

Quiz 02 (4 points)

Name:

Student ID:

Section #: 01 (MT4) | 02 (MT5)

You can refer to Lecture slides, Lecture notes, and other Internet materials. But never ask anyone. Do not accidentally modify the questions. (For online students, copy this doc and save into your shared folder for the PLT class.)

* Answer the following questions about BNF.

$\langle \text{expr} \rangle ::= \langle \text{expr} \rangle \langle \text{expr} \rangle \quad \Leftarrow \text{(i)}$
 $\quad | (\langle \text{expr} \rangle !) \quad \Leftarrow \text{(ii)}$
 $\quad | \langle \text{symbol} \rangle$
 $\quad | \langle \text{id} \rangle$

$\langle \text{id} \rangle ::= \text{Jesus, life, good, I, hi, her, sorry, } \omega \text{ (} \leftarrow \text{space), great, HGU, ISEL, s, m, es, love, forgive, PL, like, me, again, you, Can, do, still, join, Do, is, am, C, D, E, H, J, L, N, P, S, U, W, Y}$

$\langle \text{symbol} \rangle ::= .(\leftarrow \text{dot/period}), ,(\leftarrow \text{comma}), ?, (,)$

(1) Find at least one non-terminal (0.5P)

(2) Find at least one terminal (0.5P)

(3) Which one is incorrect based on the BNF (1P): ()

- ① JESUS loves you. Do you still love him?
- ② (I,like,PL)
- ③ (!)
- ④ ((PL again)!)!
- ⑤ HI, JC likes PL.

(4) Write expressions that can be generated by this BNF (2P):

1. Use (i):

2. Use (ii):