

**Q. 74** If  $A$  is a symmetric matrix, then  $A^3$  is a ..... matrix.

**Sol.** If  $A$  is a symmetric matrix, then  $A^3$  is a symmetric matrix.

$\therefore$   
 $\therefore$

$$\begin{aligned} A' &= A \\ (A^3)' &= A'^3 \\ &= A^3 \end{aligned}$$

$$[\because (A')^n = (A^n)']$$