$$X_{Lin} X_{Cin} = \frac{1}{N^2}(1 + THD)$$

$$= 0.042$$

$$\therefore L_{in} = 0.001149 \text{ Henrys} \approx 1.149 \text{ mH} /\!/$$

$$Q_{Out} \quad V_o(n=6) = 0.9549 \, V_m \times \frac{2}{35}$$

$$= 11.5466 \, V /\!/$$

$$I_o(n=6) = \frac{V_o(n=6)}{R_L}$$

$$= 0.2309 \, A /\!/$$

$$\Delta V_o = 5\% .$$

$$C_{out} = \frac{100 \cdot \left(I_o(n=6)\right)_{peak}}{\sqrt{2} \times \left(\Delta V_o \%\right) \times V_{dc} \times 12\pi \times f_s}$$

$$= 4.125 \, \mu F.$$