Quiz 2
Total marks: 10
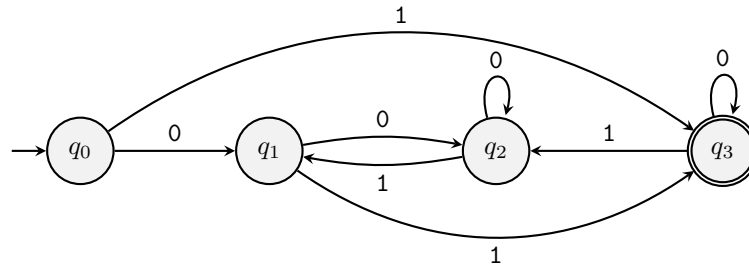CSE331
Student ID: _____
Duration: 25 minutes
Set 1

You have to use the designated spaces for your answers. No extra pages will be provided.

Problem 1: Converting DFAs to Regular Expressions (7 points)

Convert the following DFA into an equivalent regular expression using the state elimination method. First eliminate q_2, then q_3 and finally q_1. You must show work.

Problem 2: Regular Expressions (3 points)
Give a regular expression for the following language over $\Sigma = \{0, 1\}$.

$$L = \{w : 10 \text{ appears an even number of times in } w\}$$