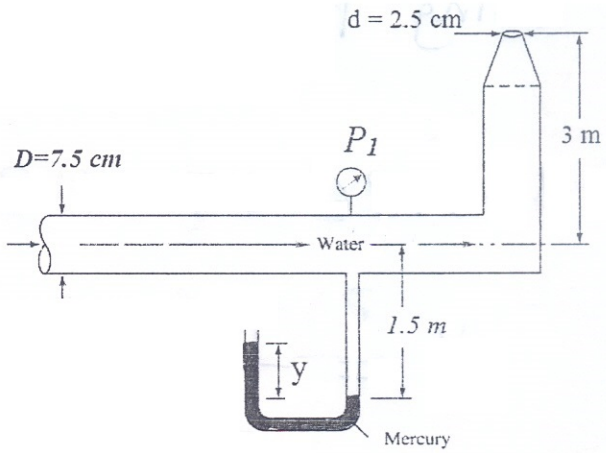
COLLEGE OF ENGINEERING & TECHNOLOGY

Department : **MECHANICAL ENGINEERING**
Lecturers : **Prof. Dr. Kamal Abd- Elaziz – Dr. Rola Samir – Dr. Ahmed Khalifa Mehanna**
Course : **Hydraulics**
Course No. : **ME 362**
Date : **09/05/2016** **Time: 40 minutes**
Name: **Reg. No.:**

12th Week Exam

Answer the following questions:

1. For ideal flow of water as shown in the below Figure, the mass flow rate is 8.83 kg/s. Find the manometer reading (y) and the absolute pressure (P_1). The atmospheric pressure is 101.3 kPa.



Name: **Reg. No.:**

2. Find the force (P) required to hold the gate in the position shown in the below Figure. The gate is 4 m wide. Neglect the weight of the gate.