



Universidade Federal de Lavras

Engenharia de Controle e Automação

Robótica

Professor: Leonardo Paiva

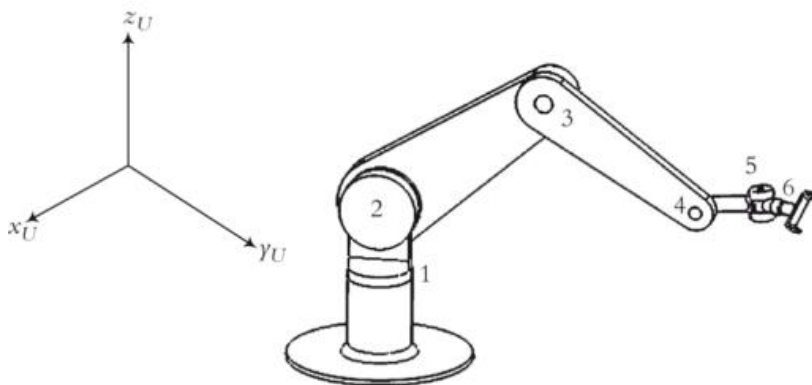
Data:

Exercício

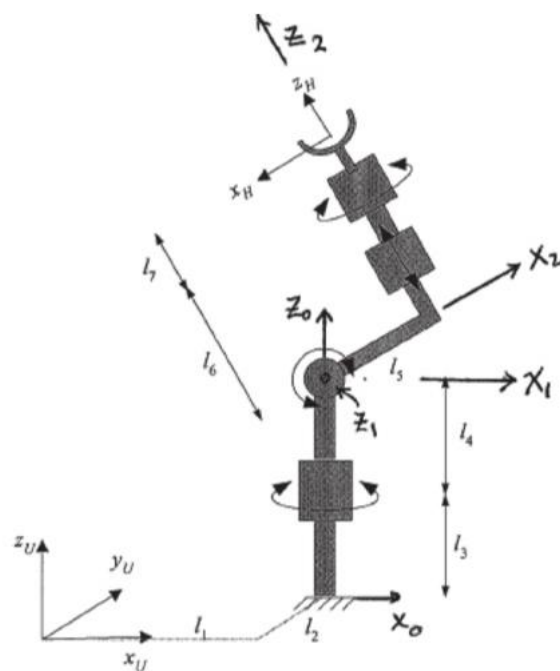
Aluno:

Dados as seguintes anatomias de manipuladores abaixo, determine os parâmetros de Denavit-hartenberg

a)

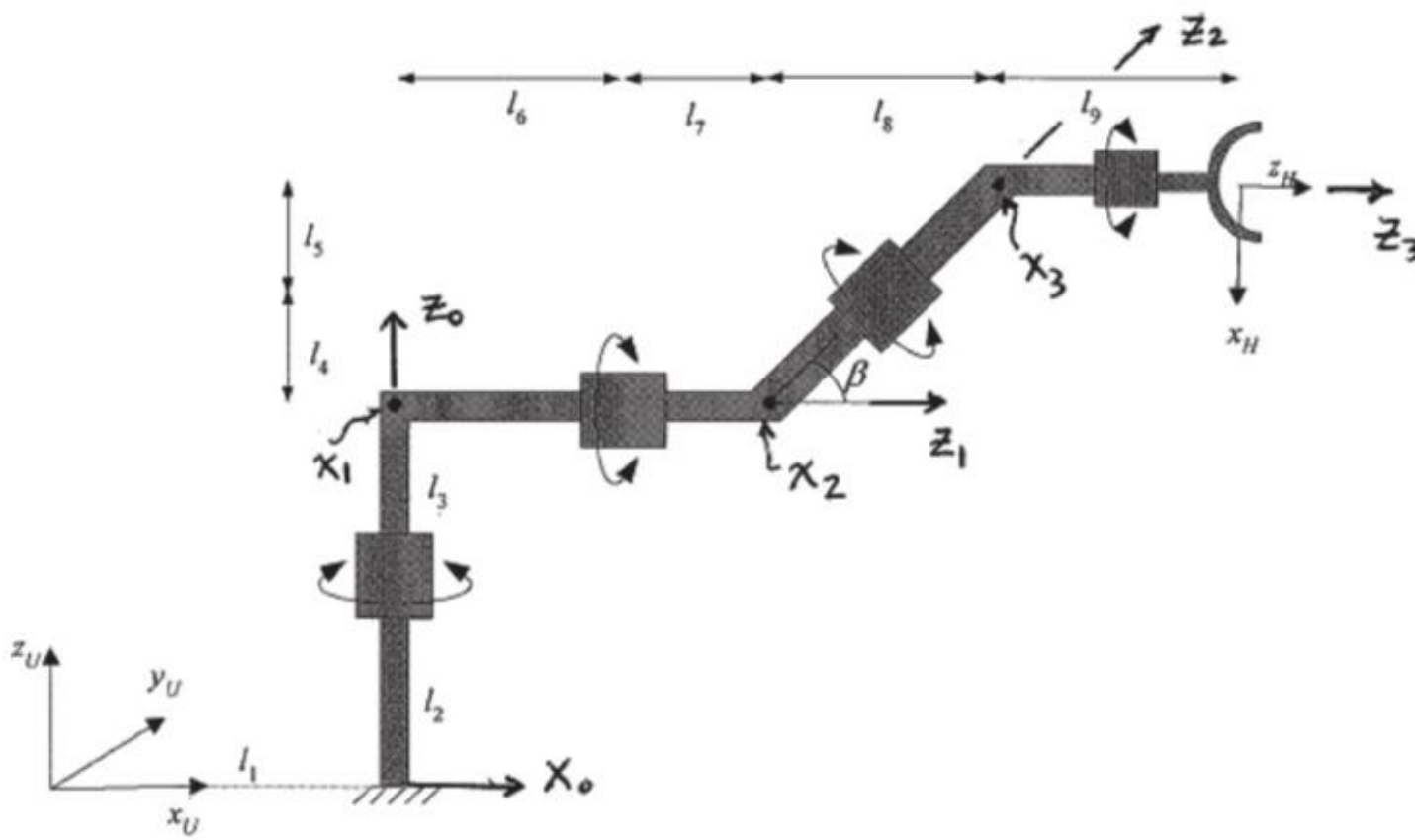


b)



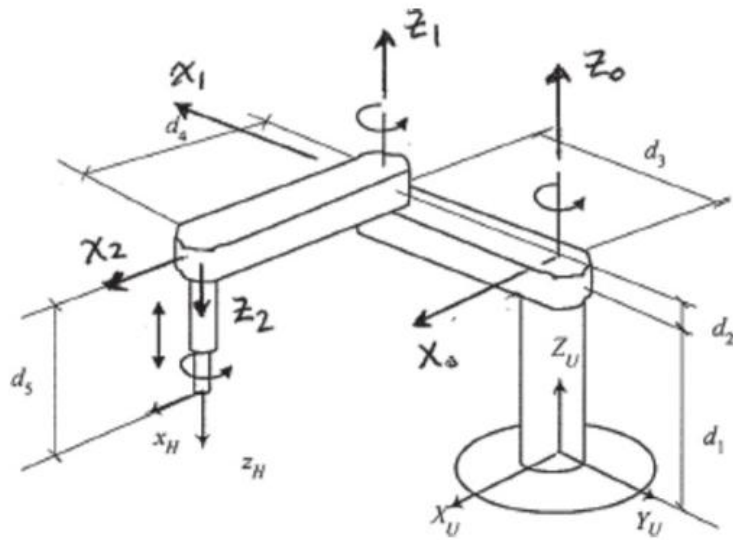
#	$\theta$	d	a	$\alpha$
0-1	$\theta_1$	$l_3 + l_4$	0	90
1-2	$\theta_2$	0	$l_5$	-90
2-H	$180 + \theta_3$	$l_6 + l_7$	0	0

c)



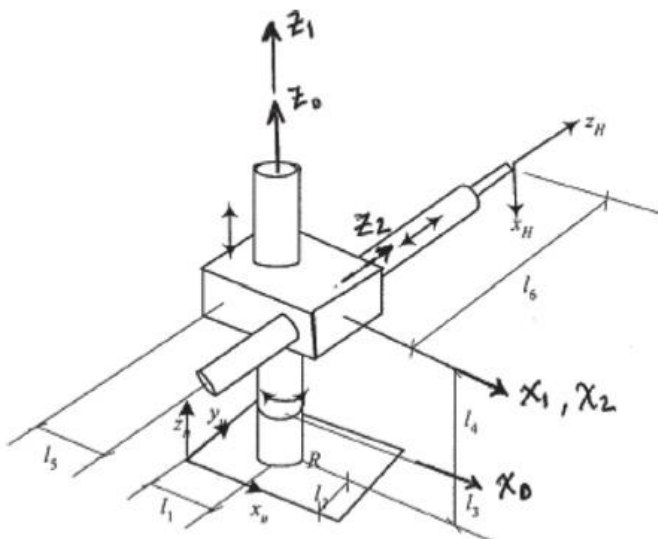
#	$\theta$	d	a	$\alpha$
0-1	$\theta_1$	$l_2 + l_3$	0	$-90$
1-2	$\theta_2$	$l_6 + l_7$	0	$\beta$
2-3	$\theta_3$	$L^*$	0	$-\beta$
3-H	$\theta_4$	$l_9$	0	0

d)



#	$\theta$	d	a	$\alpha$
0-1	$\theta_1$	0	$d_3$	0
1-2	$\theta_2$	0	$d_4$	180
2-H	$\theta_3$	$d_5$	0	0

e)



#	$\theta$	d	a	$\alpha$
0-1	$\theta_1$	$l_4$	0	0
1-2	0	0	$l_5$	-90
2-H	90	$l_6$	0	0