BRAC UNIVERSITY
Merul Badda, Dhaka, Bangladesh
CSE331 : Automata and Computability
Quiz 4
Summer 2024

Duration: 30 minutes   **CO4**   **Total: 30 marks**
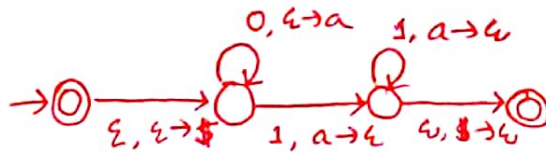
Name:	ID:	Section:

PDA

Let, $\Sigma = \{0, 1\}$.

1. Draw the state diagram of a PDA for the following CFL over Σ: (10 x 1 = 10 marks)

$L(M) \rightarrow \{w = 0^n 1^m \mid n, m \geq 0 \text{ and } n = m\}$.

Solution:

2. Draw the state diagram of a PDA for the following CFL over Σ: (10 x 1 = 10 marks)

$L(M) \rightarrow \{w = 0^n1^m \mid n, m \geq 0 \text{ and } n = 2m\}$.

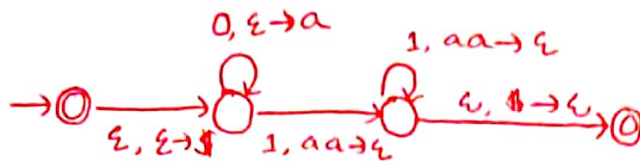Solution:

3. Draw the state diagram of a PDA for the following CFL over Σ: (10 x 1 = 10 marks)

$L(M) \rightarrow \{w = 0^n1^m \mid n, m \geq 0 \text{ and } n > 2m\}$.

Solution: