Problem 4. [20 Minutes] Consider a CT LTI system with the impulse response and inputs shown below.

- a) (3 pt) Plot the output $y_1(t)$, the convolution integral of $h_1(t)$ and $u_1(t)$. (Indicate all the critical/boundary values on the plot.).
- b) (3 pt) Plot the output $y_2(t)$, the convolution integral of $h_2(t)$ and $u_2(t)$. (Indicate all the critical/boundary values on the plot.).
- c) (3 pt) Plot the output $y_3(t)$, the convolution integral of $h_3(t)$ and $u_3(t)$. (Indicate all the critical/boundary values on the plot.).

