(a) All set of balanced parentheses

(b) All set of strings are 
( and ).

(c) Want to declare proc so keep count of 
\#\{\} \& \#\{\} \text{add } \#\{\text{}} \text{ and } \#\{\text{}} \text{ at } 20 \text{ finally count } = 0.

T \rightarrow ( \qquad \text{T. count } = 1 \text{ valid } = \text{true} \\
\text{T. valid } = \text{true}

T \rightarrow ) \qquad \text{T. count } = 1 \text{ valid } = \text{true}

T \rightarrow T( \qquad \\
\text{T. count } = 2 \text{ valid } = \text{true}

T \rightarrow T ) \qquad \text{T. count } = 2 \text{ valid } = \text{true}

Finally

P \Rightarrow T

\text{P. valid } = \text{T. valid } = \text{true}

(\text{T. count } = 20)

(d) Doesn't change, still need activation record stacks.

(e) Changes - NO global, variables exist, all data is local so static linker no longer needed.

(f) Dynamic linker - still need, no change.

(g) Array deallocators - not needed in MIP and change doesn't affect them, so no change.

(h) Symbol table - Function names are at one level and data is at another level, so symbol table changes.

Only need 1 level of scope. - Data is local - Proc names may be local level.

5 Assume static linker is after 2

(1) \text{L \& R0, 2, (05)}

(2) \text{L \& R0, 17, (03)}

(3) \text{M \& R0, 18, (02)}

(4) \text{ST \& R1, 16, (02)}

00 01 03 00 17 00 18 00 19