Take Home - 05

Due Mar 7 at 12pm **Points** 15 **Questions** 15
Available Mar 4 at 12pm - Mar 7 at 12pm 3 days **Time Limit** None

This quiz was locked Mar 7 at 12pm.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	21 minutes	9 out of 15

Score for this quiz: **9** out of 15
Submitted Mar 5 at 5:14pm
This attempt took 21 minutes.

Question 1

1 / 1 pts

1) In Algol, blocks must define a scope of declaration of some name(s), hence it is represented as a box in the contour diagram (CD) scoping mechanism.

Correct!

- (●) True
- ( ) False

Question 2

0 / 1 pts

2) In Algol, when the compiler looks up a non-local name's declaration, according to the CD rules, it cannot look (penetrate) outside-in a box except when this box is defined to represent a block.

ou Answered

- (selected) True

orrect Answer

- False

Question 3

1 / 1 pts

3) In statically scoped High-Level Languages (HLL), and according to the CD rules, a name might be
declared but not accessible or even visible.

Correct!

- (selected) True
- False

Question 4

1 / 1 pts

4) In Algol, blocks, procedures, and functions are examples of HLL's abstraction.

Correct!

- (selected) True
- False

Question 5

0 / 1 pts

5) While compiling a Pascal procedure/function, the compiler knows the static distance (sd) of all defined names (identifiers) in the program.

ou Answered

- (selected) True

orrect Answer

- False

Question 6

0 / 1 pts

6) Deeply nested Algol modules (proc's/func's/blocks) will always result in an inefficient execution time, due to bus access chasing the SL's (long static chains).

ou Answered

- (selected) True

orrect Answer

- False

Question 7

1 / 1 pts

7) The compiler is able to compute the "closures" for locally defined procedures/functions names, and place them in their definers' AR, as it does for all other local names with types such as integers, real, chars, etc.

Correct!

- (selected) True
- False

Question 8

1 / 1 pts

8) Explicit memory management garbage collection is much more secure and efficient than being implicit.

- True
- False

Correct!

Question 9

1 / 1 pts

9) In Pascal, the set, arrays, and enumerated types are true Abstract Data Types (ADTs).

Correct!

- True
- False

Question 10

1 / 1 pts

10) Combining pointers and dynamic arrays in a HLL is better than utilizing one of them only.

Correct!

- True
- False

Question 11

0 / 1 pts

11) In the Algol "pass-by-name" parameter passing, the compiler will replace every formal parameter at the callee by a textual copy of its corresponding actual parameter in the call statement, then call its thunk.

ou Answered

- (•) True

orrect Answer

- ( ) False

Question 12

1 / 1 pts

12) The run-time stack content is not accessible at all by the compiler, except in dynamically scoped HLLs.

- ( ) True

Correct!

- (•) False

Question 13

0 / 1 pts

13) A HLL that deals with functions as first class citizens, i.e., passing and returning functions to/from other functions as first class types (FCTs) integer, should allow us to deal with functions closures as FCTs integer, hence adding, subtracting, multiplying them, too.

ou Answered

- (selected) True

orrect Answer

- False

Question 14

0 / 1 pts

14) Static and dynamic scoping mechanisms are good to be combined in a HLL for efficiency, then it is up to the compiler to select which rule to apply to maximize efficiency.

ou Answered

- (selected) True

orrect Answer

- False

Question 15

1 / 1 pts

15) In Pascal, all AR's which constitute the environment of a HLL's construct, e.g., expressions and statements, to be executed as part of some procedure P, must be generated/exist at the run-time stack when P is called.

Correct!

- (selected) True
- False

Quiz Score: **9** out of 15