Quiz 6

Due Oct 3 at 11:59pm **Points** 6 **Questions** 6
Available Sep 29 at 11:59pm - Oct 10 at 11:59pm **Time Limit** 30 Minutes

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	20 minutes	6 out of 6

Score for this quiz: **6** out of 6
Submitted Oct 2 at 6:26pm
This attempt took 20 minutes.

Question 1

1 / 1 pts

For the grammar G given below, which of the strings are in L(G)

```
S -> A | B
A -> aA | a
B -> bB | λ
```

```
I.   λ
II.  a
III. b
IV.  aa
V.   ba
VI.  ab
VII. bb
```

Correct! ☑ VII

☐ VI

☐ V

Correct! ☑ IV

Correct! ☑ III

Correct!

- [x] I

Correct!

- [x] II

Question 2

1 / 1 pts

For the grammar G given below, which of the strings are in L(G)

```
S -> aA | λ
A -> bS

I.   λ
II.  a
III. b
IV.  aa
V.   ba
VI.  ab
VII. bb
```

- [ ] V
- [ ] VII
- [ ] III

Correct!

- [x] I
- [ ] II
- [ ] IV

Correct!

- [x] VI

Question 3

1 / 1 pts

Which is the classification of the following grammar.

```
S -> aA | λ
A -> Sb
```

```
I. Linear grammar
II. Right linear grammar
III. Left linear grammar
IV. Regular grammar
V. Not a regular grammar
```

Correct!

- [x] V
- [ ] IV

Correct!

- [x] I
- [ ] III
- [ ] II

Question 4

1 / 1 pts

Which is the classification of the following grammar.

```
S -> AB
A -> aA | a
B -> bB | λ
```

```
I. Linear grammar
II. Right linear grammar
III. Left linear grammar
IV. Regular grammar
V. Not a regular grammar
```

- [ ] IV
- [ ] II

Correct!

- [x] V
- [ ] III

I

Question 5

1 / 1 pts

```
A language is regular if and only if the language is:
I. Accepted by DFA or NFA
II. Described by any linear grammar
III. Described by a left linear grammar
IV. Described by a right linear grammar
V.Described by a regular expression
```

Correct! IV

Correct! V

Correct! I

Correct! III

II

Question 6

1 / 1 pts

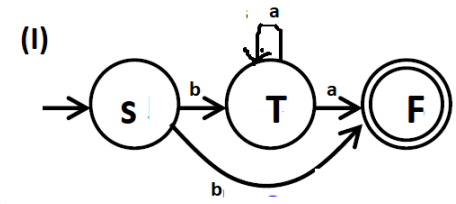
Given the production rules:

S $\longrightarrow$ bT | a

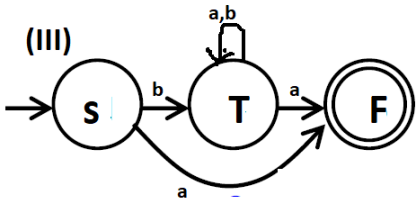
T $\longrightarrow$ aT | bT | a

Which of the following Finite Automata are equivalent to the above Grammar.

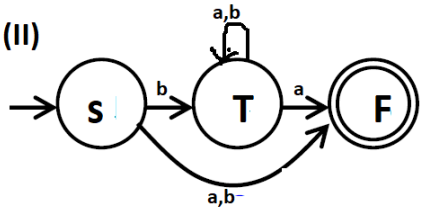
(I)



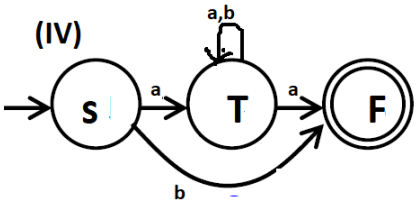
(III)



(II)



(IV)



- II
- None of the answers are correct

Correct!

- III
- I
- IV

Quiz Score: **6** out of 6