Q. 75 If A is a skew-symmetric matrix, then A^2 is a ..... .

Sol. If A is a skew-symmetric matrix, then A^2 is a symmetric matrix.

$\because$ $A' = -A$

$\therefore$ $(A^2)' = (A')^2$

$= (-A)^2$ $[\because A' = -A]$

$= A^2$

So, A^2 is a symmetric matrix.