Bahria University
Discovering Knowledge

Linear Algebra

BSCS- 5th-A

Department of Computer Science
Bahria University, Lahore Campus

Quiz: [4]   Date: Week 16, 6 June 2024

Name: _____   Roll No: _____

Evaluation of CLO	Question Number	Marks	Obtained Marks
CLO2: Apply the basic knowledge of vector spaces, Eigen value and Eigen vectors to solve the critical problems of Linear Algebra.	1,2	5+5	
Total Marks		**10**	

Question 1: Find the Characteristic Polynomial for the matrix A.

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

Question 2: Analyze the eigenvalues and span of eigenvectors of the given matrix B.

$$B = \begin{bmatrix} 1 & -1 & 0 \\ -1 & 2 & 1 \\ 0 & 1 & 1 \end{bmatrix}$$