CHAPTER - 4 :-

① $|kA| = k^n |A|$ ② $|Adj A| = |A|^{n-1}$

② $A \cdot Adj A = Adj A \cdot A = |A| I$

③ $(A^T)^{-1} = (A^{-1})^T$ ④ $(AB)^{-1} = B^{-1} A^{-1}$

⑤ $|A| = 0$; singular = Inconsistent

⑤ $|A| \neq 0$; Non-singular = consistent

⑥ $A^{-1} = \frac{Adj A}{|A|}$ ⑧ $|A| = |A'|$

⑨ $A' = A$, $B' = B$, then $(AB - BA)$ = skew sym

⑩ $\Delta = \frac{1}{2} \begin{vmatrix} x_1 & y_1 & 1 \\ x_2 & y_2 & 1 \\ x_3 & y_3 & 1 \end{vmatrix}$