CH Toffoli circuit

Represent the following circuit expressed using the Qiskit notation in Quirk (https://algassert.com/quirk) and answer the questions in this form.

from qiskit import QuantumRegister, ClassicalRegister, QuantumCircuit

qreg_q = QuantumRegister(16, 'q')
creg_c = ClassicalRegister(4, 'c')
circuit = QuantumCircuit(qreg_q, creg_c)

circuit.h(qreg_q[3])
circuit.h(qreg_q[8])
circuit.h(qreg_q[14])
circuit.h(qreg_q[15])
circuit.h(qreg_q[7])
circuit.h(qreg_q[9])
circuit.ccx(qreg_q[12], qreg_q[13], qreg_q[14])
circuit.cs(qreg_q[14], qreg_q[7])
circuit.swap(qreg_q[9], qreg_q[11])
circuit.ch(qreg_q[7], qreg_q[3])
circuit.swap(qreg_q[9], qreg_q[10])
circuit.ccx(qreg_q[3], qreg_q[4], qreg_q[0])
circuit.swap(qreg_q[6], qreg_q[11])
circuit.ccx(qreg_q[1], qreg_q[3], qreg_q[6])
circuit.ccx(qreg_q[0], qreg_q[3], qreg_q[7])
circuit.cs(qreg_q[1], qreg_q[3])
circuit.cz(qreg_q[7], qreg_q[3])
circuit.cx(qreg_q[3], qreg_q[7])
circuit.swap(qreg_q[3], qreg_q[7])
circuit.ccx(qreg_q[0], qreg_q[1], qreg_q[3])
circuit.ch(qreg_q[5], qreg_q[3])
circuit.ch(qreg_q[3], qreg_q[2])
circuit.ccx(qreg_q[5], qreg_q[6], qreg_q[7])
circuit.measure(qreg_q[0], creg_c[0])
circuit.measure(qreg_q[2], creg_c[2])
circuit.measure(qreg_q[3], creg_c[3])
circuit.measure(qreg_q[6], creg_c[3])
circuit.measure(qreg_q[7], creg_c[3])
circuit.measure(qreg_q[8], creg_c[3])
circuit.measure(qreg_q[9], creg_c[3])
circuit.measure(qreg_q[10], creg_c[3])
circuit.measure(qreg_q[11], creg_c[3])
circuit.measure(qreg_q[14], creg_c[3])

* Indica que la pregunta es obligatoria

1. Enter your experimental ID *

   _____

2. Which is the percentage value of mag^2 for the state 0 (decimal)? (e.g., 32.7) *

   _____

3. Which is the percentage value of mag^2 for the state 256 (decimal)? (e.g., 32.7) *

   _____

4. Which is the percentage value of mag^2 for the state 2400 (decimal)? (e.g., 32.7) *

   _____

5. Which is the percentage value of mag^2 for the state 8732 (decimal)? (e.g., 32.7) *

   _____

6. Which is the percentage value of mag^2 for the state 16520 (decimal)>? (e.g., 32.7) *

   _____

7. Which is the percentage value of mag^2 for the state 38216 (decimal)? (e.g., 32.7) *

   _____

8. Which is the percentage value of mag^2 for the state 44585 (decimal)? (e.g., 32.7) *

   _____

9. Which is the percentage value of mag^2 for the state 49224 (decimal)? (e.g., 32.7) *

10. Copy the code of the circuit created (Export button, then 'Copy to clipboard' under 'Escaped Link') *

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