

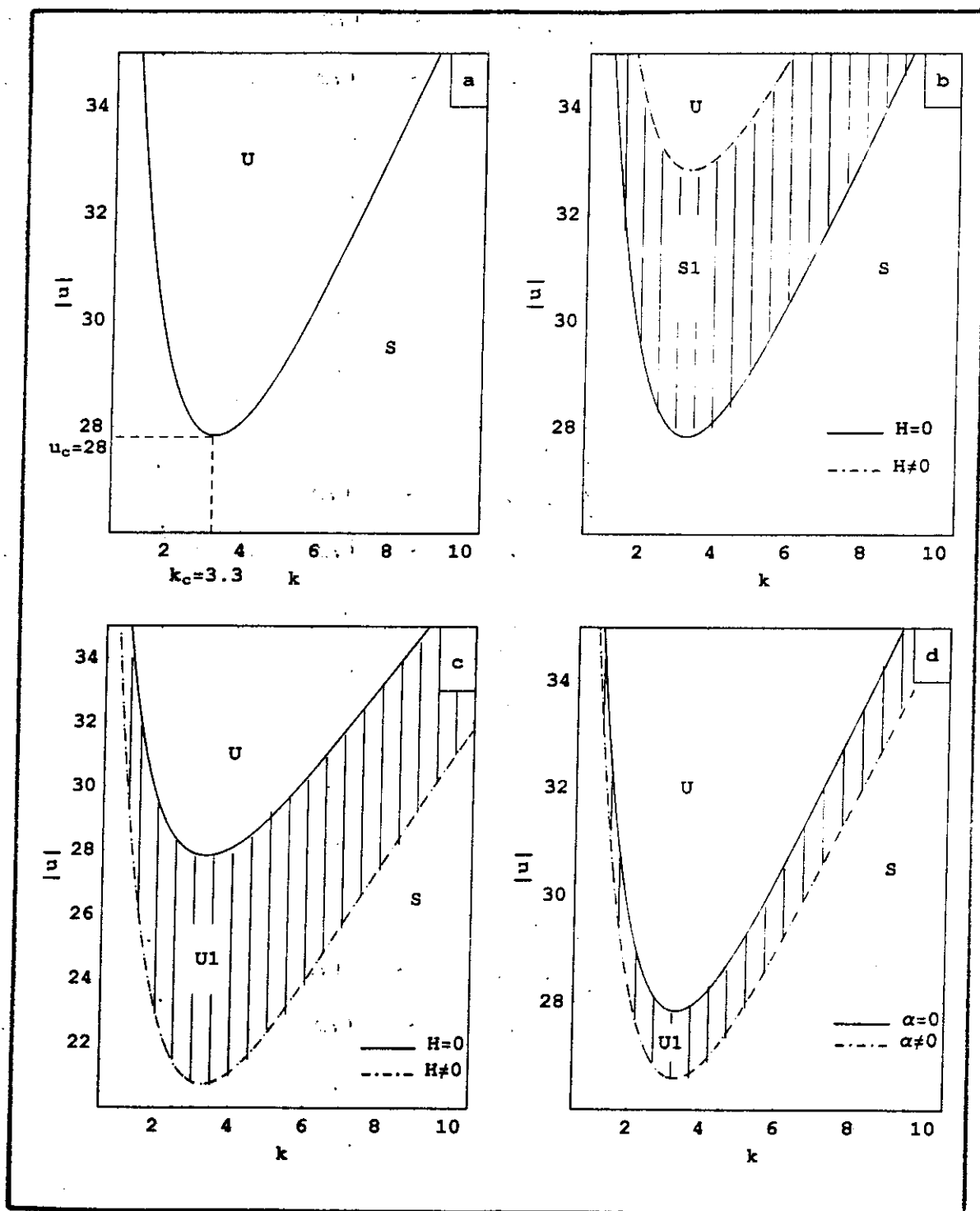


Figure 2.1 : Stability diagram on the $(|u| - k)$ plane for a system having the particulars: $\rho_1 = 5.9$, $\rho_2 = 3.2$, $h = 0.2$, $\mu_1 = 3.1$, $\mu_2 = 1.7$, $H_1 = 1.3$ and with various values of the membrane parameter σ [a]: refer to the condition (2.3.8) where $\theta_1 + \theta_2 = \pi/2$, and with semi-infinite, [b]: as (a) but $\theta_1 = 22^\circ$, $\theta_2 = 36.38^\circ$, [c]: as (a) but $\theta_1 = 60^\circ$, $\theta_2 = 72.43^\circ$, [d]: as (a) but according to the condition (2.3.11).

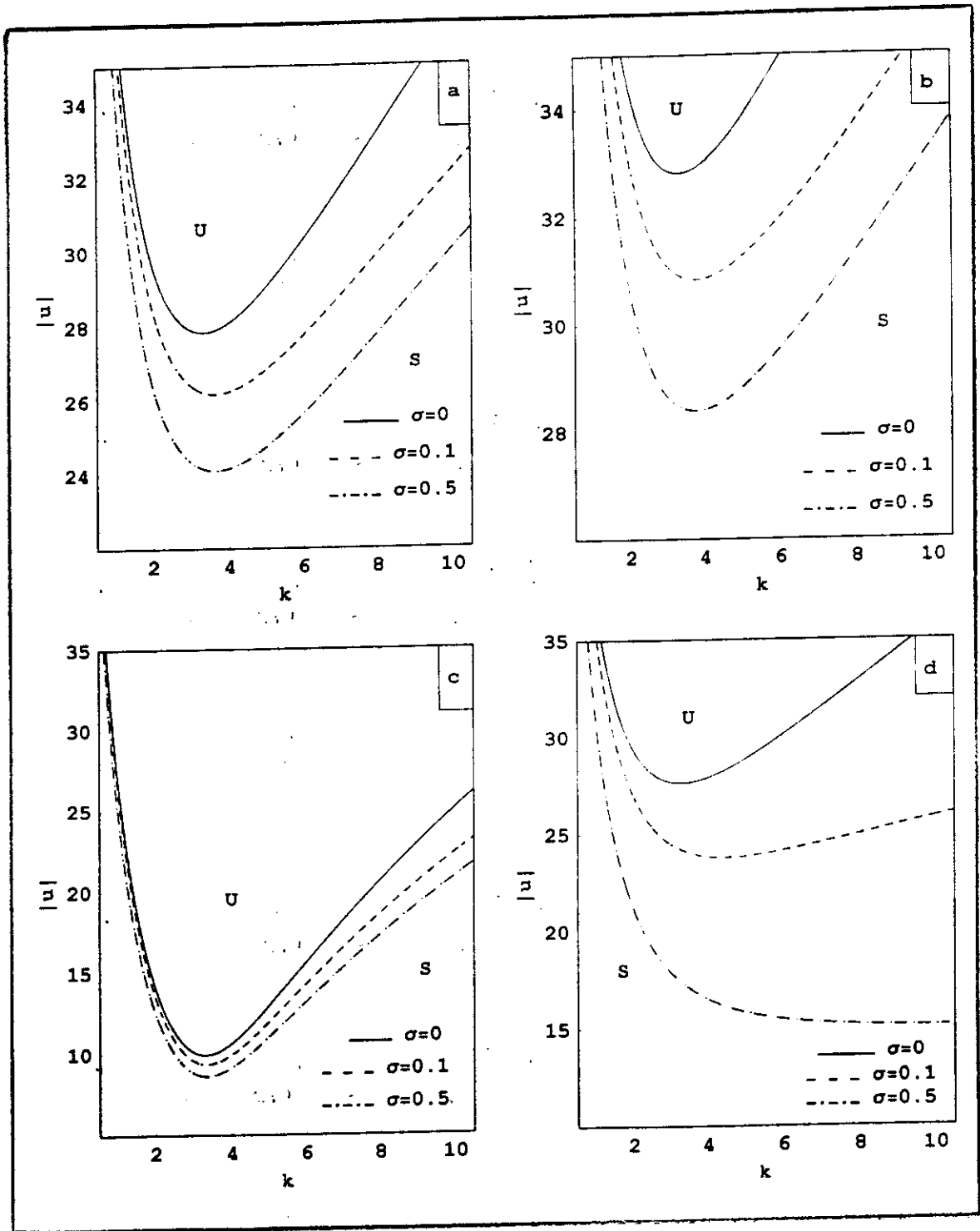


Figure 2.2 : Stability diagram for the same considered in figure 1, but with [a]:refers to the condition (2.3.12) where $\theta_1 + \theta_2 = \pi/2$, [b]:as (a) but $\theta_1 = 22^\circ$, $\theta_2 = 36.38^\circ$, [c]:as (a) but $\theta_1 = 60^\circ$, $\theta_2 = 72.43^\circ$, [d]:as (a) but according to the condition (2.3.15).

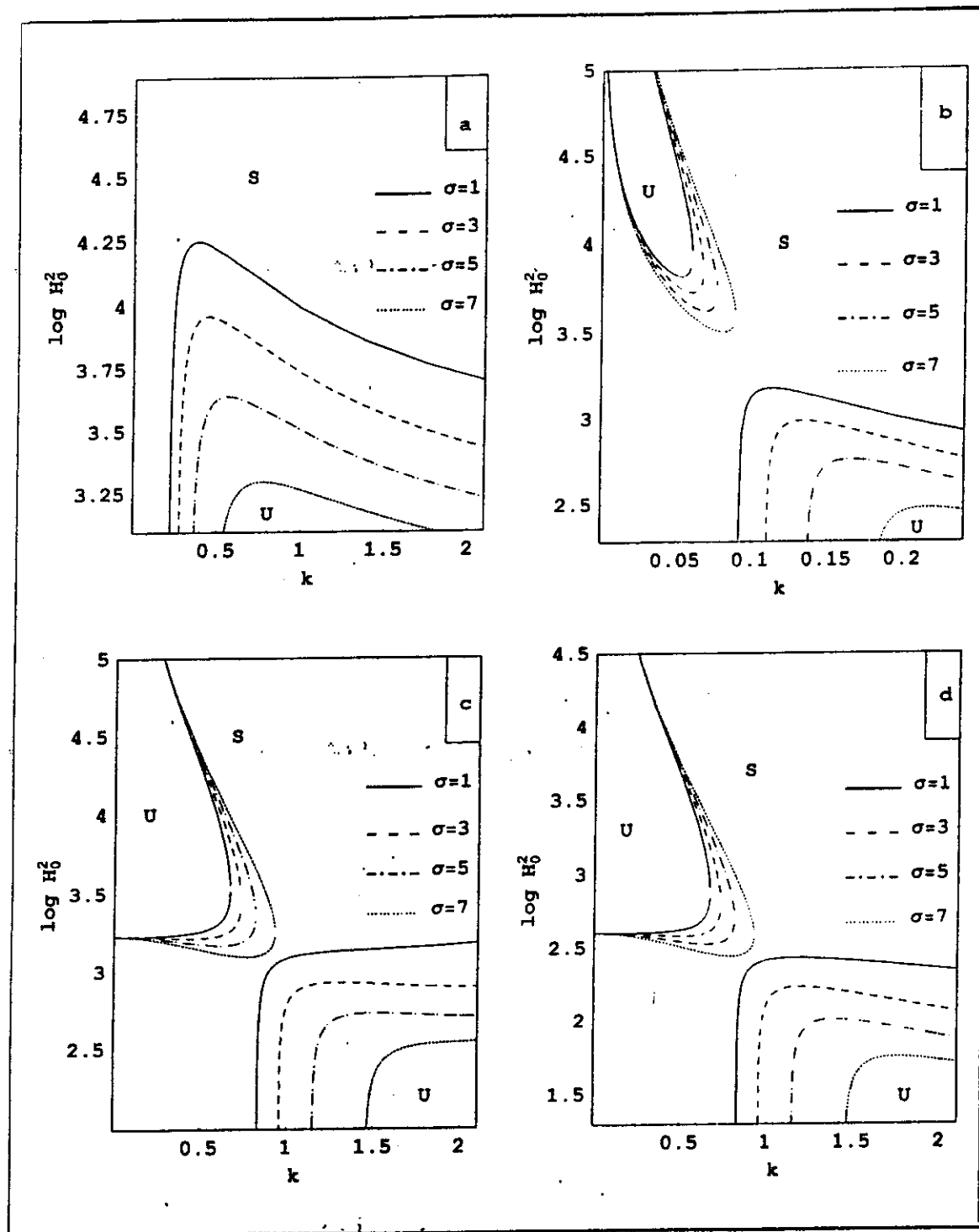


Figure 2.3 : Stability diagram on the $(\log H_0^2 - k)$ plane for a system having the particulars as in figure 1 except that $u_1 = 0.45$, $u_2 = 0.22$, $\Omega = 0.169$ [a]:refers to the condition (2.4.7) with semi-infinite and with various values of the membrane parameter σ where $\theta_1 = 20^\circ$, $\theta_2 = 33.57^\circ$, [b]:as (a) but $\theta_1 = 50^\circ$, $\theta_2 = 74.37^\circ$, [c]:as (a) but $h = 0.2$, [d]:as (c) but $\theta_1 = 60^\circ$, $\theta_2 = 72.43^\circ$.

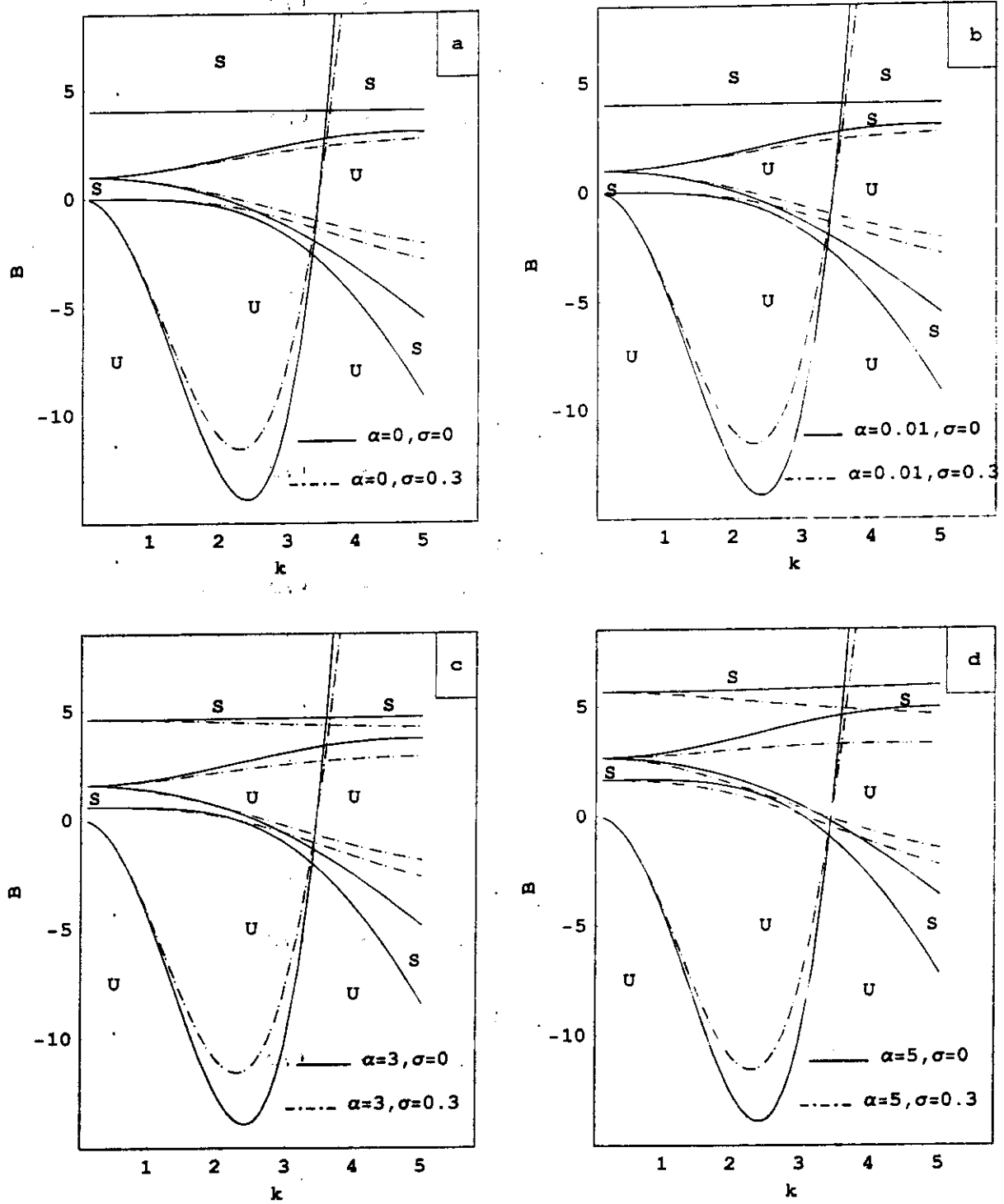


Figure 2.4 : Stability diagram on the $(B - k)$ plane for a system $\rho_1 = 3.2$, $\rho_2 = 5.9$, $h = 0.2$, $u_1 = u_2 = 0$, $H_1 = 1.3$, $\mu_1 = 3.1$, $\mu_2 = 1.7$, $\Omega = 0.067$, $\theta_1 = 30^\circ$, $\theta_2 = 60^\circ$ and with various of σ [a]: refers to $\alpha = 0$, [b]: to $\alpha = 0.0001$, [c]: to $\alpha = 0.57$, [d]: to $\alpha = 0.95$.