TRUE/FALSE

1. Modular programs are easier to develop, correct, and modify than programs constructed in some other manner.
   ANS: T      PTS: 1      REF: 45

2. One important requirement for designing a good function is giving it a name that conveys some idea of what the function does.
   ANS: T      PTS: 1      REF: 47

3. Except for strings, double quotes, identifiers, and keywords, C++ ignores all white space.
   ANS: T      PTS: 1      REF: 56

4. C++ is a case-sensitive language.
   ANS: T      PTS: 1      REF: 48

5. Programs in C++ can have more than one main() function.
   ANS: F      PTS: 1      REF: 48

6. Preprocessor commands end with a semicolon.
   ANS: F      PTS: 1      REF: 51

7. C++ provides ten built-in integer data types.
   ANS: F      PTS: 1      REF: 61

8. You cannot add and subtract character data and mix it with integer data to produce useful results.
   ANS: F      PTS: 1      REF: 70

9. Although declaration statements can be placed anywhere in a function, typically they’re grouped together and placed after the function’s opening brace.
   ANS: T      PTS: 1      REF: 81

10. Omitting the parentheses after main() is a common programming error.
    ANS: T      PTS: 1      REF: 97

MULTIPLE CHOICE

1. Programs with a structure consisting of interrelated segments, called ____, are arranged in a logical, easily understandable order to form an integrated and complete unit.
   a. blocks              c. units
2. _____ programs are easier to develop, correct, and modify than programs constructed in some other manner.
   a. Modular
   b. Handwritten
   c. Sequential
   d. Low-level

   ANS: A  PTS: 1  REF: 45

3. A _____ contains both data and functions appropriate for manipulating the data.
   a. segment
   b. block
   c. class
   d. function

   ANS: C  PTS: 1  REF: 47

4. A(n) _____ is a word the language sets aside for a special purpose and can be used only in a specified manner.
   a. codeword
   b. keyword
   c. identifier
   d. classname

   ANS: B  PTS: 1  REF: 47

5. The maximum number of characters in a function name is ____.
   a. 128
   b. 256
   c. 512
   d. 1024

   ANS: D  PTS: 1  REF: 47

6. A(n) _____ is a word designed as a memory aid.
   a. mnemonic
   b. keyword
   c. reserved word
   d. identifier

   ANS: A  PTS: 1  REF: 48

7. The main() function is referred to as a(n) _____ function because it tells other functions the sequence in which they execute.
   a. logical
   b. auxiliary
   c. driver
   d. class

   ANS: C  PTS: 1  REF: 48

8. Data transmitted to a function at runtime is referred to as the ____ of the function.
   a. return value
   b. arguments
   c. body
   d. structure

   ANS: B  PTS: 1  REF: 49

9. The _____ is an output object that sends data it receives to the standard display device.
   a. out
   b. cin
   c. print
   d. cout

   ANS: D  PTS: 1  REF: 50

10. Preprocessor commands begin with a _____ sign.
    a. #
    b. //
b. !

d. */

ANS: A  PTS:  1  REF:  51

11. _____ in C++ are any combination of letters, numbers, and special characters enclosed in quotation marks.
   a. Arrays
   b. Strings
   c. Enums
   d. Objects

   ANS: B  PTS:  1  REF:  52

12. The newline escape sequence is ____.
   a. \l
   b. \r
   c. \n
   ANS: C  PTS:  1  REF:  52

13. _____ are explanatory remarks made in a program.
   a. Comments
   b. Strings
   c. Escape sequences
   d. Classes

   ANS: A  PTS:  1  REF:  57

14. A ____ begins with two slashes (//) and continues to the end of the line.
   a. program comment
   b. function comment
   c. block comment
   d. line comment

   ANS: D  PTS:  1  REF:  57

15. A(n) ____ is an acceptable value for a data type.
   a. primitive value
   b. literal
   c. built-in value
   d. class value

   ANS: B  PTS:  1  REF:  61

16. The three most important and common integer types used in most applications are int, char, and _____.
   a. long int
   b. unsigned char
   c. bool
   d. long

   ANS: C  PTS:  1  REF:  61

17. The C++ operator ____ provides the number of bytes used to store values for any data type named in the operator’s parentheses.
   a. size()
   b. sizeof()
   c. length()
   d. lengthof()

   ANS: B  PTS:  1  REF:  65

18. A(n) ____ number, more commonly known as a real number, can be the number zero or any positive or negative number that contains a decimal point.
   a. boolean
   b. integer
   c. long int
   d. floating-point

   ANS: D  PTS:  1  REF:  67

19. A(n) ____ is an item used to change how the output stream of characters is displayed.
20. A(n) ____ is simply a name the programmer assigns to refer to computer storage locations.
   a. constant  c. expression
   b. variable  d. identifier

ANS: B  PTS: 1  REF: 79

21. A(n) ____ data value is considered a complete entity and can’t be decomposed into a smaller data type supported by the language.
   a. composed  c. complex
   b. atomic  d. real

ANS: B  PTS: 1  REF: 82

22. When a declaration statement is used to store a value into a variable, the variable is said to be ____.
   a. initialized  c. reserved
   b. deleted  d. used

ANS: A  PTS: 1  REF: 83

23. The value stored in the variable is referred to as the variable’s ____.
   a. address  c. data
   b. location  d. contents

ANS: D  PTS: 1  REF: 86

24. To determine the address of a variable, we can use C++’s address operator, ____ , which means “the address of.”
   a. *  c. &
   b. =  d. !

ANS: C  PTS: 1  REF: 88

25. A common programming error consists of forgetting to separate data streams sent to cout with the insertion symbol, ____.
   a. <  c. >>
   b. >  d. <<

ANS: D  PTS: 1  REF: 97

COMPLETION

1. A program consists of subprograms, called ____________________, that are designed and developed to perform a specific task.

ANS: modules

PTS: 1  REF: 46

2. In C++, a module can be a class or a(n) ____________________.
3. In an object-oriented language, such as C++, a(n) ________ encapsulates both data and sets of operations.

ANS: class

4. In a function header, the ________ before the function name defines the type of value the function returns when it has completed operating.

ANS: keyword

5. Each ________ inside the function body must end with a semicolon (;).

ANS: statement

6. The output object that sends data it receives to the standard display device, or console, is called ________.

ANS: cout

7. The ________ and ostream classes provide the data declarations and methods used for data input and output, respectively.

ANS: istream

8. C++ supports two types of comments: line and ________.

ANS: block

9. A(n) ________ is defined as a set of values and a set of operations that can be applied to these values.

ANS: data type

class
10. In C++, a(n) ____________________ character changes the normal interpretation of the character following it and alters its meaning.

   ANS: escape

   PTS: 1      REF: 52

11. The ____________________ data type is used to store single characters.

   ANS: char

   PTS: 1      REF: 62

12. A(n) ____________________ data type allows negative values to be stored as well as zero and positive values.

   ANS: signed

   PTS: 1      REF: 66

13. In C++, a(n) ____________________ is any combination of operators and operands that can be evaluated to yield a value.

   ANS: expression

   PTS: 1      REF: 73

14. A(n) ____________________ statement names a variable and specifies the data type that can be stored in it.

   ANS: declaration

   PTS: 1      REF: 80

15. Variables used to hold single-precision values are declared by using the keyword ____________________.

   ANS: float

   PTS: 1      REF: 67

16. Every variable has three major items associated with it: its data type, the value stored in it, and its ____________________.

   ANS: address

   PTS: 1      REF: 87

17. Forgetting to enclose a string sent to ____________________ with quotation marks is a common programming error.

   ANS: cout
PTS: 1     REF: 97