

姓名: \_\_\_\_\_

葉均承

應數一線性代數

學號: \_\_\_\_\_

## Quiz 16

考試日期: 2023/06/14

1. 請框出答案. 2. 不可使用手機、計算器，禁止作弊!

1. Find a Jordan canonical form and a Jordan basis for the matrix  $A$

$$A = \begin{bmatrix} i & 0 & 0 & 0 & 0 \\ 0 & i & 0 & 0 & 0 \\ 0 & 0 & 2 & 0 & 0 \\ 0 & 0 & 0 & 2 & 0 \\ 2 & 0 & -1 & 0 & 2 \end{bmatrix}$$

2. Find a Jordan canonical form and a Jordan basis for the matrix  $A$

$$A = \begin{bmatrix} 2 & 5 & 0 & 0 & -1 \\ 0 & 2 & 1 & 0 & 0 \\ 0 & 0 & 2 & 0 & 0 \\ 0 & 0 & 0 & 2 & 1 \\ 0 & 0 & 0 & 0 & 2 \end{bmatrix}$$