

1. Bindings can be
  - a. Both implicit and explicit
2. Static, Dynamic and automatic are examples for what?
  - a. Storage class
3. "Colorless green ideas sleep furiously"
  - a. a sentence composed by Noam Chomsky in 1957 as an example of a sentence whose grammar is correct but whose meaning is nonsensical. It was used to show inadequacy of the then-popular probabilistic models of grammar, and the need for more structured models
4. Constructs derivations and parse trees from the leaves to the roots
  - a. Bottom-up parser
5. The parsing phase is the phase in which a compiler processes the tokens, determining the program's syntactic structure.
  - a. True
6. A symbol table must support which of the following operations regarding the bindings of names to attributes
  - a. Insertion
  - b. Lookup
  - c. Deletion
  - d. All of the above
7. Allocations on the heap is
  - a. Dynamic
8. What represents the entire top-level phase being defined in a grammar
  - a. Start symbol
9. Representation of characters or digits
  - a. Literal
10. Symbols used to describe the grammar rules
  - a. Metasymbols
11. In class, we covered the two concepts that required to define a data type, what are those two concepts
  - a. Valid value
  - b. Valid operations
12. When a functions name is overloaded, the name resolution can be determined based upon the only type of parameters
  - a. False
13. A language in which tokens must occur in prespecified locations on the line or page is considered to be what?
  - a. Fixed format
14. The graphical description of the replacement process in a derivation of a grammar is
  - a. Parse tree
15. This can its values corrupted at local times
  - a. Static constant
16. What translate an entire program into executable code and does not execute it
  - a. Compiler
17. Why is it important for a language to recognize two data types as being distinctly different?
  - a. Operation might not get executed
18. What are the ways to specify semantics?
  - a. All of the above

- i. Formal definition
  - ii. Language reference manual
- 19. Those types supplied with a language, from which all other types are constructed
  - a. Predefined types
- 20. What the language constructs actually do
  - a. Semantics
- 21. A type that uses itself in its declaration is
  - a. Recursive
- 22. Formatting that affects the way tokens are recognized
  - a. Token delimiter
- 23. The process a translator goes through to determine whether type information in a program is consistent
  - a. Type checking
- 24. When grammar allows two distinct parse or syntax trees it is called what?
  - a. Ambiguous
- 25. Static binding occurs \_\_\_\_ execution
  - a. Before
- 26. The symbol table binds names to values
  - a. False
- 27. The stack and the heaps are the only places an allocation location for a variable may exist
  - a. False
- 28. Operators in expression are ....
  - a. False
- 29. Immutable objects never change state
  - a. True
- 30. Dynamic binding happens before execution
  - a. False
- 31. Operators in expressions are semantically different from function calls
  - a. False
- 32. Evaluate the RPN: 15 7 1 1 + - / 3 \* 2 1 1 + + -

↑↓	↑↓
1	1
5	1 5
7	1 5 7
1	1 5 7 1
1	1 5 7 1 1
+	1 5 7 2
-	1 5 5
/	1 1
3	1 1 3
*	1 3
2	1 3 2
1	1 3 2 1
1	1 3 2 1 1
+	1 3 2 2
+	1 3 4
-	1 -1
#N :	16

because the data stored can only be access by owner thread.