



**ISRA UNIVERSITY**

Islamabad Campus

**Department of Electrical Engineering**

**Program: B.E. (Electrical)**

**Semester – Summer 2016**

**MS-121 Linear Algebra**

**Quiz – 1**

**Marks: 20**

**Handout Date: 2/08/2016**

**Question # 1:**

Solve the following system by using the Gauss-Jordan elimination method:

$$\begin{cases} x + y + z = 5 \\ 2x + 3y + 5z = 8 \\ 4x + 5z = 2 \end{cases}$$

**Question # 2:**

Find the determinant of the matrix with row reduction method or cofactor expansion:

$$A = \begin{bmatrix} 1 & 0 & 2 & -1 \\ 3 & 0 & 0 & 5 \\ 2 & 1 & 4 & -3 \\ 1 & 0 & 5 & 0 \end{bmatrix}$$