I. Solve the following matrix equations:

1.  Ans.: 
2. Ans.:
3. Ans.:
4.  Ans.:

II. Apply elementary row operation to transform the matrix into echelon form:

1. 

2.

III. Apply elementary row operation to find the inverse of the matrix:

1.  Ans.: **** = 

2. Find the inverse of  Ans.: **** = 