Book	Big Java, Early Objects
Edition	6
Title	Introduction

1. Which statement best describes a computer program?

   A. A program is a sequence of comments.
   B. A program can decide what task it is to perform.
   C. A program is a sequence of instructions and decisions that the computer carries out. Answer
   D. A program can only perform one simple task.

Section Ref	Section 1.1 Computer Programs
Title	Which statement best describes a computer program?
Difficulty	Easy
id	testbank-bj-6-ch01-01

2. Which statement regarding computer programs is correct?

   A. Computer programs can decide what task to perform.
   B. Large and complex computer programs are generally written by only one programmer.
   C. Computer programs are composed of extremely primitive operations. Answer
   D. Small computer programs are not documented.

Title	Which statement regarding computer programs is correct?
Section reference	Section 1.1 Computer Programs
Difficulty	Easy
id	testbank-bj-6-ch01-02

3. What is an example of a typical instruction in a computer program?

   A. Add up two numbers. Answer
   B. Lay out a term paper.
   C. Drive a car.
   D. Display a fancy font.

Title	What is an example of a typical instruction in a computer program?
Section reference	Section 1.1 Computer Programs
Difficulty	Easy
id	testbank-bj-6-ch01-03

4. What does CPU stand for?

   A. Computer Programming Unit
   B. Computer Processing Unit
   C. Central Processing Unit Answer
   D. Central Programming Unit

Section Ref	Section 1.2 The Anatomy of a Computer
Title	What does CPU stand for?
Difficulty	Easy
id	testbank-bj-6-ch01-04

5. Which one of the following is NOT a function of a CPU?

A. Performing arithmetic operations
B. Processing data and controlling programs
C. Querying a database Answer
D. Fetching and storing data from storage and input devices

Section Ref	Section 1.2 The Anatomy of a Computer
Title	Which one of the following is NOT a function of a CPU?
Difficulty	Easy
id	testbank-bj-6-ch01-05

6. Which type of storage is made from electronic circuits that can store data?

A. compact disk (CD)
B. hard disk
C. primary storage Answer
D. secondary storage

Section Ref	Section 1.2 The Anatomy of a Computer
Title	Which type of storage is made from electronic circuits that can store data?
Difficulty	Easy
id	testbank-bj-6-ch01-06

7. Which one of the following memory types provides storage that persists without electricity?

A. primary storage
B. RAM
C. memory
D. secondary storage Answer

Section Ref	Section 1.2 The Anatomy of a Computer
Title	Which one of the following memory types provides storage that persists without electricity?
Difficulty	Easy
id	testbank-bj-6-ch01-07

8. Which one of the following memory types provides storage that is slower and less expensive?

A. primary storage
B. secondary storage Answer
C. peripheral device
D. the transistor

Section Ref	Section 1.2 The Anatomy of a Computer
Title	Which one of the following memory types provides storage that is slower and less expensive?
Difficulty	Easy
id	testbank-bj-6-ch01-08

9. Which type of secondary storage consists of rotating platters coated with a magnetic material?

A. hard disk Answer
B. solid state drive
C. compact disk (CD)
D. memory

Section Ref	Section 1.2 The Anatomy of a Computer

Title	Which type of secondary storage consists of rotating platters coated with a magnetic material?
Difficulty	Easy
id	testbank-bj-6-ch01-09

10. Some computers are self-contained units; others are interconnected through what?

A. bus
B. networks Answer
C. peripheral devices
D. power lines

Section Ref	Section 1.2 The Anatomy of a Computer
Title	Some computers are self-contained units; others are interconnected through what?
Difficulty	Easy
id	testbank-bj-6-ch01-10

11. Which is an example of a peripheral device?

A. the CPU
B. primary storage
C. motherboard
D. speakers Answer

Section Ref	Section 1.2 The Anatomy of a Computer
Title	Which is an example of a peripheral device?
Difficulty	Easy
id	testbank-bj-6-ch01-11

12. Which memory type does not provide persistent storage?

A. secondary storage
B. hard disk
C. primary storage Answer
D. DVD

Title	Which memory type does not provide persistent storage?
Section reference	1.2 The Anatomy of a Computer
Difficulty	Easy
id	testbank-bj-6-ch01-12

13. Where must program instructions and data reside in order for the CPU to directly read and execute them?

A. memory Answer
B. bus
C. hard disk
D. somewhere on the computer network

Title	Where must program instructions and data reside in order for the CPU to read and execute them?
Section reference	1.2 The Anatomy of a Computer
Difficulty	Easy
id	testbank-bj-6-ch01-13

14. What term is used to refer to the computer instructions that are executed by a CPU?

A. virtual machine
B. machine code Answer
C. high-level code
D. instruction set

Section Ref	Section 1.3 The Java Programming Language
Title	What term is used to refer to the computer instructions that are executed by a CPU?
Difficulty	Easy
id	testbank-bj-6-ch01-14

15. What is the Java Virtual Machine?

A. A CPU that runs compiled Java code.
B. A library that makes it possible to write portable programs.
C. A program that simulates a real CPU running compiled Java code. Answer
D. A program that translates Java code into machine instructions.

Title	What is the JVM?
Section reference	1.3 The Java Programming Language
Difficulty	Easy
id	testbank-bj-6-ch01-15

16. What is the term used to refer to Java code that runs in a browser?

A. applet Answer
B. script
C. html
D. class

Title	What is the term used to refer to Java code that runs in a browser?
Section reference	1.3 The Java Programming Language
Difficulty	easy
id	testbank-bj-6-ch01-16

17. What term is used to refer to languages that allow programmers to describe tasks at a higher conceptual level than machine code?

A. virtual
B. high-level Answer
C. sophisticated
D. conceptual

Section Ref	Section 1.3 The Java Programming Language
Title	What term is used to refer to languages that allow programmers to describe tasks at a higher conceptual level than machine code?
Difficulty	Easy
id	testbank-bj-6-ch01-17

18. What tool translates high-level instructions into low level machine code?

A. debugger
B. assembler

C. compiler Answer
D. linker

Section Ref	Section 1.3 The Java Programming Language
Title	What tool translates high-level instructions into low level machine code?
Difficulty	Easy
id	testbank-bj-6-ch01-18

19. What tool translates Java source code into files that contain instructions for the Java Virtual Machine?

A. linker
B. compiler Answer
C. assembler
D. interpreter

Section Ref	Section 1.3 The Java Programming Language
Title	What tool translates Java source code into files that contain instructions for the Java Virtual Machine?
Difficulty	Easy
id	testbank-bj-6-ch01-19

20. Which statement is true about running a Java program on a different CPU?

A. You need different Java source code for each CPU.
B. You can take code that has been generated by the Java compiler and run it on different CPUs. Answer
C. You need to compile the Java program for each CPU.
D. You cannot run the program on a different CPU because Java, being a high-level programming language, is machine dependent.

Section Ref	Section 1.3 The Java Programming Langauge
Title	Which statement is true about running a Java program on a different CPU?
Difficulty	Medium
id	testbank-bj-6-ch01-20

21. When was Java officially introduced?

A. 1991
B. 1995 Answer
C. 2000
D. 2005

Section Ref	Section 1.3 The Java Programming Language
Title	When was Java officially introduced?
Difficulty	Easy
id	testbank-bj-6-ch01-21

22. Which statement best describes the portability characteristic of Java?

A. The same already-compiled Java programs will run on Windows, UNIX, Linux, or Macintosh operating systems without any change. Answer
B. The same Java compiler can be used on many operating systems.
C. There are only small differences between the Java programming language on different operating systems.

D. It is easy to change a Java program so that it will work on different operating systems.

Section Ref	Section 1.3 The Java Programming Language
Title	Which statement best describes the portability characteristic of Java?
Difficulty	Easy
id	testbank-bj-6-ch01-22

23. No matter which Java development environment you use, what happens to the Java source code in order for a Java program to execute?

A. The source code is automatically separated into many files.
B. The source code is backed up to a network storage facility.
C. A Java compiler converts all uppercase letters to lowercase.
D. A Java compiler translates the source code into class files. Answer

Title	Â No matter which Java development environment you use, what happens to the Java source code in order for a Java program to execute?
Section reference	1.4 Becoming Familiar With Your Programming Environment
Difficulty	Easy
id	testbank-bj-6-ch01-23

24. Why should you set aside time to become familiar with the programming environment?

A. The time you spend will prevent data loss without the need for backups.
B. The tools needed for Java programming are different from other software. Answer
C. Although computer systems vary widely, the Java programming environment is always the same.
D. The Java libraries are detailed and extensive.

Title	Why should you set aside time to become familiar with the programming environment?
Section reference	1.4 Becoming Familiar With Your Programming Environment
Difficulty	Easy
id	testbank-bj-6-ch01-24

25. Suppose that a computer virus infects your computer and corrupts the files you were going to submit for your current homework assignment. What precaution could have saved you from a disastrously bad grade for this assignment?

A. Defragment the hard drive.
B. Purchase an anti-virus program to remove the virus from your computer.
C. Make regular backups of all your important files. Answer
D. Purchase an extended warranty for your computer.

Section Ref	1.4 Becoming Familiar With Your Programming Environment
Title	What can prevent you from losing files that get corrupted?
Difficulty	Easy
id	testbank-bj-6-ch01-25

26. Which statement regarding backup strategies for Java files is correct?

A. You should have multiple copies of your source files in different locations. Answer
B. You should regularly print out your work so you can retype it in case of data loss.
C. You should regularly back up the Java virtual machine instructions to prevent loss of valuable work.
D. Your compiler automatically makes backups of your source files.

Title	Which one of the following statements regarding backup strategies for Java files is correct?
Section reference	1.4 Becoming Familiar With Your Programming Environment
Difficulty	Easy
id	testbank-bj-6-ch01-26

27. The line `public class HelloPrinter` indicates which declaration below?

A. Declaration of the variable `class`.
B. Declaration of the class `HelloPrinter`. Answer
C. Declaration of the variable `public`.
D. Declaration of the class `public`.

Title	The line public class HelloPrinter indicates which declaration below?
Section reference	1.5 Analyzing Your First Program
Difficulty	Easy
id	testbank-bj-6-ch01-27

28. Every Java program consists of one or more of these fundamental building blocks.

A. class Answer
B. CPU
C. applet
D. parameter

Section Ref	Section 1.5 Analyzing Your First Program
Title	TB Every Java program consists of one or more of these fundamental building blocks.
Difficulty	Easy
id	testbank-bj-6-ch01-28

29. What is the name of the file that contains the Java source code for the public class `HelloPrinter`?

A. `HelloPrinter`
B. `HelloPrinter.java` Answer
C. `HelloPrinter.class`
D. `HelloPrinter.txt`

Section Ref	Section 1.5 Analyzing Your First Program
Title	What is the name of the file that contains the Java source code for this class?
Difficulty	Easy
id	testbank-bj-6-ch01-29

30. A _____ contains sequences of programming instructions that describe how to perform a particular task.

A. parameter
B. label
C. variable
D. method Answer

Section Ref	Section 1.5 Analyzing Your First Program
Title	A _____ contains sequences of programming instructions that describe how to perform a particular task.
Difficulty	Easy
id	testbank-bj-6-ch01-30

31. What term is used to refer to an individual instruction inside a method?

A. statement Answer
B. constant
C. comment
D. object

Section Ref	Section 1.5 Analyzing Your First Program
Title	What term is used to refer to an individual instruction inside a method?
Difficulty	Easy
id	testbank-bj-6-ch01-31

32. In Java, every statement must end with which symbol?

A. `.`
B. `)`
C. `!`
D. `;` Answer

Section Ref	Section 1.5 Analyzing Your First Program
Title	In Java, every statement must end with this symbol.
Difficulty	Easy
id	testbank-bj-6-ch01-32

33. What term is used to refer to a sequence of characters enclosed in quotation marks?

A. string Answer
B. object
C. comment
D. variable

Section Ref	Section 1.5 Analyzing Your First Program
Title	What term is used to refer to a sequence of characters enclosed in quotation marks?
Difficulty	Easy
id	testbank-bj-6-ch01-33

34. What term is used to refer to values supplied to a method that are needed to carry out its task?

A. class
B. object
C. argument Answer
D. comment

Section Ref	Section 1.5 Analyzing Your First Program
Title	What term is used to refer to values supplied to a method that are needed to carry out its task?
Difficulty	Easy
id	testbank-bj-6-ch01-34

35. Arguments supplied to methods are enclosed by which symbols?

A. `()` Answer
B. `" "`
C. `{ }`

D. `//`

Section Ref	Section 1.5 Analyzing Your First Program
Title	Arguments supplied to methods are enclosed by which symbols?
Difficulty	Easy
id	testbank-bj-6-ch01-35

36. Whenever a method is called in Java, what must be specified?

A. program name, method name
B. strings, method name
C. method name, arguments Answer
D. the main method, arguments

Section Ref	Section 1.5 Analyzing Your First Program
Title	Whenever a method is called in Java, what must be specified?
Difficulty	Easy
id	testbank-bj-6-ch01-36

37. What is the syntax for calling the `println` method on the object `System.out`?

A. `println("Any message").System.out;`
B. `System.out("Any message").println;`
C. `System.out.println("Any message");` Answer
D. `println(System.out,"Any message");`

Section Ref	Section 1.5 Analyzing Your First Program
Title	What is the syntax for calling the println method on the object System.out?
Difficulty	Easy
id	testbank-bj-6-ch01-37

38. What is the name of the method in the given method call?

```
System.out.println("Welcome");
```

A. `"Welcome"`
B. `System`
C. `println` Answer
D. `out`

Section Ref	Section 1.5 Analyzing Your First Program
Title	What is the name of the method in the given method call?
Difficulty	Easy
id	testbank-bj-6-ch01-38

39. What is the argument in the given method call?

```
System.out.println("Welcome");
```

A. `out`
B. `println`
C. `"Welcome"` Answer
D. `System`

Section Ref	Section 1.5 Analyzing Your First Program
Title	What is the argument in the given method call?

Difficulty	Easy
id	testbank-bj-6-ch01-39

40. What is the output of the following Java statement?

```
System.out.println("4 + 6");
```

A. `10`
B. `46`
C. `4`
D. `4 + 6` Answer

Section Ref	Section 1.5 Analyzing Your First Program
Title	What is the output of the following Java statement?
Difficulty	Easy
id	testbank-bj-6-ch01-40

41. What is the output of the following Java statement?

```
System.out.println(4 + 6);
```

A. `4 + 6`
B. `4`
C. `10` Answer
D. `46`

Section Ref	Section 1.5 Analyzing Your First Program
Title	What is the output of the following Java statement?
Difficulty	Easy
id	testbank-bj-6-ch01-41

42. Which statement is true about the following Java code fragment:

```
System.out.println("Hello!);
```

A. There is a run-time error.
B. There are no errors.
C. There is a compile-time error. Answer
D. There are multiple errors.

Title	Which statement is true about the following Java code fragment?
Section reference	1.6 Errors
Difficulty	Easy
id	testbank-bj-6-ch01-42

43. Assuming the programmer wishes to display "Hello!" on the screen, which statement is true about the following Java code fragment:

```
System.out.println("Helo!");
```

A. There is a run-time error. Answer
B. There are no errors.
C. There is a compile-time error.
D. There are multiple errors.

Title	Which statement is true about the following Java code fragment?

Section reference	1.6 Errors
Difficulty	Easy
id	testbank-bj-6-ch01-43

44. Assuming the programmer wishes to display "Hello!" on the screen, which statement is true about the following Java code fragment:

```
System.out.println("Hello!");
```

A. There is a run-time error.
B. There are no errors. Answer
C. There is a compile-time error.
D. There are multiple errors.

Title	Which statement is true about the following Java code fragment?
Section reference	1.6 Errors
Difficulty	Easy
id	testbank-bj-6-ch01-44

45. Assuming the programmer wishes to display "Hello!" on the screen, which statement is true about the following Java code fragment:

```
System.out.printn("Helo!");
```

A. There is a run-time error.
B. There are no errors.
C. There is a compile-time error.
D. There are multiple errors. Answer

Title	Which statement is true about the following Java code fragment?
Section reference	1.6 Errors
Difficulty	Easy
id	testbank-bj-6-ch01-45

46. Assume that the following Java statement is contained in the `main` method of the class named `Hello`:

```
System.out.printLine("Hello!");
```

What is the name of the file generated by the Java compiler?

A. `Hello.java`
B. Hello
C. No file is generated due to an error. Answer
D. `Hello.class`

Title	What is the name of the file generated by the Java compiler?
Section reference	1.6 Errors
Difficulty	Easy
id	testbank-bj-6-ch01-46

47. What is a logic error?

A. A violation of the rules of the computer language.
B. A missing `main` method.
C. A program that is syntactically correct but does not do what it is supposed to do. Answer

D. An error that is so severe that it generates an exception.

Title	What is a logic error?
Section reference	1.6 Errors
Difficulty	Easy
id	testbank-bj-6-ch01-47

48. What is the term used to describe an error detected by the compiler that is a violation of the programming language rules?

A. logic error
B. compile-time error Answer
C. run-time error
D. typo

Section Ref	Section 1.6 Errors
Title	Term describing an error violating the programming language rules.
Difficulty	Easy
id	testbank-bj-6-ch01-48

49. Other than compile-time error, what is another term used to describe an error detected by the compiler that is a violation of the programming language rules?

A. typo
B. logic error
C. syntax error Answer
D. run-time error

Section Ref	Section 1.6 Errors
Title	Another term describing an error violating the programming language rules.
Difficulty	Easy
id	testbank-bj-6-ch01-49

50. What is the term used to describe an error causing a program to take an action that the programmer did not intend?

A. typo
B. run-time error Answer
C. compile-time error
D. syntax error

Section Ref	Section 1.6 Errors
Title	Term describing an error causing a program to take an action that the programmer did not intend)
Difficulty	Easy
id	testbank-bj-6-ch01-50

51. Other than run-time error, what is another term used to describe an error causing a program to take an action that the programmer did not intend?

A. syntax error
B. logic error Answer
C. mistake
D. compile-time error

Section Ref	Section 1.6 Errors
Title	Another term describing an error causing a program to take an action that the programmer did not intend)
Difficulty	Easy
id	testbank-bj-6-ch01-51

52. Which statement is true about the following Java statement:

```
System.out.Println("Welcome!");
```

A. There are multiple errors.
B. There are no errors.
C. There is a run-time error.
D. There is a compile-time error. Answer

Section Ref	Section 1.6 Errors
Title	Which statement is true about the following Java statement?
Difficulty	Easy
id	testbank-bj-6-ch01-52

53. Assuming the programmer wishes to output the phrase "Hello!", which of the following is true about the following Java statement:

```
System.out.println("Welcme!");
```

A. There are multiple errors.
B. There is a run-time error. Answer
C. There are no errors.
D. There is a compile-time error.

Section Ref	Section 1.6 Errors
Title	Which statement is true about the following Java statement?
Difficulty	Easy
id	testbank-bj-6-ch01-53

54. Assuming the programmer wishes to output the phrase "Welcome!", Which statement is true about the following Java statement:

```
System.out.println("Welcome!");
```

A. There are no errors. Answer
B. There is a run-time error.
C. There are multiple errors.
D. There is a compile-time error.

Section Ref	Section 1.6 Errors
Title	Which statement is true about the following Java statement?
Difficulty	Easy
id	testbank-bj-6-ch01-54

55. Assuming the programmer wishes to output the phrase "Welcome!", which of the following is true about the following Java statement.

```
System.out.Println("Wlcome!");
```

A. There are no errors.

B. There is a compile-time error.
C. There is a run-time error.
D. There are multiple errors. Answer

Section Ref	Section 1.6 Errors
Title	Which statement is true about the following Java statement?
Difficulty	Easy
id	testbank-bj-6-ch01-55

56. Assume that the `main` method of the class named `Welcome` does not contain any compile-time errors. What is the name of the file generated by the Java compiler?

A. `Welcome.class` Answer
B. `Welcome.java`
C. No additional file is generated.
D. `Welcome`

Section Ref	Section 1.6 Errors
Title	Assume that the main method of the class named Welcome does not contain any compile-time errors. What is the name of the file generated by the Java compiler?
Difficulty	Easy
id	testbank-bj-6-ch01-56

57. Which statement is true about the compilation process?

A. The compiler will generate CPU specific instructions even if it detects an error.
B. The compiler will generate Java virtual machine instructions even if it detects an error.
C. The compiler will stop compiling when it finds the first error.
D. The compiler will continue compiling after it finds an error. Answer

Section Ref	Section 1.6 Errors
Title	Which statement is true about the compilation process?
Difficulty	Easy
id	testbank-bj-6-ch01-57

58. Who or what is responsible for inspecting and testing the program to guard against logic errors?

A. JVM
B. programmer Answer
C. end-user
D. compiler

Section Ref	Section 1.6 Errors
Title	Who/what is responsible for ... guarding against logic errors?
Difficulty	Easy
id	testbank-bj-6-ch01-58

59. If you get a sequence of error messages from the compiler that are increasingly off track, you should

A. check for division by zero
B. restructure your code to make it more readable
C. check for spelling, capitalization, or missing quotation marks Answer
D. include more of your code within the`main` method

Section Ref	Section 1.6 Errors

Title	If you get a sequence of error messages from the compiler that are increasingly off track, you should
Difficulty	Easy
id	testbank-bj-6-ch01-59

60. The error message "cannot find symbol" is usually a good clue that what kind of error has been made?

A. logic
B. spelling Answer
C. run-time
D. division by zero

Section Ref	Section 1.6 Errors
Title	The error message "cannot find symbol" is usually a good clue that what kind of error has been made?
Difficulty	Easy
id	testbank-bj-6-ch01-60

61. A sequence of steps that contains precise instructions for what to do at each step and where to go next is _____.

A. unambiguous Answer
B. terminating
C. executable
D. documented

Title	A sequence of steps that contains precise instructions...?
Section reference	1.7 Problem Solving: Algorithm Design
Difficulty	Easy
id	testbank-bj-6-ch01-61

62. A sequence of steps that can be carried out in practice is _____.

A. unambiguous
B. terminating
C. executable Answer
D. documented

Title	A sequence of steps that can be carried out in practice ...?
Section reference	1.7 Problem Solving: Algorithm Design
Difficulty	Easy
id	testbank-bj-6-ch01-62

63. A sequence of steps that eventually comes to an end is _____.

A. unambiguous
B. terminating Answer
C. executable
D. documented

Title	A sequence of steps that eventually comes to an end ...?
Section reference	1.7 Problem Solving: Algorithm Design
Difficulty	Easy
id	testbank-bj-6-ch01-63

64. What is the purpose of the following algorithm?

```
input somenum
Repeat the following steps for 14 times
  input variable1
  if variable1 < somenum then
    somenum = variable1
print somenum
```

A. To search for a particular number among 15 numbers.
B. To find the largest among 15 numbers.
C. To print out the 15 numbers.
D. To find the smallest among 15 numbers. Answer

Title	What is the purpose of the following algorithm?
Section reference	1.7 Problem Solving: Algorithm Design
Difficulty	Easy
id	testbank-bj-6-ch01-64

65. Evaluate the given pseudocode to calculate the efficiency of a vehicle's fuel consumption using the following test values, rounded to one decimal place:

The trip odometer reading (odometer) = 350

The amount to fill the gas tank (amount) = 12

```
input odometer
input amount
output odometer/amount
```

What is the final output?

A. 27.7
B. 29.2 Answer
C. 34.4
D. 32.3

Title	What is output of this pseudocode with these test values?
Section reference	1.7 Problem Solving: Algorithm Design
Difficulty	Medium
id	testbank-bj-6-ch01-65

66. Evaluate the given pseudocode to calculate the weighted score for a student:

The homework score (homework) = 95

The weight of homework (hwWeight) = 35%

The exam score (exams) = 87

The weight of exams(exWeight) = 65%

```
input homework
input hwWeight
input exams
input exWeight
output homework*hwWeight + exams*exWeight
```

What is the final output?

A. 89.20
B. 89.80 Answer
C. 87.80
D. 92.20

Title	What is the final output?
Section reference	1.7 Problem Solving: Algorithm Design
Difficulty	Medium
id	testbank-bj-6-ch01-66

67. Evaluate the given pseudocode to calculate the payment (pmt) with the following test values:

The total number of hours worked (working_hours) = 60

The rate paid for hourly work (rate) = 12

```
input working_hours
input rate
pmt = working_hours * rate
if working_hours > 40 then
  extra_hours = working_hours - 40
  extra_pmt = extra_hours * rate
  pmt = pmt + extra_pmt
output pmt
```

What is the final output?

A. 960 Answer
B. 840
C. 240
D. 720

Title	What is output of this pseudocode with these test values?
Section reference	1.7 Problem Solving: Algorithm Design
Difficulty	Hard
id	testbank-bj-6-ch01-67

68. What term is used to refer to an informal description of a sequence of steps for solving a problem?

A. assembly language instructions
B. pseudocode Answer
C. machine instructions for a specific CPU

D. Java virtual machine instructions

Section Ref	Section 1.7 Problem Solving: Algorithm Design
Title	What term is used to refer to an informal description of a sequence of steps for solving a problem?
Difficulty	Easy
id	testbank-bj-6-ch01-68

69. What term is used to refer to a sequence of steps for solving a problem that is unambiguous, executable, and terminating?

A. documentation
B. pseudoprogram
C. algorithm Answer
D. comments

Section Ref	Section 1.7 Problem Solving: Algorithm Design
Title	What term is used to refer to a sequence of steps for solving a problem that is unambiguous, executable, and terminating?
Difficulty	Easy
id	testbank-bj-6-ch01-69

70. Which of the following options is true about algorithms?

A. Algorithms are described informally and can contain ambiguous steps.
B. Algorithms are written in a programming language.
C. Algorithms can replace the source code in programs.
D. You must create an algorithm for a problem before you can create a program to solve the problem. Answer

Section Ref	Section 1.7 Problem Solving: Algorithm Design
Title	Which of the following options is true about algorithms?
Difficulty	Easy
id	testbank-bj-6-ch01-70

71. A sequence of steps is unambiguous when _____

A. it will eventually come to an end.
B. it is clearly documented.
C. it can be carried out in practice.
D. there are precise instructions for what to do at each step and where to go next. Answer

Section Ref	Section 1.7 Problem Solving: Algorithm Design
Title	A sequence of steps is unambiguous when ...?
Difficulty	Easy
id	testbank-bj-6-ch01-71

72. A sequence of steps is executable when _____

A. it will eventually come to an end.
B. it can be carried out in practice. Answer
C. it is documented.
D. there are precise instructions for what to do at each step and where to go next.

Section Ref	Section 1.7 Problem Solving: Algorithm Design

Title	A sequence of steps is executable when ...?
Difficulty	Easy
id	testbank-bj-6-ch01-72

73. A sequence of steps is terminating when _____

A. there are precise instructions for what to do at each step and where to go next.
B. it will eventually come to an end. Answer
C. it can be documented.
D. it can be carried out in practice.

Section Ref	Section 1.7 Problem Solving: Algorithm Design
Title	A sequence of steps is terminating when ...?
Difficulty	Easy
id	testbank-bj-6-ch01-73

74. What is the purpose of the following algorithm?

```
input num
Repeat the following steps for 9 times
  input var1
  if var1 > num then
    num = var1
print num
```

A. To print out the 10 numbers
B. To search for a particular number among 10 numbers
C. To find the largest among 10 numbers Answer
D. To find the smallest among 10 numbers

Section Ref	Section 1.7 Problem Solving: Algorithm Design
Title	What is the purpose of the following algorithm?
Difficulty	Easy
id	testbank-bj-6-ch01-74

75. Evaluate the given pseudocode to calculate the efficiency of a vehicle's fuel consumption using the following test values:

The trip odometer reading (odometer) = 300

The amount to fill the gas tank (amount) = 15

```
input odometer
input amount
output odometer/amount
```

What is the final output?

A. 15
B. 10
C. 30

D. 20 Answer

Section Ref	Section 1.7 Problem Solving: Algorithm Design
Title	What is output of this pseudocode with these test values?
Difficulty	Medium
id	testbank-bj-6-ch01-75

76. Evaluate the given pseudocode to calculate the weighted score for a student:

The program score (program) = 92

The weight of programs (pgmWeight) = 40%

The exam score (exams) = 85

The weight of exams(exWeight) = 60%

```
input program
input pgmWeight
input exams
input exWeight
output program*pgmWeight + exams*exWeight
```

What is the final output?

A. 89.20
B. 87.80 Answer
C. 89.80
D. 92.20

Section Ref	Section 1.7 Problem Solving: Algorithm Design
Title	What is output of this pseudocode with these test values?
Difficulty	Medium
id	testbank-bj-6-ch01-76

77. Evaluate the given pseudocode to calculate the payment (pmt) with the following test values:

The total number of hours worked (working_hours) = 50

The rate paid for hourly work (rate) = 10

```
input working_hours
input rate
pmt = working_hours * rate
if working_hours > 40 then
  extra_hours = working_hours - 40
  extra_pmt = extra_hours * rate
  pmt = pmt + extra_pmt
end of if
output pmt
```

What is the final output?

A. 540
B. 580
C. 500
D. 600 Answer

Section Ref	Section 1.7 Problem Solving: Algorithm Design
Title	What is output of this pseudocode with these test values?
Difficulty	Hard
id	testbank-bj-6-ch01-77

78. What is the correct order of the steps in the program development process:

i. Develop and describe the algorithm.

ii. Translate the algorithm into Java.

iii. Understand the problem.

iv. Compile and test the program.

v. Test the algorithm with different inputs.

A. iii, i, ii, iv, v
B. i, ii, iv, v, iii
C. iii, i, v, ii, iv Answer
D. i, iii, v, ii, iv

Section Ref	Section 1.7 Problem Solving: Algorithm Design
Title	What is the order of the steps in the program development process?
Difficulty	Easy
id	testbank-bj-6-ch01-78

79. Pseudocode must be

i. Unambiguous.

ii. Syntactically correct code.

iii. Readable by a human.

iv. Indicative of results of an algorithm.

A. i, ii
B. i, ii, iii
C. i, iii, iv Answer
D. ii, iii, iv

Section Ref	Section 1.7 Problem Solving: Algorithm Design
Title	Pseudocode must be
Difficulty	Easy
id	testbank-bj-6-ch01-79