

King Fahd University of Petroleum & Minerals
 CIVIL ENGINEERING DEPARTMENT
 CE 203 STRUCTURAL MECHANICS I

Last H.W.

Deadline for solution: **BEFORE THE FINAL EXAM. DO IT BEFORE YOU SEE THE KEY-SOLUTION !!!**

- 1) For the beam shown in Fig. P1, determine the algebraic equations for the slope and deflection. Also, determine the value and location of the maximum deflection.
- 2) For the beam shown in Fig. P2, write a single equation for the moment using the singularity functions. In addition, write all boundary conditions necessary to solve for the deflection. (The solution for y is not required).
- 3) Find the slope and deflection equations for the beam shown in Fig. P3 using the singularity function method. Also determine the slope and deflection at point C.
- 4) Determine the reactions of the beam shown in Fig. P4.
- 5) Using the singularity function method, calculate the reactions, and then determine the slope and deflection at point D in Fig. P5.

