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Time taken 1 min 37 secs

Grade 9.00 out of 10.00 (90%)

Question 1

Correct

Mark 1.00 out of 1.00

In assembly language, how is a linked list typically implemented?

- ☐ a. Using recursion
- ☐ b. Using an array
- ☒ c. Using pointers ✓
- ☐ d. Using loops

Your answer is correct.

Question 2

Correct

Mark 1.00 out of 1.00

When might you need to perform program translation among different programming languages?

- ☐ a. During hardware design
- ☐ b. For software documentation
- ☒ c. When porting software across platforms ✓
- ☐ d. Only in academic research

Question 3

Correct

Mark 1.00 out of 1.00

What is the purpose of high-level data structures in assembly language?

- ☒ a. Efficient memory management ✓
- ☐ b. Faster program execution
- ☐ c. Improved code readability
- ☐ d. Easier debugging

Question 4

Correct

Mark 1.00 out of 1.00

Which data structure is commonly used to represent a collection of elements with a Last-In-First-Out (LIFO) order?

- ☐ a. Queue
- ☒ b. Stack ✓
- ☐ c. Linked List
- ☐ d. Tree

Your answer is correct.

Question 5

Correct

Mark 1.00 out of 1.00

Which phase of program translation involves converting high-level code into assembly language code?

- ☐ a. Parsing
- ☐ b. Lexical analysis
- ☒ c. Code generation ✓
- ☐ d. Semantic analysis

Question 6

Incorrect

Mark 0.00 out of 1.00

Which phase of program translation involves checking for errors in the source code?

- ☐ a. Lexical analysis
- ☒ b. Semantic analysis ✗
- ☐ c. Syntax analysis
- ☐ d. Code generation

Question 7

Correct

Mark 1.00 out of 1.00

In the context of program translation, what is syntax?

- ☐ a. The meaning of program statements
- ☒ b. The structure of program statements ✓
- ☐ c. The size of the program
- ☐ d. The documentation of the program

Question 8

Correct

Mark 1.00 out of 1.00

What does a linker do during program translation?

- ☐ a. Translates assembly language to machine language
- ☒ b. Combines multiple object files into a single executable ✓
- ☐ c. Translates high-level source code to assembly language
- ☐ d. Optimizes the code for better performance

Your answer is correct.

Question 9

Correct

Mark 1.00 out of 1.00

When translating a program from one language to another, what is a potential challenge related to semantics?

- ☒ a. Incompatible data types ✓
- ☐ b. Variable naming conventions
- ☐ c. Line-by-line code translation
- ☐ d. Code documentation

Question 10

Correct

Mark 1.00 out of 1.00

In the context of program translation, what are semantic differences?

- ☐ a. Differences in variable names
- ☒ b. Differences in the meaning of program statements ✓
- ☐ c. Differences in program size
- ☐ d. Differences in program structure