



## College of Engineering & Technology

Department: Mechanical Engineering  
Lecturer: Dr. Rola Afify  
Course Code: ME464

Marks: 10  
Time: 4:00 – 5:00  
Date: 20/5/2014

Name:

R.N.:

**Answer the following questions:**

### **Question one (4 marks)**

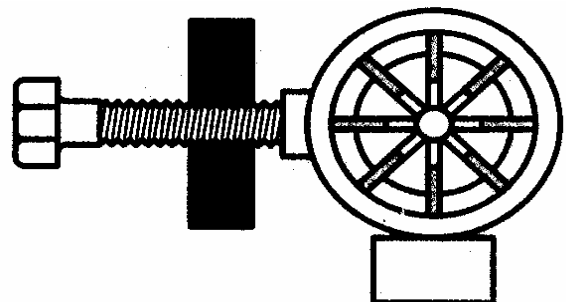
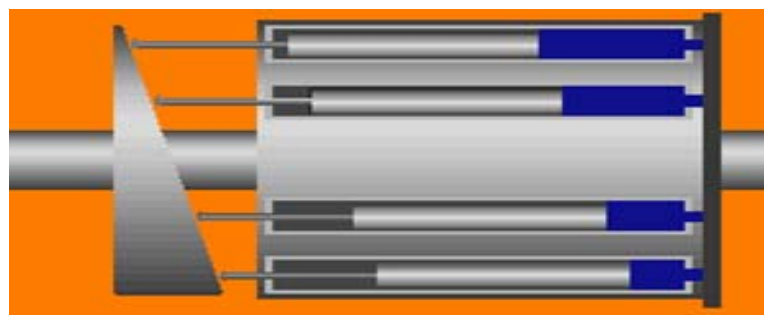
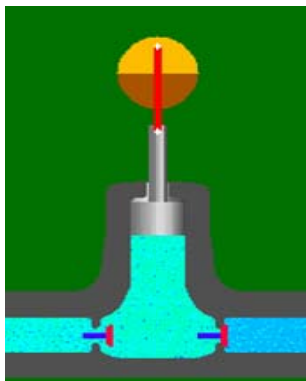
Sketch Vane Pump and show how it works.

### **Question two (3 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  $10^\circ$  and the volumetric efficiency is 94%.

### **Question three (3 marks)**

Write down the words that represent each of the following:



Good Luck 1/1