

The minimal polynomial of $\begin{bmatrix} 2 & 1 & 0 & 0 \\ 0 & 2 & 0 & 0 \\ 0 & 0 & 2 & 0 \\ 0 & 0 & 1 & 5 \end{bmatrix}$ is

(a) $(x - 2)(x - 5)$

(b) $(x - 2)^2(x - 5)$

(c) $(x - 2)^3(x - 5)$

(d) none of these