



College of Engineering & Technology

Department: Mechanical Engineering

Marks: 20

Lecturer: Dr. Rola Afify

Time: 2:30 - 4:00

Course Code: ME464

Date: 14/5/2013

Name:

Answer the following questions:

Question one (5 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 (10 marks)

Find the flow rate that an axial piston pump delivers at 1000 rpm. The pump has nine 15-mm-diameter pistons arranged on a 125-mm-diameter piston circle. The offset angle is set at 10° and the volumetric efficiency is 94%.

Question three (5 marks)

Write down the words that represent each of the following:

