

TRUE/FALSE

1. A register is a short-term memory location in the processor.

ANS: T PTS: 1 REF: 45

2. The second generation of programming languages came to be known as “high-level” languages because statements could be expressed more closely to the way people think than the way the computer “thinks.”

ANS: F PTS: 1 REF: 45

3. FORTRAN is considered a first-generation language.

ANS: F PTS: 1 REF: 46

4. The Java language was enhanced in the 1980s to incorporate object-oriented programming (OOP).

ANS: F PTS: 1 REF: 46

5. Interpreted programs can be modified and tested immediately.

ANS: T PTS: 1 REF: 46-47

6. JavaScript is considered an interpreted language because it is interpreted by a Web browser.

ANS: T PTS: 1 REF: 47

7. JavaScript is embedded in an HTML file and interpreted by a Web browser, such as Mozilla Firefox, Internet Explorer, Google Chrome, or Safari.

ANS: T PTS: 1 REF: 47

8. 4GLs are associated with visual interfaces and natural languages in some definitions.

ANS: T PTS: 1 REF: 47

9. Machine code is compiled into bytecode by a just-in-time compiler.

ANS: F PTS: 1 REF: 47

10. Fourth-generation languages are “application specific”—that is, they are tied to an application such as a database or a report writer.

ANS: T PTS: 1 REF: 47

11. Mosaic was released in 1995, Netscape Navigator in 2000, and Microsoft Internet Explorer in 2002.

ANS: F PTS: 1 REF: 48

12. JavaScript was first known as Mocha.

ANS: T PTS: 1 REF: 49

13. HTML uses a system of tags to identify sections of a Web page.

ANS: T PTS: 1 REF: 49

14. E-mail and File Transfer Protocol (FTP) are two applications that use the Internet as their principal medium.

ANS: T PTS: 1 REF: 49

15. Credit for the development of JavaScript goes to Bill Gates of Microsoft Corporation.

ANS: F PTS: 1 REF: 49

16. JavaScript programs are compiled and run separately as standalone programs.

ANS: F PTS: 1 REF: 49

17. A principle of XHTML is that it contains the content of data and leaves the formatting specifics to external documents, such as Cascading Style Sheets (CSS).

ANS: T PTS: 1 REF: 51

18. In object-based programming, a statement is often made up of two parts: the name of the object initiating an action (such as document) and the action itself.

ANS: T PTS: 1 REF: 52

19. In pseudocode, the keyword `Display` is followed by the text expression. In JavaScript, the `document.write` is followed by the text expression in parentheses, and a semicolon is placed at the end of the statement.

ANS: T PTS: 1 REF: 52

20. JavaScript, like most full programming languages, requires the declaration of a data type.

ANS: F PTS: 1 REF: 56

21. JavaScript has no separate declaration for constants, so constants are declared as variables.

ANS: T PTS: 1 REF: 56

22. Named constants should be used when they serve to improve readability and understanding.

ANS: T PTS: 1 REF: 58

23. A number entered in a text box is stored as a numeric variable.

ANS: F PTS: 1 REF: 59

24. An expression using the `+` operator between two variables assigned with the `prompt()` statement concatenates the variables as strings instead of performing arithmetic addition on them.

ANS: T PTS: 1 REF: 59

25. In JavaScript, variables are declared with `var` and the data type must be specified.

ANS: F PTS: 1 REF: 62

MULTIPLE CHOICE

1. _____ consisted of machine languages, written in binary code and executed by the computer's processor.

a. First-generation languages c. Third-generation languages
b. Second-generation languages d. Fourth-generation languages

ANS: A PTS: 1 REF: 44

2. With a(n) _____ the editor, compiler, and executer are combined in the same application.

a. graphical browser c. integrated development environment
b. second-generation language d. first-generation language

ANS: C PTS: 1 REF: 46

3. Complete programs that are translated into complete machine-executable programs are said to be _____.

a. interpreted c. instantiated
b. compiled d. validated

ANS: B PTS: 1 REF: 46

4. _____ was one of the first languages to have an integrated development environment (IDE).

a. Visual Basic c. LISP
b. FORTRAN d. COBOL

ANS: A PTS: 1 REF: 46

5. Which of the following is considered a second generation language?

a. FORTRAN c. C
b. LISP d. Assembly language

ANS: D PTS: 1 REF: 45

6. Programs translated and executed line by line from the source code are said to be _____.

a. compiled c. interpreted
b. validated d. instantiated

ANS: C PTS: 1 REF: 46

7. _____ programs are free of syntax errors and they run faster than interpreted programs (because they are already in machine executable form).

a. Validated c. Assembled
b. Compiled d. Instantiated

ANS: B PTS: 1 REF: 46

8. ____ focus less on a program's procedures and more on the objects (or things) on which these procedures operate.
- a. Validated
 - b. Compiled
 - c. Assembled
 - d. Object oriented

ANS: D PTS: 1 REF: 46

9. If a(n) ____ program contains a syntax error it usually just halts or crashes.
- a. validated
 - b. compiled
 - c. interpreted
 - d. object oriented

ANS: C PTS: 1 REF: 46

10. A(n) ____ is one that does not run as a separate (stand-alone) program.
- a. second-generation language
 - b. scripting language
 - c. first-generation language
 - d. interpreted language

ANS: B PTS: 1 REF: 47

11. ____ are segments of program code that another program runs.
- a. Scripts
 - b. Tags
 - c. Hyperlinks
 - d. Methods

ANS: A PTS: 1 REF: 47

12. In the early 1990s, search tools with the names Archie, Gopher, Veronica, and Jughead established the use of ____, which made it possible to click a text link and retrieve a document from another location in the vast Internet resources known as "cyberspace."
- a. hyperlinks
 - b. tags
 - c. functions
 - d. objects

ANS: A PTS: 1 REF: 48

13. In 1989, ____ developed Hypertext Markup Language (HTML), which became the language of the modern Internet, and Hypertext Transfer Protocol (HTTP), which specified how communication should take place.
- a. Bill Gates
 - b. Tim Berners-Lee
 - c. IBM
 - d. Larry Page

ANS: B PTS: 1 REF: 48

14. ____ is a markup language, meaning it describes the layout of a Web page onscreen.
- a. Java
 - b. HTML
 - c. C++
 - d. Visual Basic

ANS: B PTS: 1 REF: 49

15. The collection of HTML pages stored, transmitted, and displayed on the Internet is known as the ____.
- a. URL
 - b. graphical browser
 - c. World Wide Web
 - d. Hypertext Transfer Protocol

ANS: C PTS: 1 REF: 49

16. A computer that stores and sends out Web pages on the Internet is called a ____.
- a. Web server
 - c. DNS

- a. `var lastName`
- b. `""`
- c. `prompt`
- d. `"Enter the employee's last name:"`

ANS: B PTS: 1 REF: 57

25. Which of the following statements outputs the following?

This is line 1.
This is line 2.

- a. `document.write("This is line 1.");`
 `document.write("This is line 2.");`
- b. `var BR = "<br />";`
 `document.write("This is line 1." + BR);`
 `document.write("This is line 2." + BR);`
- c. `document.write("This is line 1.");`
 `document.write("This is line 2.");`
- d. `var BR = "<br />";`
 `document.write("This is line 1." + BR);`
 `document.write("This is line 2." + BR);`

ANS: D PTS: 1 REF: 58