

Homework 5

1 (30 points) Describe how I, Z, X, Y and Hadamard quantum gates are working.

2 (30 points) Prove the NoCloning Theorem

3. (40 points) Describe Bell Circuit and calculate $B(|00\rangle)$, $B(|01\rangle)$, $B(|10\rangle)$ and $B(|11\rangle)$