**ASSIGNMENT 1**

Q1: Let A= B= find

1. A+B
2. A-B
3. 2A+3B
4. AB
5. 3A-5B
6. BA

Q2: Find the value of each of the following determinants:

Q3: Reduce each of the following matrices into the indicated form:

1. reduced echelon form
2. reduced echelon form
3. echelon form
4. echelon form

Q4: Show that

1. is periodic having period 2
2. is nilpotent of index 2
3. is involutory

Q5: Solve the following systems by Gauss Jordan method and Gauss Elimination method.

3)

=0

Q6. Solve the following system of linear equations by inversion method.

1. 2x +3y+3z =5

x2y+z=4

3x

2) x1 + 3x2 + 3x3 = 5,

x1 – 2x2 + x3 = -4,

3x1 – x2 – 2x3 = 3

3) x + y + 2z = 1,

3x + 2 y + z = 7,

2x + y + 3z = 2.