Homework Assignment Submitted Successfully.

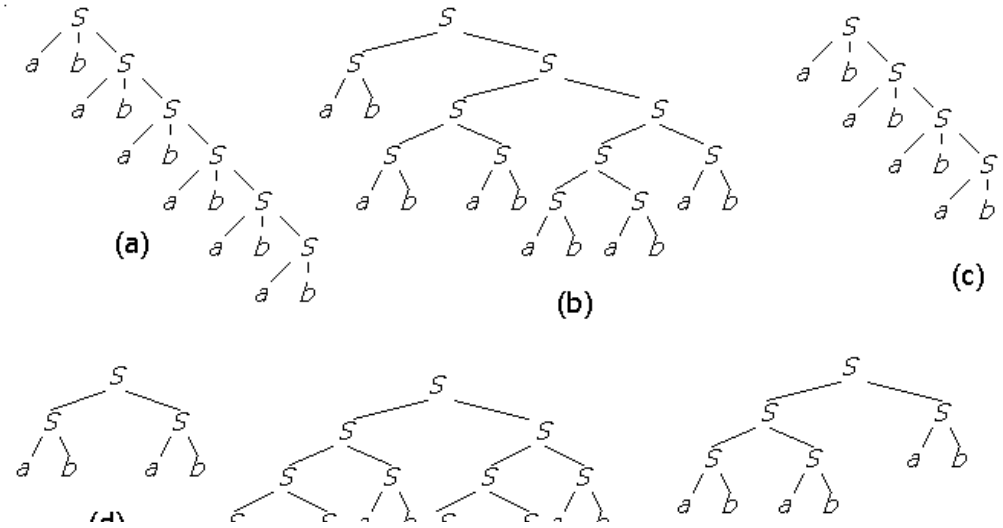
You obtained a score of 11.0 points, out of a possible 15.0 points.
You have answered 4 questions correctly.
You have answered 1 question incorrectly.
For each correct answer, you received 3.0 points
and for each incorrect answer, you lost 1.0 points.

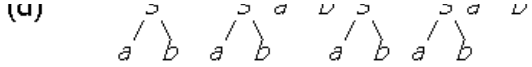
Submission number:	63572
Submission certificate:	IJ281534
Submission time:	2014-02-22 16:45:22 PST (GMT - 8:00)

Number of questions:	5
Positive points per question:	3.0
Negative points per question:	1.0
Your score:	11

Selected questions on parse trees. Based on Section 5.2 of HMU.

1. Which of the following is a parse tree for the grammar S → abS, S → ab?





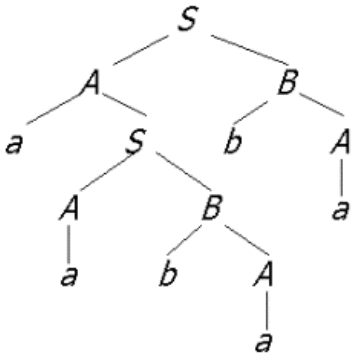
(e) (f)

a) (f)
b) (c)
c) (e)
d) (b)

Answer submitted: **b)**

You have answered the question correctly.

2. Here is a parse tree that uses some unknown grammar G.



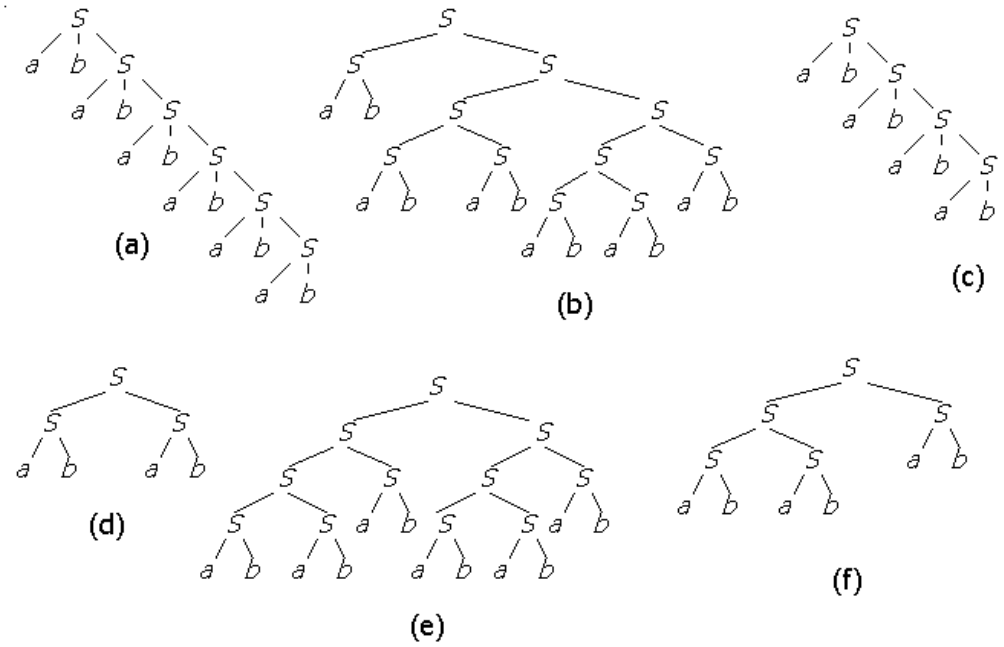
Which of the following productions is surely one of those for grammar G?

a) S → B
b) B → ba
c) A → SB
d) B → bA

Answer submitted: **d)**

You have answered the question correctly.

3. Which of the parse trees below yield the same word?

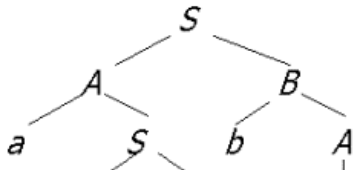


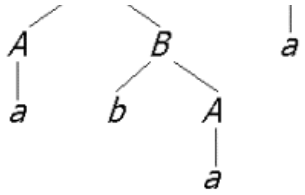
a) a and d
b) a and f
c) a and e
d) c and d

Answer submitted: **c)**

You have answered the question correctly.

4. The folowing is a parse tree in some unknown grammar G:





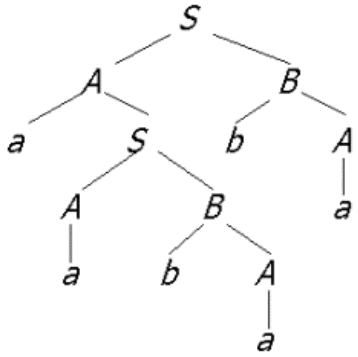
Which of the following productions is **definitely not** a production of G?

a) A → aS
b) S → CB
c) None of the other choices.
d) B → CD

Answer submitted: **c)**

You have answered the question correctly.

5. The parse tree below represents a rightmost derivation according to the grammar `S → AB, A → aS|a, B → bA`.



Which of the following is a right-sentential form in this derivation?

a) aABbA
b) aSB
c) aaBba
d) aABba

Answer submitted: **b)**

Your answer is incorrect.

This is a left-sentential form, but not a right-sentential form. Its derivation according to the parse tree is S => AB => aSB. Remember that in a rightmost derivation, every step replaces the rightmost nonterminal.

Section 5.2.5 (p. 188) talks about constructing leftmost derivations from parse trees. You should think about how to change that method to produce rightmost derivations instead. Also, see Section 5.1.4 (p. 177) for the definition of rightmost derivations.