ISRA UNIVERSITY

Islamabad Campus

Department of Electrical Engineering
Program: B.E. (Electrical)
Semester – Summer 2016

MS-121 Linear Algebra

Quiz – 4
Marks: 20   **Handout Date: 25/08/2016**

Question # 1:

Find the characteristic equation and Eigenvalues of the following matrix:

$$A = \begin{bmatrix} 1 & -3 & 3 \\ 3 & -5 & 3 \\ 6 & -6 & 4 \end{bmatrix}$$

Question # 2:

Find the determinant of the given matrix by (a) Cofactor expansion & (b) Arrow Technique:

$$A = \begin{bmatrix} 3 & -4 & a \\ a^2 & 1 & 2 \\ 2 & a-1 & 4 \end{bmatrix}$$