Bahria University
Discovering Knowledge

Assignment: [3]

Date: Week 11, 10 Dec 2023

Name: _____

Roll No: _____

Evaluation of CLO	Question Number	Marks	Obtained Marks
CLO statement **CLO1** **Interpret** the fundamental concepts of linear algebra, vector equations and linear transformations.	1	5	
	2	5	
	3	5	
	4	5	
Total Marks		**20**	

Q1:   (5)
Find the vertices of unit square after shearing it along x-axis by a factor 2 and then translating the sheared square by the vector $(2, 3)$.

Q2:   (5)

Find the stretching of an ellipse $\frac{(x-1)^2}{4} + \frac{(y+2)^2}{16} = 1$ along y-axis by factor 3.

Q3:   (5)

Let $(x+1)^2 + (y-2)^2 = 9$ be a circle. Find its equation and image under the effect of shear parallel to y-axis by factor -2.

Q4:   (5)

Let y=2x-3 be a line. Find its reflection along the line x= -2