$J(f;x) = J(f_1, ..., f_n; x_1, ..., x_n) := \begin{vmatrix} \frac{\partial f_1}{\partial x_1} & ... & \frac{\partial f_n}{\partial x_n} \\ \frac{\partial f_1}{\partial x_n} & ... & \frac{\partial f_n}{\partial x_n} \end{vmatrix} \in \mathbb{C}^* = \mathbb{C} \setminus \{0\}.$