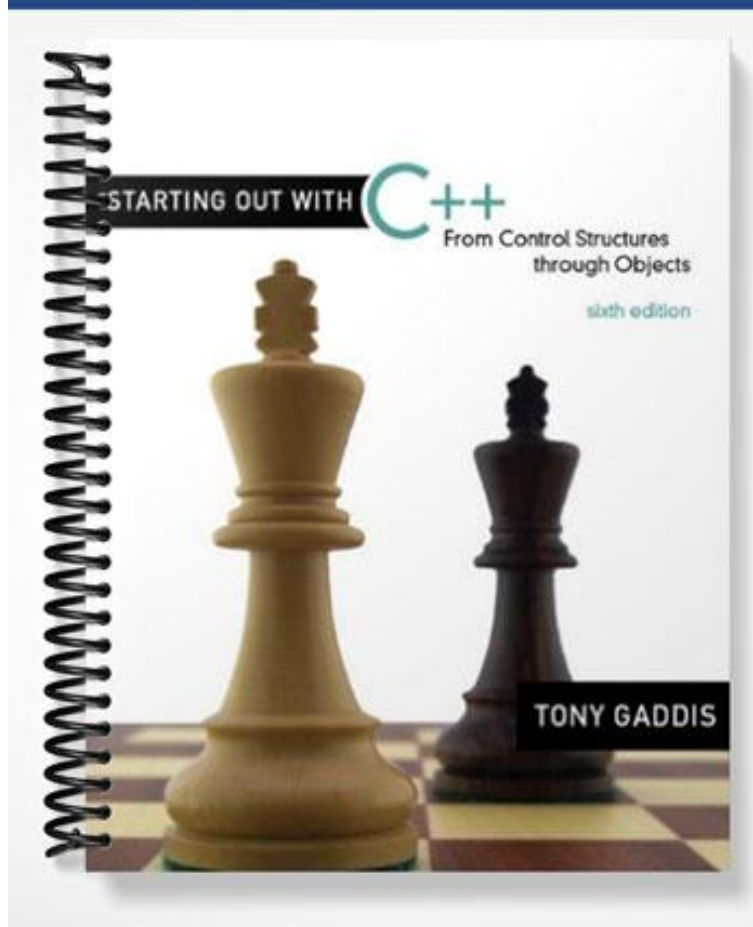


TEST BANK



Chapter Two

MULTIPLE CHOICE

1. In a C++ program, two slash marks (//) indicate:
 - a. The end of a statement
 - b. The beginning of a comment
 - c. The end of the program
 - d. The beginning of a block of code
 - e. None of the above

ANS: B

2. A statement that starts with a # is called a:
 - a. Comment
 - b. Function
 - c. Preprocessor directive
 - d. Key word
 - e. None of the above.

ANS: C

3. For every opening brace in a C++ program, there must be a:
 - a. String literal
 - b. Function
 - c. Variable
 - d. Closing brace
 - e. None of the above

ANS: D

4. The _____ is/are used to display information on the computer's screen.
 - a. Opening and closing braces
 - b. Opening and closing quotation marks
 - c. cout object
 - d. Backslash
 - e. None of the above

ANS: C

5. The _____ causes the contents of another file to be inserted into a program.
 - a. Backslash
 - b. Pound sign
 - c. Semicolon
 - d. #include directive
 - e. None of the above

ANS: D

6. _____ represent storage locations in the computer's memory.
 - a. Literals
 - b. Variables
 - c. Comments
 - d. Integers

e. None of the above

ANS: B

7. These are data items whose values do not change while the program is running.
- Literals
 - Variables
 - Comments
 - Integers
 - None of the above

ANS: A

8. You must have a _____ for every variable you intend to use in a program.
- purpose
 - definition
 - comment
 - constant
 - None of the above

ANS: B

9. Of the following, which is a valid C++ identifier?
- June1997
 - _employee_number
 - __department
 - myExtraLongVariableName
 - All of the above are valid identifiers.

ANS: E

10. The numeric data types in C++ can be broken into two general categories:
- numbers and characters
 - singles and doubles
 - integer and floating point
 - real and unreal
 - None of the above

ANS: C

11. Besides decimal, two other number systems you might encounter in C++ programs are:
- Octal and Fractal
 - Hexadecimal and Octal
 - Unary and Quaternary
 - Base 7 and Base 9
 - None of the above

ANS: B

12. A character literal is enclosed in _____ quotation marks, whereas a string literal is enclosed in _____ quotation marks.
- double, single
 - triple, double
 - open, closed
 - single, double
 - None of the above

ANS: D

13. In memory, C++ automatically places a _____ at the end of string literals.
- Semicolon
 - Quotation marks
 - Null terminator
 - Newline escape sequence
 - None of the above

ANS: C

14. Which escape sequence causes the cursor to move to the beginning of the current line?
- \n
 - \t
 - \a
 - \b
 - \r

ANS: E

15. What is the modulus operator?
- +
 - *
 - &
 - %
 - ||

ANS: D

16. Which data type typically requires only one byte of storage?
- short
 - int
 - float
 - char
 - double

ANS: D

17. What is the output of the following statement?

```
cout << 4 * (15 / (1 + 3)) << endl;
```

- 15
- 12
- 63
- 72
- None of these

ANS: B

18. In programming terms, a group of characters inside a set of quotation marks is called a:
- String literal
 - Variable
 - Operation
 - Statement
 - None of the above

ANS: A

19. This is used to mark the end of a complete C++ programming statement.
- Pound Sign
 - Semicolon
 - Data type
 - Void
 - None of the above

ANS: B

20. Which character signifies the beginning of an escape sequence?
- //
 - /
 - \
 - #
 - {

ANS: C

21. _____ must be included in any program that uses the `cout` object.
- Opening and closing braces
 - The header file `iostream`
 - Comments
 - Escape sequences
 - None of the above

ANS: B

22. If you use a C++ key word as an identifier, your program will:
- Execute with unpredictable results
 - not compile
 - understand the difference and run without problems
 - Compile, link, but not execute
 - None of the above

ANS: B

23. In the C++ instruction,

```
cookies = number % children;
```

given the following declaration statement:

```
int number = 38, children = 4, cookies;
```

what is the value of `cookies` after the execution of the statement?

- 2
- 0
- 9
- .5
- None of these

ANS: A

24. This function in C++ allows you to identify how many bytes of storage on your computer system an integer data value requires.
- len
 - bytes
 - f(x)
 - int
 - sizeof

ANS: E

25. Character constants in C++ are always enclosed in _____.
- [brackets]
 - "double quotation marks"
 - 'single quotation marks'
 - {braces}
 - (parentheses)

ANS: C

26. These are used to declare variables that can hold real numbers.
- Integer data types
 - Real data types
 - Floating point data types
 - Long data types
 - None of the above

ANS: C

27. The `float` data type is considered _____ precision, and the `double` data type is considered _____ precision.
- single, double
 - float, double
 - integer, double
 - short, long
 - None of the above

ANS: A

28. A variable whose value can be either `true` or `false` is of this data type.
- binary
 - bool
 - T/F
 - float
 - None of the above.

ANS: B

29. How would you consolidate the following declaration statements into one statement?

```
int x = 7;
int y = 16;
int z = 28;
```

- `int x = 7; y = 16; z = 28;`

- b. `int x = 7 y = 16 z = 28;`
- c. `int x, y, z = 7, 16, 28`
- d. `int x = 7, y = 16, z = 28;`
- e. None of these will work

ANS: D

30. A variable's _____ is the part of the program that has access to the variable.
- a. data Type
 - b. value
 - c. scope
 - d. reach
 - e. None of the above

ANS: C

31. Every complete C++ program must have a _____.
- a. comment
 - b. function named `main`
 - c. preprocessor directive
 - d. symbolic constant
 - e. `cout` statement

ANS: B

32. This control sequence is used to skip over to the next horizontal tab stop.
- a. `\n`
 - b. `\h`
 - c. `\t`
 - d. `\a`
 - e. `\'`

ANS: C

33. Which one of the following would be an illegal variable name?
- a. `dayOfWeek`
 - b. `3dGraph`
 - c. `_employee_num`
 - d. `June1997`
 - e. `itemsorderedforthemonth`

ANS: B

34. Look at the following program and answer the question that follows it.

```
1 // This program displays my gross wages.
2 // I worked 40 hours and I make $20.00 per hour.
3 #include <iostream>
4 using namespace std;
5
6 int main()
7 {
8     int hours;
9     double payRate, grossPay;
10
11     hours = 40;
```

```

12     payRate = 20.0;
13     grossPay = hours * payRate;
14     cout << "My gross pay is $" << grossPay << endl;
15     return 0;
16 }

```

Which line(s) in this program cause output to be displayed on the screen?

- a. 13 and 14
- b. 8 and 9
- c. 14
- d. 13
- e. 15

ANS: C

35. Which of the following defines a double-precision floating point variable named payCheck?

- a. float payCheck;
- b. double payCheck;
- c. payCheck double;
- d. Double payCheck;

ANS: B

36. What will the following code display?

```

cout << "Monday";
cout << "Tuesday";
cout << "Wednesday";

```

- a. Monday
Tuesday
Wednesday
- b. Monday Tuesday Wednesday
- c. MondayTuesdayWednesday
- d. "Monday"
"Tuesday"
"Wednesday"

ANS: C

37. What will the following code display?

```

int number = 7;
cout << "The number is " << "number" << endl;

```

- a. The number is 7
- b. The number is number
- c. The number is7
- d. The number is 0

ANS: B

38. What will the following code display?

```

int x = 0, y = 1, z = 2;

```



```
cout << x << y << z << endl;
```

- a. 0 1 2
- b. 0
1
2
- c. xyz
- d. 012

ANS: D

39. What will the following code display?

```
cout << "Four\n" << "score\n";  
cout << "and" << "\nseven";  
cout << "\nyears" << " ago" << endl;
```

- a. Four
score
and
seven
years ago
- b. Four score and seven
years ago
- c. Four
score
and seven
years ago
- d. Four score
and seven
years ago

ANS: A

40. What will the following code display?

```
cout << "Four " << "score ";  
cout << "and " << "seven/n";  
cout << "years" << "ago" << endl;
```

- a. Four score and seven
yearsago
- b. Four score and seven
years ago
- c. Four score and seven/nyearsago
- d. Four
score
and
seven
yearsago

ANS: C

41. What will the following code display?

```
cout << "Four" << "score" << endl;
cout << "and" << "seven" << endl;
cout << "years" << "ago" << endl;
```

- a. Four
score
and
seven
years
ago
- b. Four score and seven years ago
- c. Fourscoreandsevenyearsago
- d. Fourscore
andseven
yearsago

ANS: D

42. Assume that a program has the following variable definition:

```
char letter;
```

Which of the following statements correctly assigns the character Z to the variable?

- a. letter = Z;
- b. letter = "Z";
- c. letter = 'Z';
- d. letter = (Z);

ANS: C

43. What will the value of x be after the following statements execute?

```
int x;
x = 18 / 4;
```

- a. 4.5
- b. 4
- c. 0
- d. unknown

ANS: B

44. What will the value of x be after the following statements execute?

```
int x;
x = 18.0 / 4;
```

- a. 4.5
- c. 0

b. 4

d. unknown

ANS: A

45. What will the value of `x` be after the following statements execute?

```
int x;  
x = 18 % 4;
```

a. 0.45

c. 2

b. 4

d. unknown

ANS: C

46. Assuming you are using a system with 1-byte characters, how many bytes of memory will the following string literal occupy?

```
"William"
```

a. 7

c. 8

b. 14

d. 1

ANS: C

TRUE/FALSE

1. When typing in your source code into the computer, you must be very careful since most of your C++ instructions, header files, and variable names are case sensitive.

ANS: T

2. A preprocessor directive does not require a semicolon at the end.

ANS: T

3. The C++ language requires that you give variables names that indicate what the variables are used for.

ANS: F

4. A variable called "average" should be declared as an integer data type because it will probably hold data that contains decimal places.

ANS: F

5. Escape sequences are always stored internally as a single character.

ANS: T

6. Floating point constants are normally stored in memory as doubles.

ANS: T

7. If you do not follow a consistent programming style, your programs will generate compiler errors.

ANS: F