

112 學年度秋季班機械工程學系機械產業碩士專班 筆試題目

系所：機械工程學系 考試科目：靜力學 考試日期：0408 第1頁，共1頁

※ 考生請注意：本試題可使用計算機。請於答案卷作答，於本試題紙上作答者，不予計分。

1. Determine the angles made by the vector $V = -36i + 15j$ with the positive x- and y-axes. Write the unit vector n in the direction of V . (50%)
2. Determine the magnitude T of the tension in the supporting cable and the magnitude of the force on the pin at A for the jib crane shown. The beam AB is a standard 0.5-m I-beam with a mass of 95 kg per meter length. (50%)

