

## Matrix Multiplication

let  $A$  be the matrix of  $m/n$  order  
&  $B$  is the matrix of  $p/q$  order then

(a) Matrix multiplication is possible if no. of columns of  $A$  matrix is equal to no. of rows of  $B$  matrix then the matrix multiplication is possible i.e.  $m=p$  otherwise matrix multiplication is Not possible.

(b) If the matrix multiplication is possible order of the result matrix will be number of rows of  $A$  matrix & no of rows of  $B$  matrix i.e.  $m/q$ .

(c) To multiply the matrix the elements of the first row will be multiplied with the first column will get first element of resultant matrix, elements of the first row will be multiplied with 2<sup>nd</sup> column to get the second matrix so on so first.