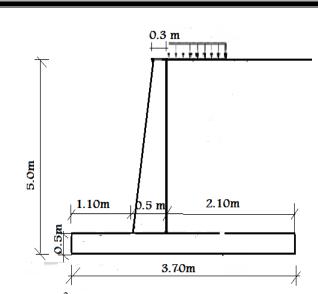
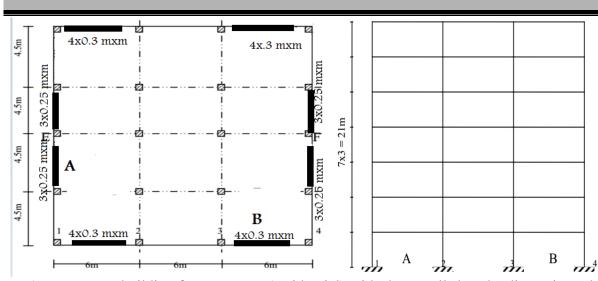


## **Question One:**



If you know that the allowable net bearing capacity=180 KN/m<sup>2</sup> and the angle of friction and cohesion *of soil under the base of retaining wall are*  $\emptyset = 33^{\circ} \& 9.0$ KN/m<sup>2</sup> respectively, Check the stability for the shown concrete cantilever retaining wall designed to resist earth pressure of soil with  $\emptyset = 28.5^{\circ}$ ,  $\gamma = 16.3$  KN/m<sup>3</sup> and surcharge of 35 KN/m<sup>2</sup>

**Question Two:** 



A seven-story building frame system (residential) with shear walls has the dimensions shown in the Figure. The total sustained dead load is 800 kg/m2. This building is located in Gaza Strip and lies on top of a deep clayey deposit( $S_D$ ). Eight shear walls, with the dimensions shown in the figure a lateral force resisting system. Determine the seismic shear loads at the fourth story level acting on shear wall A& B using 1997 UBC.

## End of Questions Good Luck

Course No: CON.5306 Course Title: Advanced Structural Design Date: 24/10/2017 No. of Questions: (2) Time: 1hours Using Calculator **University of Palestine** 



First Midterm Exam First Semester 2017/2018 Total Grade: Instructor Name :Dr. Ayed Zuhud Student No.: \_\_\_\_\_\_ Student Name: \_\_\_\_\_\_ College Name: \_\_\_\_\_\_ Dep. / Specialist: \_\_\_\_\_\_ Using Dictionary (No)