$$\begin{aligned}
3 & A = \begin{pmatrix} 10 & 0 & -2 \\ 0 & 2 & 0 \\ -2 & 0 & 10 \end{pmatrix} \\
& [A - AE] = \begin{pmatrix} 10 - \lambda & 0 & -2 \\ 0 & 2 - \lambda & 0 \\ -2 & 0 & 10 - \lambda \end{pmatrix} = \\
& = \begin{pmatrix} 10 - \lambda \end{pmatrix} \begin{pmatrix} 2 - \lambda & 0 \\ 0 & 10 - \lambda \end{pmatrix} + \begin{pmatrix} -2 \\ -2 & 0 \end{pmatrix} = \\
& = \begin{pmatrix} 10 - \lambda \end{pmatrix} \begin{pmatrix} (2 - \lambda)(10 - \lambda) - 2 & (2)(2 - \lambda) \\ (2 - \lambda)((10 - \lambda)^2 - 2^2) = (2 - \lambda)(12 - \lambda) \\
& = \begin{pmatrix} 2 - \lambda \end{pmatrix} \begin{pmatrix} (10 - \lambda)^2 - 2^2 \end{pmatrix} = \begin{pmatrix} 2 - \lambda \end{pmatrix} \begin{pmatrix} (12 - \lambda)(12 - \lambda) \end{pmatrix} \\
& = \begin{pmatrix} 2 - \lambda \end{pmatrix} \begin{pmatrix} (10 - \lambda)^2 - 2^2 \end{pmatrix} = \begin{pmatrix} 2 - \lambda \end{pmatrix} \begin{pmatrix} (12 - \lambda)(12 - \lambda) \end{pmatrix} \\
& = \begin{pmatrix} 2 - \lambda \end{pmatrix} \begin{pmatrix} (10 - \lambda)^2 - 2^2 \end{pmatrix} = \begin{pmatrix} 2 - \lambda \end{pmatrix} \begin{pmatrix} 2 - \lambda \end{pmatrix} \begin{pmatrix} 12 - \lambda \end{pmatrix} \\
& = \begin{pmatrix} 2 - \lambda \end{pmatrix} \begin{pmatrix} (10 - \lambda)^2 - 2^2 \end{pmatrix} = \begin{pmatrix} 2 - \lambda \end{pmatrix} \\
& = \begin{pmatrix} 2 - \lambda \end{pmatrix} \begin{pmatrix} (10 - \lambda)^2 - 2 \end{pmatrix} \begin{pmatrix} 2 - \lambda \end{pmatrix} \begin{pmatrix} 2 - \lambda \end{pmatrix} \begin{pmatrix} 2 - \lambda \end{pmatrix} \\
& = \begin{pmatrix} 2 - \lambda \end{pmatrix} \\
& = \begin{pmatrix} 2 - \lambda \end{pmatrix} \\
& = \begin{pmatrix} 2 - \lambda \end{pmatrix} \\
& = \begin{pmatrix} 2 - \lambda \end{pmatrix} \\
& = \begin{pmatrix} 2 - \lambda \end{pmatrix} \begin{pmatrix} 2$$

 $VBS Q = \frac{-7}{5\sqrt{2}} = -0.98$

$$\begin{array}{ll}
(3) & = \angle e_1 + \beta e_2 \\
& = \angle e_1 + \beta e_2 \\
& = \angle (e_1, e_1) + \beta (e_1 e_2) \\
& = \angle (e_2, e_2) + \beta (e_2 e_2)
\end{array}$$

$$\int -1 = d \cdot 2 + \beta \cdot (-3) \qquad \int 2d - 3\beta - 1 = 0$$

$$10 = d \cdot (-3) + \beta \cdot 10 \qquad \left[-3d + 10\beta - 10 = 0 \right]$$

$$\mathcal{L} = \frac{23}{11}$$

$$\beta = \frac{23}{11}$$

$$\mathcal{L} = \frac{40}{11} \quad \beta = \frac{23}{11}$$

(1) Manidem number D_2 :
$$\left(\begin{array}{cccc} -4 - \lambda & 1 & -3 \\ 3 & -5 - \lambda & 7 \\ 1 & -1 & -\lambda \end{array}\right)$$

$$(54) \lambda + 7 = \lambda^2 + 5\lambda + 7 \underline{20}$$