11.06

$$\left| c^x - 1 - x - \frac{x^2}{2} - \frac{x^3}{6} - \frac{x^4}{24} \right| \leq \frac{|x|^5}{40} \qquad om \quad |x| \leq 1 \qquad f(x) = c^x$$

$$\left| c^x - 1 - x - \frac{x^2}{2} - \frac{x^3}{6} - \frac{x^4}{24} \right| = \left| f(x) - P_4(x) \right| = \left| R_5(x) \right| = \left| \frac{e^\beta}{5!} x^5 \right| \leq \left| \frac{3}{120} x^5 \right| = \frac{|x|^5}{40}$$