ELEMENTS OF APPLIED MATHEMATICS

SUPPLEMENTARY PROBLEM SET – JORDAN FORM OF A MATRIX

Find the Jordan canonical forms for the following matrices:

PROBLEM A $\begin{bmatrix} 3 & 2 & -3 \\ 4 & 10 & -12 \\ 3 & 6 & -7 \end{bmatrix}$,

PROBLEM B $\begin{bmatrix} 1 & -3 & 4 \\ 4 & -7 & 8 \\ 6 & -7 & 7 \end{bmatrix}$,

PROBLEM C $\begin{bmatrix} -2 & 2 & 1 \\ -7 & 4 & 2 \\ 5 & 0 & 0 \end{bmatrix}$,

PROBLEM D $\begin{bmatrix} 1 & 2 & -1 \\ 0 & 2 & 0 \\ 1 & -2 & 3 \end{bmatrix}$,

PROBLEM E $\begin{bmatrix} 3 & 0 & 8 \\ 3 & -1 & 6 \\ -2 & 0 & -5 \end{bmatrix}$,

PROBLEM F $\begin{bmatrix} 4 & 0 & 1 \\ 2 & 3 & 2 \\ 1 & 0 & 4 \end{bmatrix}$.