

Iqra National University.  
Linear Algebra Major Assignment for Spring 2020.  
Semester - II, BS-SE.

Q1. Compute adjoint of;

(i)  $A = \begin{bmatrix} 1 & 2 & \text{2nd-ID} \\ 2 & 3 & 1 \\ 3 & 1 & 2 \end{bmatrix}$   $\because$  2nd-ID - 2nd number of your ID.

(ii).  $B = \begin{bmatrix} 3 & 4 & 5 \\ 2 & -1 & 8 \\ 5 & -2 & 8 \end{bmatrix}$

Q2. Find the cofactors of  $A_{21}$ ,  $A_{31}$ ,  $A_{33}$  if

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

Q3. Find Eigen values and Eigen vectors if.

$$A = \begin{bmatrix} 2 & 1 & 1 \\ 1 & 3 & 2 \\ -1 & 1 & 2 \end{bmatrix} \quad \& \quad I = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$$