Quiz 11

Due Nov 7 at 11:59pm **Points** 6 **Questions** 6
Available Nov 3 at 11:59pm - Nov 21 at 11:59pm **Time Limit** 30 Minutes

Instructions

Quiz 11

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	29 minutes	5.67 out of 6

ⓘ Correct answers will be available on Nov 15 at 12am.

Score for this quiz: **5.67** out of 6
Submitted Nov 7 at 9:32pm
This attempt took 29 minutes.

Question 1 — 1 / 1 pts

Which one of the following are accurate statements.

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A. Every NFA can be converted to an equivalent PDA.
B. Every nondeterministic PDA can be converted to an equivalent deterministi
c PDA.
C. Every regular grammar is a context-free grammar
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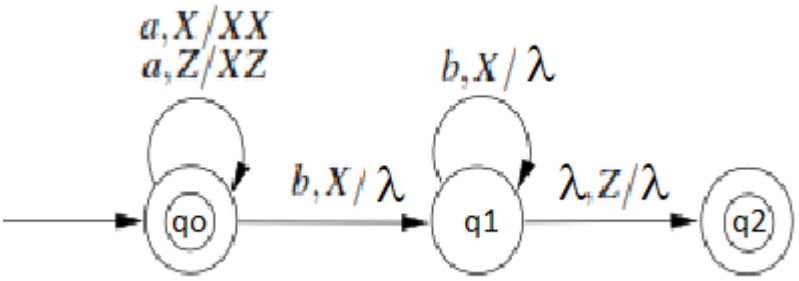
- [ ] None of A, B , C
- [x] C
- [x] A
- [ ] B

Question 2

1 / 1 pts



What is the final accepting configuration on the string aabb

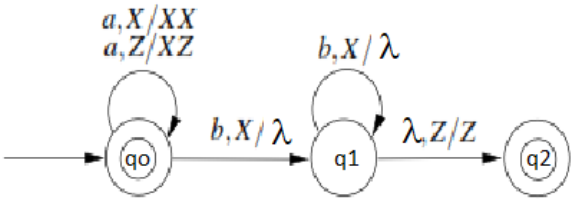
A. q2,λ,λ
B. q2,λ,Z
C. q1,λ,Z
D. q2,Z,Z

- (•) A
- ( ) B
- ( ) C
- ( ) D

Partial

Question 3

0.67 / 1 pts



What are the strings accepted by this PDA?

A. λ
B. aa
C. ab

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D. ba
E. bb
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- [ ] A
- [x] B
- [ ] D
- [x] C
- [ ] E

Question 4

1 / 1 pts

State transition labelled a, b / c means "when machine reads an a from the input and the top symbol of the stack is a b, it may replace the b with c."

What edge label would indicate "Read a 0, don't pop anything from stack, don’t push anything to the stack"?

A. 0, λ/0
B. λ, 0/0
C. λ, λ/0
D. 0. λ/λ

- [ ] B
- [ ] C
- [x] D
- [ ] A

Question 5

1 / 1 pts

Which of the following pairs have DIFFERENT expressive power?

A Deterministic finite automata(DFA) and Non-deterministic finite automata(NFA)

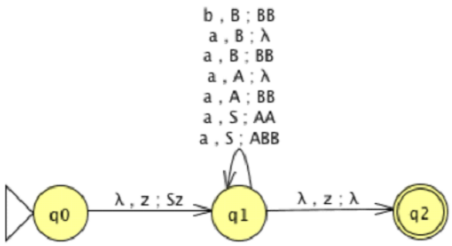
B Deterministic push down automata(DPDA)and Non-deterministic push down automata (NPDA)

- [x] B only
- [ ] None of A or B
- [ ] Both A and B
- [ ] A only

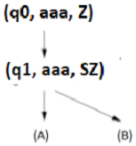
Question 6

1 / 1 pts

Given a NPDA below:



If you write the configuration sequence on input aaa as shown below, give the configuration that is possible for (A) and (B)?



- [ ] (q1,aa,BBZ)
- [ ] (q2,aaa,S)
- [ ] (q1,aaa,AAZ)
- [x] (q1,aa, AAZ)
- [ ] (q1,aaa,ABBZ)
- [x] (q1,aa,ABBZ)

Quiz Score: **5.67** out of 6