6.

Programming Model: Four qubits

Four weights : a_1, a_2, a_3, a_4

Six strengths : $b_{12}, b_{13}, b_{14}, b_{23}, b_{24}, b_{34}$

$$O(a_i, b_{ij}; q_i) = a_1 q_1 + a_2 q_2 + a_3 q_3 + a_4 q_4 +$$
$$b_{12} q_1 q_2 + b_{13} q_1 q_3 + b_{14} q_1 q_4 + b_{23} q_2 q_3 + b_{24} q_2 q_4 + b_{34} q_3 q_4$$

QMI : a_1 a_2 a_3 a_4 b_{12} b_{13} b_{14} b_{23} b_{24} b_{34}

a_1	a_2	a_3	a_4	b_{12}	b_{13}	b_{14}	b_{23}	b_{24}	b_{34}
0.5	0.5	0.5	2	1	-1	-2	-1	-2	2

q_1	q_2	q_3	q_4	Objective
0	0	0	0	0
0	0	0	1	2
0	0	1	0	0.5
0	0	1	1	4.5
0	1	0	0	0.5
0	1	0	1	0.5
0	1	1	0	0
0	1	1	1	2
1	0	0	0	0.5
1	0	0	1	0.5
1	0	1	0	0
1	0	1	1	2
1	1	0	0	2
1	1	0	1	0
1	1	1	0	0.5
1	1	1	1	0.5