



ISRA UNIVERSITY

Islamabad Campus

Department of Electrical Engineering

Program: B.E. (Electrical)

Semester – Summer 2016

MS-121 Linear Algebra

Quiz – 2

Marks: 20

Handout Date: 11/08/2016

Question # 1:

Use Cramer's rule to solve the following system of equations:

$$\begin{cases} 2x + y + z = 3 \\ x - y - z = 0 \\ x + 2y + z = 0 \end{cases}$$

Question # 2:

Check whether the following 3 x 3 matrix is invertible or not:

$$A = \begin{bmatrix} 1 & 2 & 3 \\ 1 & 0 & 1 \\ 2 & 4 & 6 \end{bmatrix}$$

Question # 3:

Verify that $\det(\mathbf{AB}) = \det(\mathbf{A}) \det(\mathbf{B})$:

$$A = \begin{bmatrix} 3 & 1 \\ 2 & 1 \end{bmatrix}, B = \begin{bmatrix} -1 & 3 \\ 5 & 8 \end{bmatrix},$$