**ASSIGNMENT NO.- 1[Ch-3 (Matrices)]**

**Class -XII**

1. If ,find the value of

2. Solve for and :

3. If ,then prove by principle of mathematical induction that

for all

4. If ,prove that is a skew-symmetric matrix.

5. Express the matrix as the sum of a symmetric and a skew-symmetric matrix,where

.

6. If are square matrices of same order and is a skew-symmetric matrix,show that is

skew-symmetric.

7. Using the elementary transformations ,find the inverse of the following matrix,

.

8. Find the matrix so that .

9. For the matrix ,show that Hence ,find

10. A trust fund has Rs 35000 to be invested in two different types of bands.The first bond pays 8%

interest per annum which will be given to orphanage and second bond pays 10% interest per

annum which will be given to an N.G.O.(Cancer Aid Society).Using matrix multiplication

,determine how to divideRs 35000 among two types of bonds if the trust fund obtains an annual

total interest of Rs 32000.

11. If ,then find