

科目：工程力學

適用：土木系三

編號：732

考生注意：

1. 依次序作答，只要標明題號，不必抄題。
2. 答案必須寫在答案卷上，否則不予計分。
3. 限用藍、黑色筆作答；試題須隨卷繳回。

本 試 題

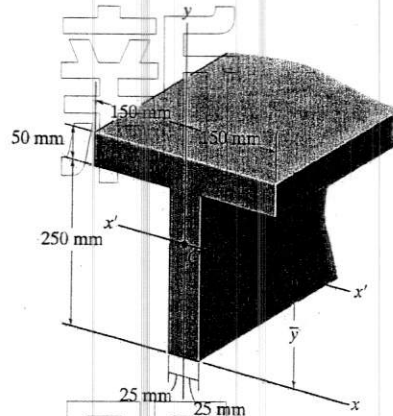
共 2 頁

第 / 頁

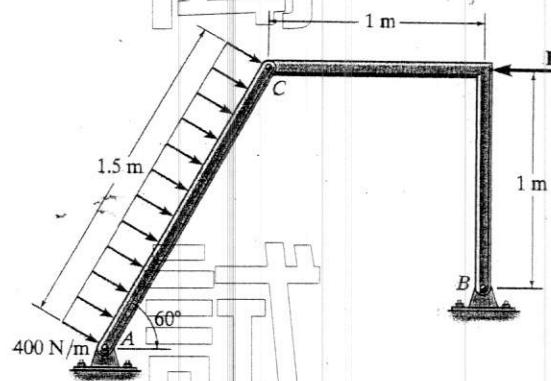
(1) For the cross section as shown below, determine:

(a) the centroidal \bar{y} of the cross-sectional area, (10%)

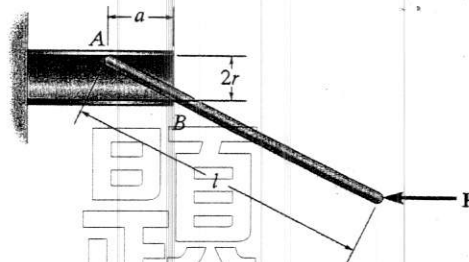
(b) the moment of inertia $\bar{I}_{x'}$ about the x' centroidal axis. (10%)



(2) Determine the horizontal and vertical components of force that pins A and B exert on the two-member frame under $F = 500$ N. (20%)



(3) The thin rod of length l is supported by the smooth tube. Determine the distance a needed for equilibrium if the applied load is P . (20%).



科目：工程力學

適用：土木系三

考生注意：

1. 依次序作答，只要標明題號，不必抄題。
2. 答案必須寫在答案卷上，否則不予計分。
3. 限用藍、黑色筆作答；試題須隨卷繳回。

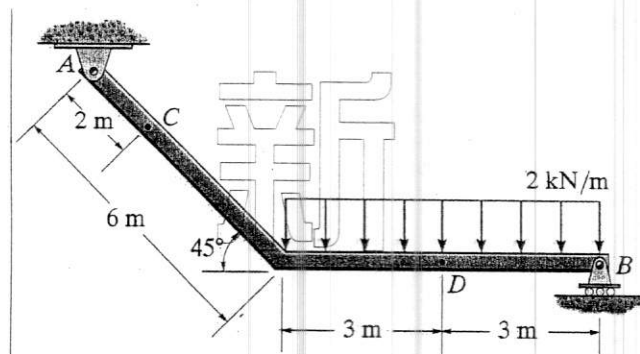
本 試 題

共 2 頁

第 2 頁

編號：732

- (4) Determine the internal normal force, shear force, and moment at sections points D. (20%)



- (5) Write the expression and draw the shear and bending-moment diagrams for the beam. (20%)

