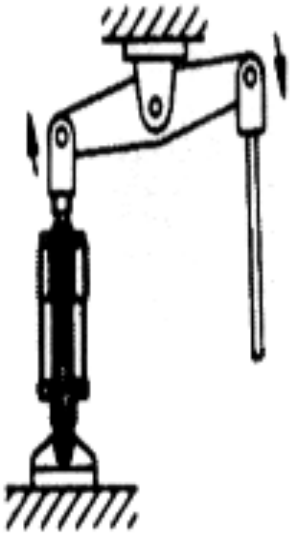
Department: Mechanical Engineering Marks: 10
Lecturer: Dr. Rola Afify Time: 3:00 - 4:00
Course Code: ME464 Date: 6/5/2014

Name: R.N.:

Answer the following questions:

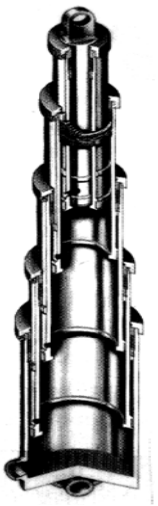
Question one (3 marks)

Why does the rod of a double-acting cylinder retract at a greater velocity than it extends for the same input flow rate?



Question two (2 marks)

Write down the words that represent each of the following:



Question three (5 marks)

A hydraulic motor has a displacement of 163 cm^3 and operates with a pressure of 69 bar and a speed of 2000 rpm. If the actual flow rate consumed by the motor is 0.006 m^3/s and the actual torque delivered by the motor is 169 N.m., find

a- η_v, η_m, and η_o b- The actual power delivered by motor

Good Luck 1/1

Dr. Rola Afify