

to show I.i

$$a \begin{bmatrix} 2 & 1 & -1 \\ 3 & -2 & 4 \end{bmatrix} + b \begin{bmatrix} 1 & 1 & -3 \\ -2 & 0 & 5 \end{bmatrix} + c \begin{bmatrix} 4 & -1 & 2 \\ 1 & -2 & 3 \end{bmatrix} = \begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$$

$$2a + b + 4c = 0$$

$$a + b - c = 0$$

$$-a - 3b + 2c = 0$$

$$3a - 2b + c = 0$$

$$-2a - 2c = 0$$

$$4a + 5b + 3c = 0$$

on solving we get $a = b = c = 0$

$\Rightarrow$ A, B, C are I.i