**Lesson 1**

What is the purpose of the compiler?

Question 1Select one:

a.

Translates the computer code from the human-readable form to something a machine can “understand.”

b.

Links the object code files together to form an executable program

c.

A program statement specifying how a piece of code can be used

Feedback

Your answer is correct.

The correct answer is: Translates the computer code from the human-readable form to something a machine can “understand.”

Question 2

Correct

1.00 points out of 1.00

Flag question

Question text

Name a function that must appear in every C++ program.

Question 2Select one:

a.

main

b.

return

c.

cout

d.

include

Feedback

Your answer is correct.

The correct answer is: main

Question 3

Correct

1.00 points out of 1.00

Flag question

Question text

What is the purpose of the #include directive?

Question 3Select one:

a.

It instructs the computer to make available facilities (code) from a file

b.

It instructs the computer to translate code into something a computer can understand

c.

It instructs the computer to display output

d.

It gives information about the code, but is not readable by the computer

Feedback

Your answer is correct.

The correct answer is: It instructs the computer to make available facilities (code) from a file

Question 4

Correct

1.00 points out of 1.00

Flag question

Question text

Name the four parts of a function.

Question 4Select one:

a.

A return type, a function body, a name, and a parameter list

b.

A return type, a function body, a name, and a comment

c.

A return type, a function body, a main, and a parameter list

d.

A string return type, a function body, a name, and a parameter list

Feedback

Your answer is correct.

The correct answer is: A return type, a function body, a name, and a parameter list

If you want the user to input an integer value into your program for a variable named number, what are two lines of code you could write to ask the user to do it and to input the value into your program?

**Lesson 2**

Question 1Select one:

a.

cout >> "Please enter a numeric value\n";

cin >> number;

b.

cout > "Please enter a numeric value\n";

cin > number;

c.

cout >> "Please enter a numeric value\n";

cin = number;

d.

cout = "Please enter a numeric value\n";

cin = number;

Feedback

Your answer is correct.

The correct answer is: cout >> "Please enter a numeric value\n";

cin >> number;

Question 2

Correct

1.00 points out of 1.00

Flag question

Question text

How is string concatenation (joining) coded in C++?

Question 2Select one:

a.

string name = first + ' ' + second;

b.

string name = first << ' ' << second;

c.

string name = first , ' ' , second;

d.

string name = first == ' ' == second;

Feedback

Your answer is correct.

The correct answer is: string name = first + ' ' + second;

Question 3

Correct

1.00 points out of 1.00

Flag question

Question text

What are typical sizes for a char, an int, and a double?

Question 3Select one:

a.

char = 1 byte, double = 8 bytes, int = 4 bytes

b.

char = 1 byte, double = 2 bytes, int = 1 byte

c.

char = 4 bytes, double = 8 bytes, int = 4 bytes

d.

char = 1 byte, double = 8 bytes, int = 1 byte

Feedback

Your answer is correct.

The correct answer is: char = 1 byte, double = 8 bytes, int = 4 bytes

Question 4

Incorrect

0.00 points out of 1.00

Flag question

Question text

What is a definition?

Question 4Select one:

a.

Sets aside memory for an object or variable

b.

Tells you how you can use an object or variable, but does not reserve memory

c.

Can appear multiple times in a program

d.

Can appear multiple times in a program as long as it's type is different

Feedback

Your answer is incorrect.

The correct answer is: Sets aside memory for an object or variable

Question 5

Correct

1.00 points out of 1.00

Flag question

Question text

What is an literal?

Question 5Select one:

a.

A constant value such as "Hello, World", 12.3, or true

b.

Information about the purpose of a piece of code

c.

The assignment of a value to a portion of memory

d.

The name assigned to an object

Feedback

Your answer is correct.

The correct answer is: A constant value such as "Hello, World", 12.3, or true

Question 6

Incorrect

0.00 points out of 1.00

Flag question

Question text

What is a variable?

Question 6Select one:

a.

A named object.

b.

A statement that gives a name to an object

c.

A declaration that sets aside memory for an object

d.

A set of possible values and a set of operations

Feedback

Your answer is incorrect.

The correct answer is: A named object.

Question 7

Incorrect

0.00 points out of 1.00

Flag question

Question text

What is an object?

Question 7Select one:

a.

A region of memory with a type that specifies what kind of information can be placed in it.

b.

A set of possible values that can be placed in memory

c.

A name assigned to a portion of memory

d.

A set of bits in memoory

Feedback

Your answer is incorrect.

The correct answer is: A region of memory with a type that specifies what kind of information can be placed in it.

Question 8

Correct

1.00 points out of 1.00

Flag question

Question text

What is meant by the term prompt?

Question 8Select one:

a.

A message encouraging the user to enter data

b.

Rapid response to the computer

c.

The time limit to enter data

Feedback

Your answer is correct.

The correct answer is: A message encouraging the user to enter data

Question 9

Correct

1.00 points out of 1.00

Flag question

Question text

What is the difference between = and ==?

Question 9Select one:

a.

= assigns a value to a variable, == compares two values for equality

b.

== assigns a value to a variable, = compares two values for equality

c.

= assigns a value to a variable, == is not a valid operator

d.

They are the same

Feedback

Your answer is correct.

The correct answer is: = assigns a value to a variable, == compares two values for equality

Question 10

Incorrect

0.00 points out of 1.00

Flag question

Question text

Which is an example of type safety?

Question 10Select one:

a.

double x = 3.14;

double y = x;

b.

double x;

double y = x;

c.

double x;

double y = 2.0 + x;

d.

None of the above

Feedback

Your answer is incorrect.

The correct answer is: double x = 3.14;

double y = x;

Question 11

Correct

1.00 points out of 1.00

Flag question

Question text

What is \n called and what purpose does it serve?

Question 11Select one:

a.

A “special character” indicating a newline in the output

b.

A “special character” indicating a tab in the output

c.

Indicates the data entered is a numeric value

d.

Indicates that the data displayed is numeric

Feedback

Your answer is correct.

The correct answer is: A “special character” indicating a newline in the output

Question 12

Correct

1.00 points out of 1.00

Flag question

Question text

What kinds of literals are there? Select all that apply

Question 12Select one or more:

a.

Integer

b.

Floating point

c.

String

d.

Boolean

e.

Assignment

f.

Declaration

Feedback

Your answer is correct.

The correct answers are: Integer , Floating point, String, Boolean

Question 13

Correct

1.00 points out of 1.00

Flag question

Question text

What terminates input into a string?

Question 13Select one:

a.

Whitespace (space, newline, tab)

b.

Ctl+Z

c.

Period (.)

d.

Semi-colon (;)

Feedback

Your answer is correct.

The correct answer is: Whitespace (space, newline, tab)

Question 14

Correct

1.00 points out of 1.00

Flag question

Question text

What terminates input into an integer?

Question 14Select one:

a.

Entering a non-numeric value

b.

Period (.)

c.

Ctl+Z

d.

Semi-colon (;)

Feedback

Your answer is correct.

The correct answer is: Entering a non-numeric value

Question 15

Correct

1.00 points out of 1.00

Flag question

Question text

Which of the following are legal names in C++? (multiple answers)

Question 15Select one or more:

a.

This\_little\_pig

b.

This\_1\_is fine

c.

2\_For\_1\_special

d.

the\_$12\_method

e.

\_this\_is\_ok

Feedback

Your answer is correct.

The correct answers are: This\_little\_pig, the\_$12\_method, \_this\_is\_ok

Question 16

Correct

1.00 points out of 1.00

Flag question

Question text

Which operator do you use to read data the user enters into a variable?

Question 16Select one:

a.

<<

b.

>>

c.

==

d.

<

Feedback

Your answer is correct.

The correct answer is: >>

Question 17

Correct

1.00 points out of 1.00

Flag question

Question text

How would you write

cout << "Hello, ";

cout << first\_name;

cout << "!\n";

as a single line of code?

Question 17Select one:

a.

cout << "Hello, " << first\_name << "!\n";

b.

cout << "Hello, " < first\_name < "!\n";

c.

cout << "Hello, first\_name!\n";

d.

coutput << "Hello, " << first\_name << "!\n";

Feedback

Your answer is correct.

The correct answer is: cout << "Hello, " << first\_name << "!\n"

**Lesson 3**

How do you sort the elements of a vector named "grades"?

Question 1Select one:

a.

sort(grades);

b.

grades.sort():

c.

sort[grades];

d.

grades.sort;

Feedback

Your answer is correct.

The correct answer is: sort(grades);

Question 2

Correct

1.00 points out of 1.00

Flag question

Question text

What is the life of a variable?

Question 2Select one:

a.

from definition to end of scope

b.

from declaration to end of loop

c.

from definition to end of program

d.

from start of program to end of program

Feedback

Your answer is correct.

The correct answer is: from definition to end of scope

Question 3

Correct

1.00 points out of 1.00

Flag question

Question text

What is an lvalue?

Question 3Select one:

a.

The left-hand operand of an assignment statement

b.

The right-hand operand of an assignment statement

c.

A function that returns the length of a string

d.

An integer value representing the length of a rectangle

Feedback

Your answer is correct.

The correct answer is: The left-hand operand of an assignment statement

Question 4

Correct

1.00 points out of 1.00

Flag question

Question text

Outputs from a computation

Question 4Select one or more:

a.

to a screen

b.

to files

c.

to other programs

d.

to network connections

Feedback

Your answer is correct.

The correct answers are: to a screen, to files, to other programs, to network connections

Question 5

Correct

1.00 points out of 1.00

Flag question

Question text

What does vector’s member size() do?

Question 5Select one:

a.

Returns the number of elements in a vector

b.

Create a vector of 20 elements

c.

Returns the last element in a vector

d.

Returns the number of the last element in the vector

Feedback

Your answer is correct.

The correct answer is: Returns the number of elements in a vector

Question 6

Correct

1.00 points out of 1.00

Flag question

Question text

The three requirements a programmer should keep in mind when expressing computations

Question 6Select one or more:

a.

Correctness

b.

Simplicity

c.

Efficiency

d.

Input

Feedback

Your answer is correct.

The correct answers are: Correctness, Simplicity, Efficiency

Question 7

Correct

1.00 points out of 1.00

Flag question

Question text

The statement inside a function doubleIt that returns a value to the calling statement Is

Question 7Select one:

a.

return ans;

b.

doubleIt = ans;

c.

ans = doubleIt;

d.

break ans;

Feedback

Your answer is correct.

The correct answer is: return ans;

Question 8

Correct

1.00 points out of 1.00

Flag question

Question text

Which function does not return a value?

Question 8Select one:

a.

void doubleIt (a int) { ... code ... }

b.

int doubleIt (a int) { ... code ... }

c.

double doubleIt (a int) { ... code ... }

d.

doubleIt (a int) { ... code ... }

Feedback

Your answer is correct.

The correct answer is: void doubleIt (a int) { ... code ... }

Question 9

Correct

1.00 points out of 1.00

Flag question

Question text

When would a programmer prefer a switch-statement to an if-statement?

Question 9Select one:

a.

It is clearer than nested if-statements, especially when we compare against many constants

b.

When the value you are "switching" on is a string

c.

The value in the case statement is a variable

d.

The value in the case label is a variable

Feedback

Your answer is correct.

The correct answer is: It is clearer than nested if-statements, especially when we compare against many constants

Question 10

Correct

1.00 points out of 1.00

Flag question

Question text

When should the for-loop be used

Question 10Select one or more:

a.

yields more easily understood code

b.

yields more maintainable code

c.

whenever a loop can be defined with a simple initializer, condition, and increment operation

d.

Only when a while loop can not be used

Feedback

Your answer is correct.

The correct answers are: yields more easily understood code, yields more maintainable code, whenever a loop can be defined with a simple initializer, condition, and increment operation

Question 11

Correct

1.00 points out of 1.00

Flag question

Question text

A common problem with the switch statement is To forget to terminate a case with a break

Question 11Select one:

True

False

Feedback

The correct answer is 'True'.

Question 12

Correct

1.00 points out of 1.00

Flag question

Question text

What does vector<char> alphabet(26); do?

Question 12Select one:

a.

A vector of 26 characters is initialized to " "

b.

A vector of 26 characters is initialized to "0"

c.

A vector of 27 characters is initialized to " "

d.

A vector of 25 characters is initialized to " "

Feedback

Your answer is correct.

The correct answer is: A vector of 26 characters is initialized to " "

Question 13

Correct

1.00 points out of 1.00

Flag question

Question text

What does an expression do?

Question 13Select one:

a.

Computes a value from a number of operands

b.

Specifies a name with its type in a program

c.

Selects between two alternatives

d.

Iterates through a block of code

Feedback

Your answer is correct.

The correct answer is: Computes a value from a number of operands

Question 14

Correct

1.00 points out of 1.00

Flag question

Question text

What the line char foo(int x) means in a function definition?

char foo(int x) Given that, we know enough to say char x = foo(44);

Question 14Select one:

a.

char x = foo(44); //foo returns a character value, based on an integer value

b.

int x = foo("44"); //foo returns a integer value, based on an character value

c.

int x = foo(44); //foo returns a integer value, based on an integer value

d.

char x = foo(3.14); //foo returns a character value, based on a floating point value

Feedback

Your answer is correct.

The correct answer is: char x = foo(44); //foo returns a character value, based on an integer value

Question 15

Correct

1.00 points out of 1.00

Flag question

Question text

When should the for-loop be used?

Question 15Select one or more:

a.

Want easily understood code

b.

Want maintainable code

c.

used when loop can be defined as a for-statement with a simple initializer, condition, and increment operation

d.

When the loop variable is modified inside the body of the loop

Feedback

Your answer is correct.

The correct answers are: Want easily understood code, Want maintainable code, used when loop can be defined as a for-statement with a simple initializer, condition, and increment operation

Question 16

Correct

1.00 points out of 1.00

Flag question

Question text

What is a constant expression?

Question 16Select one:

a.

A named object that cannot change and is initialized at compile time

b.

A notation that directly specifies a value, such as 12, 0, or true

c.

A named object that cannot change and is initialized at run time

d.

A named object that can change and is initialized at run time

Feedback

Your answer is correct.

The correct answer is: A named object that cannot change and is initialized at compile time

Question 17

Correct

1.00 points out of 1.00

Flag question

Question text

What does a statement do?

Question 17Select one or more:

a.

Computes a value from a number of operands

b.

Specifies a name with its type in a program

c.

Selects between two alternatives

d.

Iterates through a block of code

Feedback

Your answer is correct.

The correct answers are: Specifies a name with its type in a program, Selects between two alternatives, Iterates through a block of code

Question 18

Correct

1.00 points out of 1.00

Flag question

Question text

What is a function?

Question 18Select one:

a.

the way we represent actions and computations

b.

an individual computer statement

c.

repetition logic such as for or while statments

d.

selection logic such as if or switch statements

Feedback

Your answer is correct.

The correct answer is: the way we represent actions and computations

Question 19

Correct

1.00 points out of 1.00

Flag question

Question text

Inputs to a computation

Question 19Select one or more:

a.

from mouse clicks

b.

from files

c.

from other parts of the program

d.

from another program

Feedback

Your answer is correct.

The correct answers are: from mouse clicks, from files, from other parts of the program, from another program

Question 20

Correct

1.00 points out of 1.00

Flag question

Question text

What is the code to display the third element of a vector? Use the following vector declaration:

vector v = {5, 7, 9, 4, 6, 8};

Question 20Select one:

a.

cout << v[2] << '\n';

b.

cout << v[3] << '\n';

c.

cout << v(2) << '\n';

d.

cout << v(3) << '\n';

Feedback

Your answer is correct.

The correct answer is: cout << v[2] << '\n';

**Lesson 4**

What is a linker error?? Assume the following function declaration

char grade(int ngrade); // determine the grade to be assigned

int main

{

// code below

return 0;

}

Question 1Select one or more:

a.

char c0 = grades(97);

b.

char c1 = grade(97, 76); /

c.

int i2 = grade("A");

d.

char c3 = grade(97);

Feedback

Your answer is correct.

The correct answers are: char c1 = grade(97, 76); /, int i2 = grade("A");

Question 2

Correct

1.00 points out of 1.00

Flag question

Question text

What is a type error? Assume the following function declaration

char grade(int ngrade); // determine the grade to be assigned

Question 2Select one or more:

a.

char c0 = grades(97);

b.

char c1 = grade(97, 76); /

c.

char c2 = grade("A");

d.

char c3 = grade(97);

Feedback

Your answer is correct.

The correct answers are: char c0 = grades(97); , char c1 = grade(97, 76); /, char c2 = grade("A");

Question 3

Correct

1.00 points out of 1.00

Flag question

Question text

What does a try statement do?

Question 3Select one:

a.

Executes code to see if an error occurs

b.

Responds to an error

c.

Is used with a grab statement to handle any error

d.

None of the aboveo

Feedback

Your answer is correct.

The correct answer is: Executes code to see if an error occurs

Question 4

Correct

1.00 points out of 1.00

Flag question

Question text

What does a catch statement do?

Question 4Select one:

a.

Tests to see if an error occurs

b.

Responds to an error

c.

Is used with a preceding throw statement

d.

None of the aboveo

Feedback

Your answer is correct.

The correct answer is: Responds to an error

Question 5

Correct

1.00 points out of 1.00

Flag question

Question text

What are Logic errors?

Question 5Select one:

a.

Errors found by the linker when it is trying to combine object files into an executable program.

b.

Errors detected by the computer (hardware and/or operating system)

c.

Errors detected by user code

d.

Errors found by the programmer looking for the causes of erroneous results

Feedback

Your answer is correct.

The correct answer is: Errors found by the programmer looking for the causes of erroneous results

Question 6

Correct

1.00 points out of 1.00

Flag question

Question text

What guarantees should a program reasonably offer?

Question 6Select one or more:

a.

produce the desired results for all legal inputs

b.

give reasonable error messages for all illegal inputs

c.

is allowed to terminate after finding an error

d.

is completelyerror free

Feedback

Your answer is correct.

The correct answers are: produce the desired results for all legal inputs , give reasonable error messages for all illegal inputs , is allowed to terminate after finding an error

Question 7

Correct

1.00 points out of 1.00

Flag question

Question text

Name four major types of errors

Question 7Select one or more:

a.

Compile-time errors

b.

Link-time errors

c.

Run-time errors

d.

Logic errors

e.

Input errors

Feedback

Your answer is correct.

The correct answers are: Compile-time errors, Link-time errors, Run-time errors, Logic errors

Question 8

Correct

1.00 points out of 1.00

Flag question

Question text

An example of a post-condition is

int area(int length, int width)

{

if (length <= 0 || width <= 0)

{

cout<< "length and width must be greater than zero\n"

return -1;

}

int a = length \* width;

if (a <= 0)

{

cout << "area may not be a negative value\n";

return -1;

}

return a;

}

Question 8Select one:

a.

length and width must be greater than zero

b.

a must be greater than zero

c.

a = length \* widith

d.

length must be greater than zero and width may be any value

Feedback

Your answer is correct.

The correct answer is: a must be greater than zero

Question 9

Correct

1.00 points out of 1.00

Flag question

Question text

What is a syntax error? Assume the following function declaration

char grade(int ngrade); // determine the grade to be assigned

Question 9Select one or more:

a.

char c1 = grade(97;

b.

char c2 = grade(97)

c.

Char c3 = grade(97);

d.

char c4 = grade(97);

Feedback

Your answer is correct.

The correct answers are: char c1 = grade(97; , char c2 = grade(97), Char c3 = grade(97);

Question 10

Correct

1.00 points out of 1.00

Flag question

Question text

How do you test if an input operation succeeded?

Question 10Select one:

a.

by testing cin with code like if (cin)

b.

by testing cout with code like if (cout)

c.

by testing cerror with code like if (cerror)

d.

by testing input with code like if (input)

Feedback

Your answer is correct.

The correct answer is: by testing cin with code like if (cin)

Question 11

Correct

1.00 points out of 1.00

Flag question

Question text

Why, with a vector called v, is v[v.size()] a range error?

vector <int> v; // a vector of integers

for (int i; cin>>i; )

v.push\_back(i); // get values

for (int i = 0; i<=v.size(); ++i) // print values

cout << "v[" << i <<"] == " << v[i] << '\n';

Question 11Select one:

a.

The element numbering for a vector starts at 0, while the size of the vector is the number or elements

b.

The size of the vector is 1 less than the number of elements in it

c.

There is no error. The code works properly

Feedback

Your answer is correct.

The correct answer is: The element numbering for a vector starts at 0, while the size of the vector is the number or elements

Question 12

Correct

1.00 points out of 1.00

Flag question

Question text

What are argument errors?

Question 12Select one or more:

a.

Passing the wrong number of parameters to a function

b.

Passing parameters that produce a illogical results

c.

Passing a negative number to a function

d.

Passing a constant to a function

Feedback

Your answer is correct.

The correct answers are: Passing the wrong number of parameters to a function, Passing parameters that produce a illogical results

Question 13

Correct

1.00 points out of 1.00

Flag question

Question text

What are Link-time errors?

Question 13Select one:

a.

Errors found by the linker when it is trying to combine object files into an executable program.

b.

Type errors

c.

Errors detected by user code

d.

Errors found by the programmer looking for the causes of erroneous results

Feedback

Your answer is correct.

The correct answer is: Errors found by the linker when it is trying to combine object files into an executable program.

Question 14

Correct

1.00 points out of 1.00

Flag question

Question text

An example of a pre-condition is

int area(int length, int width)

{

if (length <= 0 || width <= 0)

{

cout<< "length and width must be greater than zero\n"

return -1;

}

int a = length \* width;

if (a <= 0)

{

cout << "area may not be a negative value\n";

return -1;

}

return a;

}

Question 14Select one:

a.

length and width must be greater than zero

b.

a must be greater than zero

c.

a = length \* widith

d.

length must be greater than zero and width may be any value

Feedback

Your answer is correct.

The correct answer is: length and width must be greater than zero

Question 15

Correct

1.00 points out of 1.00

Flag question

Question text

How are exceptions caught?

Question 15Select one:

a.

use try and catch

b.

use throw and catch

c.

use try\_error and catch

d.

use try Bad\_error{} and catch

Feedback

Your answer is correct.

The correct answer is: use try and catch

Question 16

Correct

1.00 points out of 1.00

Flag question

Question text

An example of an argument error is

int area(int length, int width)

{

int a = length \* width;

return a;

}

Question 16Select one:

a.

length > 0

b.

width <= 0

c.

a = length \* widith

d.

a <= 0

Feedback

Your answer is correct.

The correct answer is: width <= 0

Question 17

Correct

1.00 points out of 1.00

Flag question

Question text

What are Compile-time errors?

Question 17Select one or more:

a.

Syntax errors

b.

Type errors

c.

Errors detected by user code

d.

Errors found by the programmer looking for the causes of erroneous results

Feedback

Your answer is correct.

The correct answers are: Syntax errors, Type errors

Question 18

Correct

1.00 points out of 1.00

Flag question

Question text

What are the steps in debugging a program?

Question 18Select one or more:

a.

Get the program to compile.

b.

Get the program to link.

c.

Get the program to do what it is supposed to do.

d.

Use meaningful variable names

Feedback

Your answer is correct.

The correct answers are: Get the program to compile. , Get the program to link. , Get the program to do what it is supposed to do.

Question 19

Correct

1.00 points out of 1.00

Flag question

Question text

What is debugging?

Question 19Select one:

a.

find and remove errors.

b.

find and remove logic only errors.

c.

find and remove syntax only errors.

d.

find and remove insects in the hardware

Feedback

Your answer is correct.

The correct answer is: find and remove errors.

Question 20

Correct

1.00 points out of 1.00

Flag question

Question text

What are Run-time errors?

Question 20Select one or more:

a.

Errors found by the linker when it is trying to combine object files into an executable program.

b.

Errors detected by the computer (hardware and/or operating system)

c.

Errors detected by user code

d.

Errors found by the programmer looking for the causes of erroneous results

Feedback

Your answer is correct.

The correct answers are: Errors detected by the computer (hardware and/or operating system), Errors detected by user code

**Lesson 5 na**

**Lesson 6**

What is unit testing?

Question 1Select one:

a.

Testing from a collection of tests that have been useful for finding errors in the past

b.

Testing something like a function or a class that is a part of a complete program

c.

Usually testing the interactions between functions and classes

d.

Is not necessary

Feedback

Your answer is correct.

The correct answer is: Testing something like a function or a class that is a part of a complete program

Question 2

Correct

1.00 points out of 1.00

Flag question

Question text

Why do we care about code layout?

Question 2Select one:

a.

It makes the code easier to read and maintain

b.

It allows the code to execute more quickly

c.

It allows the code to compile correctly

d.

It allows all the code to display on one screen

Feedback

Your answer is correct.

The correct answer is: It makes the code easier to read and maintain

Question 3

Correct

1.00 points out of 1.00

Flag question

Question text

What are symbolic constants?

Question 3Select one:

a.

A name assigned to an object whose value is not supposed to change

b.

A name assigned to a value that is allowed to change

c.

A logically separate part of code

d.

Not allowed in C++

Feedback

Your answer is correct.

The correct answer is: A name assigned to an object whose value is not supposed to change

Question 4

Correct

1.00 points out of 1.00

Flag question

Question text

What is system testing?

Question 4Select one:

a.

Testing from a collection of tests that have been useful for finding errors in the past

b.

Testing something like a function or a class that is a part of a complete program

c.

Usually testing the interactions between functions and classes

d.

Is not necessary

Feedback

Your answer is correct.

The correct answer is: Usually testing the interactions between functions and classes

Question 5

Correct

1.00 points out of 1.00

Flag question

Question text

What are the rules for legal function names?

Question 5Select one or more:

a.

Begin with a letter

b.

May contain an underscore (\_)

c.

May contain a number

d.

May contain a space

Feedback

Your answer is correct.

The correct answers are: Begin with a letter, May contain an underscore (\_), May contain a number

Question 6

Correct

1.00 points out of 1.00

Flag question

Question text

Always retest the program after cleanup

Question 6Select one:

True

False

Feedback

The correct answer is 'True'.

Question 7

Correct

1.00 points out of 1.00

Flag question

Question text

What is regression testing?

Question 7Select one:

a.

Testing from a collection of tests that have been useful for finding errors in the past

b.

Testing something like a function or a class that is a part of a complete program

c.

Usually testing the interactions between functions and classes

d.

Is not necessary

Feedback

Your answer is correct.

The correct answer is: Testing from a collection of tests that have been useful for finding errors in the past

Question 8

Correct

1.00 points out of 1.00

Flag question

Question text

Why is it a good idea to build a program incrementally?

Question 8Select one:

a.

You can build a program in stages, and test it at each stage,

b.

You reduce testing time, since the program is tested only one time

c.

You eliminate the need for commenting the code

d.

It is not a good idea. Coding in stages results in unnecessarily complex code.

Feedback

Your answer is correct.

The correct answer is: You can build a program in stages, and test it at each stage,

Question 9

Partially correct

0.50 points out of 1.00

Flag question

Question text

A function name should be

Question 9Select one or more:

a.

identify the logically separate parts of our code

b.

reflect the purpose of the function

c.

always be in upper case

d.

always contain an underscore "\_"

Feedback

Your answer is partially correct.

You have correctly selected 1.

The correct answers are: identify the logically separate parts of our code, reflect the purpose of the function

Question 10

Correct

1.00 points out of 1.00

Flag question

Question text

What are the rules for legal variable names?

Question 10Select one or more:

a.

Begin with a letter

b.

May contain an underscore (\_)

c.

May contain a number

d.

May contain a space

Feedback

Your answer is correct.

The correct answers are: Begin with a letter, May contain an underscore (\_), May contain a number

Question 11

Correct

1.00 points out of 1.00

Flag question

Question text

The library is where we find all of the standard mathematical functions

Question 11Select one:

a.

<cmath>

b.

<carith>

c.

<math>

d.

<arith>

Feedback

Your answer is correct.

The correct answer is: <cmath>

Question 12

Correct

1.00 points out of 1.00

Flag question

Question text

How do you decide what should be a separate function?

Question 12Select one:

a.

When a procedure performs more than one logical action

b.

When a procedure contains more than 20 lines of code

c.

When a procedure contains a selection structure (if or case)

d.

When a procedure contains a loop (repetition)

Feedback

Your answer is correct.

The correct answer is: When a procedure performs more than one logical action

Question 13

Correct

1.00 points out of 1.00

Flag question

Question text

To recover from an error, we code

Question 13Select one:

a.

a try catch statement

b.

a try throw statement

c.

a throw statement

d.

a try recover statement

Feedback

Your answer is correct.

The correct answer is: a try catch statement

Question 14

Correct

1.00 points out of 1.00

Flag question

Question text

Code layout is important because code that is hard to read is where bugs can more easily hide

Question 14Select one:

True

False

Feedback

The correct answer is 'True'.

Question 15

Correct

1.00 points out of 1.00

Flag question

Question text

When do you start to test?

Question 15Select one:

a.

Test after commenting the program.

b.

Test after each set of minor improvement

c.

Test after the program coding finished

d.

Test only after a major change in the program's logic

Feedback

Your answer is correct.

The correct answer is: Test after each set of minor improvement

Question 16

Incorrect

0.00 points out of 1.00

Flag question

Question text

Why do we split code into multiple functions?

Question 16Select one:

a.

Ideally a function performs a single logical action

b.

a function works with exactly one user-defined data type

c.

a function is created for each logic structure (loop or selection)

d.

a function is created for data validation

Feedback

Your answer is incorrect.

The correct answer is: Ideally a function performs a single logical action

Question 17

Correct

1.00 points out of 1.00

Flag question

Question text

What should commenting be?

Question 17Select one or more:

a.

Still valid

b.

Adequate for a reader

c.

Not so verbose that they distract from the code

d.

The code re-written in English

Feedback

Your answer is correct.

The correct answers are: Still valid, Adequate for a reader , Not so verbose that they distract from the code

Question 18

Correct

1.00 points out of 1.00

Flag question

Question text

What is the purpose of commenting?

Question 18Select one:

a.

Are for things that code expresses poorly

b.

Code re-written in English

c.

Required by the linker

d.

To identify who wrote the code

Feedback

Your answer is correct.

The correct answer is: Are for things that code expresses poorly

Question 19

Correct

1.00 points out of 1.00

Flag question

Question text

Block comments are

Question 19Select one:

a.

starts with a /\* and continues until a \*/

b.

starts with a // and continues until a \\

c.

starts with a /\* and continues until a \*\

d.

starts with a \*/ and continues until a \*/

Feedback

Your answer is correct.

The correct answer is: starts with a /\* and continues until a \*/

Question 20

Correct

1.00 points out of 1.00

Flag question

Question text

Tells the compiler that we are defining an object that is not supposed to change

Question 20Select one:

a.

const

b.

constant

c.

int

d.

class

Feedback

Your answer is correct.

The correct answer is: const

**Lesson 7**

Question 1

Correct

1.00 points out of 1.00

Flag question

Question text

What is an implementation?

Question 1Select one:

a.

The part of the class’s declaration that its users access directly.

b.

The part of the class’s declaration that its users access only indirectly

c.

The part of the class's structure that initializes objects of the class

d.

The part of the class that normally releases resources used by the class

Feedback

Your answer is correct.

The correct answer is: The part of the class’s declaration that its users access only indirectly

Question 2

Partially correct

0.50 points out of 1.00

Flag question

Question text

A pass by const is used

Question 2Select one or more:

a.

To pass large amounts of data to a function

b.

To pass small amounts of data to a function

c.

To pass data to a function that will change the data

d.

To pass data to a function that will not change the data

Feedback

Your answer is partially correct.

You have correctly selected 1.

The correct answers are: To pass large amounts of data to a function, To pass data to a function that will not change the data

Question 3

Incorrect

0.00 points out of 1.00

Flag question

Question text

What does adding const to a member function do?

Question 3Select one:

a.

Prevents the function from modifying it's own parameters

b.

Prevents the function from modifying any variable

c.

Means that only integer values can be used as parameters

d.

Prevents the function's parameters from being modified any place in the program.

Feedback

Your answer is incorrect.

The correct answer is: Prevents the function from modifying it's own parameters

Question 4

Partially correct

0.50 points out of 1.00

Flag question

Question text

A pass by reference is used

Question 4Select one or more:

a.

To pass large amounts of data to a function

b.

To pass small amounts of data to a function

c.

To pass data to a function that will change the data

d.

To pass data to a function that will not change the data

Feedback

Your answer is partially correct.

You have correctly selected 1.

The correct answers are: To pass large amounts of data to a function, To pass data to a function that will change the data

Question 5

Correct

1.00 points out of 1.00

Flag question

Question text

Why are “helper functions” best placed outside the class definition?

Question 5Select one:

a.

They often work independently of the class

b.

A class may not have more than 50 functions

c.

A public function must be declared outside of the class

d.

A private function must be declared outside the class

Feedback

Your answer is correct.

The correct answer is: They often work independently of the class

Question 6

Incorrect

0.00 points out of 1.00

Flag question

Question text

What is valid state?

Question 6Select one:

a.

When a class holds a valid value

b.

When a class compiles correctly

c.

When a class's destructor releases the classes resources

d.

When a class has a member function called valid\_state

Feedback

Your answer is incorrect.

The correct answer is: When a class holds a valid value

Question 7

Correct

1.00 points out of 1.00

Flag question

Question text

using namespace std;

Question 7Select one:

a.

Allows you to write std::string name; as string name;

b.

Requires you to write the std:: to reference a string data type std::string name;

c.

Allows you to write string std::name; as string name;

d.

Requires you to write the std:: to reference a string's variable name string std::name;

Feedback

Your answer is correct.

The correct answer is: Allows you to write std::string name; as string name;

Question 8

Correct

1.00 points out of 1.00

Flag question

Question text

What is an invariant?

Question 8Select one:

a.

The part of the class’s declaration that its users access directly.

b.

A rule for what constitutes a valid value

c.

The part of the class's structure that initializes objects of the class

d.

The part of the class that normally releases resources used by the class

Feedback

Your answer is correct.

The correct answer is: A rule for what constitutes a valid value

Question 9

Correct

1.00 points out of 1.00

Flag question

Question text

What is a header file?

Question 9Select one or more:

a.

a collection of declarations, typically defined in a file

b.

use an #include statement to refer to the file(s) in our source files

c.

The declarations and functions at the top of your .cpp file

d.

The declarations and functions at the top of your .c file

Feedback

Your answer is correct.

The correct answers are: a collection of declarations, typically defined in a file, use an #include statement to refer to the file(s) in our source files

Question 10

Correct

1.00 points out of 1.00

Flag question

Question text

What is a constructor?

Question 10Select one:

a.

char, int, and double

b.

A function implicitly invoked when an object is destroyed

c.

types the programmer defines

d.

A member function with the same name as its class. It is used for initialization

Feedback

Your answer is correct.

The correct answer is: A member function with the same name as its class. It is used for initialization

Question 11

Correct

1.00 points out of 1.00

Flag question

Question text

What is an interface?

Question 11Select one:

a.

The part of the class’s declaration that its users access directly.

b.

The part of the class’s declaration that its users access only indirectly

c.

The part of the class's structure that initializes objects of the class

d.

The part of the class that normally releases resources used by the class

Feedback

Your answer is correct.

The correct answer is: The part of the class’s declaration that its users access directly.

Question 12

Correct

1.00 points out of 1.00

Flag question

Question text

What is a destructor?

Question 12Select one:

a.

char, int, and double

b.

A function implicitly invoked when an object is destroyed

c.

types the programmer defines

d.

A member function with the same name as its class. It is used for initialization

Feedback

Your answer is correct.

The correct answer is: A function implicitly invoked when an object is destroyed

Question 13

Correct

1.00 points out of 1.00

Flag question

Question text

An enum class values

enum class ClassName{

freshman=1, sophomore, junior, senior

};

Question 13Select one:

a.

sophomore=2, junior=3, senior=4

b.

sophomore=1, junior=1, senior=1

c.

sophomore=0, junior=0, senior=0

d.

Will not compile

Feedback

Your answer is correct.

The correct answer is: sophomore=2, junior=3, senior=4

Question 14

Correct

1.00 points out of 1.00

Flag question

Question text

is a programming language concept, not a design concept

Question 14Select one:

True

False

Feedback

The correct answer is 'False'.

Question 15

Correct

1.00 points out of 1.00

Flag question

Question text

What is the difference between pass-by-reference and pass-by-const-reference?

Question 15Select one:

a.

Pass by reference allows the contents of the referenced memory location to be changed

b.

Pass by const reference requires the function's parameters to be constants

c.

Pass by reference duplicates the contents of the referenced memory location

d.

Pass by const reference allows the contents of the referenced memory location to be changed

Feedback

Your answer is correct.

The correct answer is: Pass by reference allows the contents of the referenced memory location to be changed

Question 16

Correct

1.00 points out of 1.00

Flag question

Question text

What is an enum?

Question 16Select one:

a.

a very simple user-defined type, specifying its set of values as symbolic constants

b.

the symbolic constants within a class

c.

the numeric values in a <variant>

d.

a list of values defined by const

Feedback

Your answer is correct.

The correct answer is: a very simple user-defined type, specifying its set of values as symbolic constants

Question 17

Correct

1.00 points out of 1.00

Flag question

Question text

What is a using directive?

Question 17Select one:

a.

Allows all the names in a namespace to be used without the namespace-name as an explicit qualifier

b.

Requires all the names in a namespace to be used with an explicit qualifier

c.

Should always be used to simplify coding

d.

Is required when working with a namespace that you ave coded

Feedback

Your answer is correct.

The correct answer is: Allows all the names in a namespace to be used without the namespace-name as an explicit qualifier

Question 18

Correct

1.00 points out of 1.00

Flag question

Question text

What is a built-in type?

Question 18Select one:

a.

char, int, and double

b.

string, vector, and ostream

c.

types the programmer defines

d.

Token and Token\_stream

Feedback

Your answer is correct.

The correct answer is: char, int, and double

Question 19

Partially correct

0.33 points out of 1.00

Flag question

Question text

Why should a class's interface be small?

Question 19Select one or more:

a.

small interface is easy to learn and easy to remember

b.

The implementer doesn’t waste a lot of time implementing unnecessary and rarely used facilities.

c.

When something is wrong, there are fewer functions to check to find the problem.

d.

Private functions take more resources

Feedback

Your answer is partially correct.

You have correctly selected 1.

The correct answers are: small interface is easy to learn and easy to remember, The implementer doesn’t waste a lot of time implementing unnecessary and rarely used facilities., When something is wrong, there are fewer functions to check to find the problem.

Question 20

Correct

1.00 points out of 1.00

Flag question

Question text

What is the purpose of a namespace?

Question 20Select one:

a.

A language mechanism to organize declarations classes, functions, data, and type

b.

Is typically not part of a header file

c.

Is a block of code that performs some operation

d.

Is the program element that control how and in what order objects are manipulated

Feedback

Your answer is correct.

The correct answer is: A language mechanism to organize declarations classes, functions, data, and type

**Lesson 8**

when dealing with input and output, how is the variety of devices dealt?

Question 1Select one:

a.

operating systems separate the detailed handling of I/O devices into device drivers

b.

programmers build I/O handling for each device into their code

c.

programmers write different versions of their program for each type of I/O device

Feedback

Your answer is correct.

The correct answer is: operating systems separate the detailed handling of I/O devices into device drivers

Question 2

Correct

1.00 points out of 1.00

Flag question

Question text

What is the default output format for floating-point values?

Question 2Select one:

a.

A total of 6 digits

b.

A maximum of 6 digits to the right of the decimal point

c.

A maximum of 6 digits to the left of the decimal point

d.

A maximum of 12 digits total

Feedback

Your answer is correct.

The correct answer is: A total of 6 digits

Question 3

Incorrect

0.00 points out of 1.00

Flag question

Question text

What does a buffer do?

Question 3Select one:

a.

deals with streams of input

b.

deal with streams of output

c.

turns values of various types into character sequences

d.

sends the character sequences to another computer, file, or other location

e.

a data structure that is used internally to store the data

Feedback

Your answer is incorrect.

The correct answer is: a data structure that is used internally to store the data

Question 4

Correct

1.00 points out of 1.00

Flag question

Question text

What are examples of structured files?

Question 4Select one or more:

a.

XML files

b.

HTML files

c.

text files

d.

disk files

Feedback

Your answer is correct.

The correct answers are: XML files, HTML files

Question 5

Incorrect

0.00 points out of 1.00

Flag question

Question text

What are hexadecimal numbers used for in computer science?

Question 5Select one:

a.

To represent the value of an 8-bit byte

b.

To represent 8 digits

c.

To represent 16 digits

d.

To represent 10 digits

Feedback

Your answer is incorrect.

The correct answer is: To represent the value of an 8-bit byte

Question 6

Correct

1.00 points out of 1.00

Flag question

Question text

What are the four steps for reading a file?

Question 6Select one:

a.

open, read, close, error handling

b.

open, write, close, error handling

c.

open, clear buffer, close, error handling

d.

read, clear buffer, close, error handling

Feedback

Your answer is correct.

The correct answer is: open, read, close, error handling

Question 7

Correct

1.00 points out of 1.00

Flag question

Question text

What are the four steps for writing a file?

Question 7Select one:

a.

open, read, close, error handling

b.

open, write, close, error handling

c.

open, clear buffer, close, error handling

d.

write, clear buffer, close, error handling

Feedback

Your answer is correct.

The correct answer is: open, write, close, error handling

Question 8

Incorrect

0.00 points out of 1.00

Flag question

Question text

What are the four steps for writing a file?

Question 8Select one:

a.

good, eof, bad, fail

b.

open, write, close, error handlng

c.

good, bof, bad, fail

d.

write, clear buffer, close, error handling

Feedback

Your answer is incorrect.

The correct answer is: good, eof, bad, fail

Question 9

Correct

1.00 points out of 1.00

Flag question

Question text

What does an istream do?

Question 9Select one:

a.

deals with streams of input

b.

deal with streams of output

c.

turns values of various types into character sequences

d.

sends the character sequences to another computer, file, or other location

e.

a data structure that is used internally to store the data

Feedback

Your answer is correct.

The correct answer is: deals with streams of input

Question 10

Correct

1.00 points out of 1.00

Flag question

Question text

What does an ostream do?

Question 10Select one or more:

a.

deals with streams of input

b.

reads the character sequences from another computer, file, or other location

c.

turns values of various types into character sequences

d.

sends the character sequences to another computer, file, or other location

e.

a data structure that is used internally to store the data

Feedback

Your answer is correct.

The correct answers are: turns values of various types into character sequences, sends the character sequences to another computer, file, or other location

Question 11

Correct

1.00 points out of 1.00

Flag question

Question text

What does clear() does?

Question 11Select one:

a.

Changes the stream state to good

b.

Changes the stream state to bad

c.

Changes the stream state to the indicated state

d.

Changes the stream state to fail

Feedback

Your answer is correct.

The correct answer is: Changes the stream state to good

Question 12

Correct

1.00 points out of 1.00

Flag question

Question text

What does fail() indicate?

Question 12Select one:

a.

Something unexpected happened

b.

Something unexpected and serious happened

c.

The end of file was reached

d.

The end of file was not reached

Feedback

Your answer is correct.

The correct answer is: Something unexpected happened

Question 13

Correct

1.00 points out of 1.00

Flag question

Question text

What does good() indicate?

Question 13Select one:

a.

The file operation succeeded

b.

The file buffer is cleared

c.

The end of file was reached

d.

The end of file was not reached

Feedback

Your answer is correct.

The correct answer is: The file operation succeeded

Question 14

Correct

1.00 points out of 1.00

Flag question

Question text

What does isalnum do?

Question 14Select one:

a.

Is the character either a letter or a digit

b.

Is the character a letter

c.

Is the character a digit

d.

Is the character either a punctuation mark or a digit

Feedback

Your answer is correct.

The correct answer is: Is the character either a letter or a digit

Question 15

Correct

1.00 points out of 1.00

Flag question

Question text

What does isalpha do?

Question 15Select one:

a.

Is the character either a letter or a digit

b.

Is the character a letter

c.

Is the character a digit

d.

Is the character either a punctuation mark or a digit

Feedback

Your answer is correct.

The correct answer is: Is the character a letter

Question 16

Correct

1.00 points out of 1.00

Flag question

Question text

What does isdigit do?

Question 16Select one:

a.

Is the character either a letter or a digit

b.

Is the character a letter

c.

Is the character a digit

d.

Is the character either a punctuation mark or a digit

Feedback

Your answer is correct.

The correct answer is: Is the character a digit

Question 17

Correct

1.00 points out of 1.00

Flag question

Question text

What does setprecision() do?

Question 17Select one:

a.

Sets the decimal precision to be used to format floating-point values on output operations

b.

Sets the decimal precision to be used to format floating-point values on input operations

c.

Sets the decimal precision to be used to format floating-point values on input and output operations

d.

Sets the decimal precision to be used to format floating-point values within the program

Feedback

Your answer is correct.

The correct answer is: Sets the decimal precision to be used to format floating-point values on output operations

Question 18

Incorrect

0.00 points out of 1.00

Flag question

Question text

What does setw() do?

Question 18Select one:

a.

Sets the field width to be used on output operations

b.

Sets the field width to be used on input operations

c.

Sets the field width, only used on floating point output operations

d.

Sets the field width only used on numeric output operations

Feedback

Your answer is incorrect.

The correct answer is: Sets the field width to be used on output operations

Question 19

Incorrect

0.00 points out of 1.00

Flag question

Question text

What does showbase do?

Question 19Select one:

a.

Inserts prefixes indicating the numeric base into output numerical integer values

b.

Inserts suffixes indicating the numeric base into output numerical integer values

c.

Requires prefixes indicating the numeric base in input numerical integer values

d.

Requires suffixes indicating the numeric base in input numerical integer values

Feedback

Your answer is incorrect.

The correct answer is: Inserts prefixes indicating the numeric base into output numerical integer values

Question 20

Correct

1.00 points out of 1.00

Flag question

Question text

What does the notation << dec do?

Question 20Select one:

a.

Outputs a number in decimal form. Includes a 0 at the beginning of the number

b.

Outputs a number in decimal form.

c.

Inputs a number in decimal form. Expects a 0 at the beginning of the number

d.

Inputs a number in decimal form.

Feedback

Your answer is correct.

The correct answers are: Outputs a number in decimal form. Includes a 0 at the beginning of the number, Outputs a number in decimal form.

Question 21

Incorrect

0.00 points out of 1.00

Flag question

Question text

What does the notation << hex do?

Question 21Select one:

a.

Outputs a number in hexadecimal form. Includes a 0 at the beginning of the number

b.

Outputs a number in hexadecimal form. Includes a 0X at the beginning of the number

c.

Inputs a number in hexadecimal form. Expects a 0 at the beginning of the number

d.

Inputs a number in hexadecimal form. Expects a 0X at the beginning of the number

Feedback

Your answer is incorrect.

The correct answer is: Outputs a number in hexadecimal form. Includes a 0 at the beginning of the number

Question 22

Correct

1.00 points out of 1.00

Flag question

Question text

What does the notation << oct do?

Question 22Select one:

a.

Outputs a number in octal form. Includes a 0 at the beginning of the number

b.

Outputs a number in octal form. Includes a 0X at the beginning of the number

c.

Inputs a number in octal form. Expects a 0 at the beginning of the number

d.

Inputs a number in octal form. Expects a 0X at the beginning of the number

Feedback

Your answer is correct.

The correct answers are: Outputs a number in octal form. Includes a 0 at the beginning of the number, Outputs a number in octal form. Includes a 0X at the beginning of the number

Question 23

Correct

1.00 points out of 1.00

Flag question

Question text

What is a file?

Question 23Select one:

a.

a sequence of bytes numbered from 0 upward

b.

a function that converts objects in main memory into streams of byte

c.

a data structure to store data internally

d.

turns character sequences into values of various types

Feedback

Your answer is correct.

The correct answer is: a sequence of bytes numbered from 0 upward

Question 24

Incorrect

0.00 points out of 1.00

Flag question

Question text

What is a file format?

Question 24Select one:

a.

The way the data in a file is organized

b.

The way the data is organized within the program

c.

Special characters such as $ and ,

d.

A function in iostream.h

Feedback

Your answer is incorrect.

The correct answer is: The way the data in a file is organized

Question 25

Correct

1.00 points out of 1.00

Flag question

Question text

What is a fstream?

Question 25Select one:

a.

a file that can be read and written

b.

a file that can only be read

c.

a file that can only be written

d.

indicates a file has a fatal error

Feedback

Your answer is correct.

The correct answer is: a file that can be read and written

Question 26

Correct

1.00 points out of 1.00

Flag question

Question text

What is a terminator?

Question 26Select one:

a.

A symbol indicating the end of data input

b.

A symbol indicating the end of a loop

c.

ctrl + Z

d.

\*/

Feedback

Your answer is correct.

The correct answer is: A symbol indicating the end of data input

Question 27

Correct

1.00 points out of 1.00

Flag question

Question text

What is the prefix for a decimal number?

Question 27Select one:

a.

none

b.

d

c.

0

d.

0X

Feedback

Your answer is correct.

The correct answer is: none

Question 28

Correct

1.00 points out of 1.00

Flag question

Question text

What is the prefix for a hexadecimal number?

Question 28Select one:

a.

none

b.

d

c.

0

d.

0X

Feedback

Your answer is correct.

The correct answer is: 0X

Question 29

Correct

1.00 points out of 1.00

Flag question

Question text

What is the prefix for an octal number?

Question 29Select one:

a.

none

b.

d

c.

0

d.

0X

Feedback

Your answer is correct.

The correct answer is: 0

Question 30

Correct

1.00 points out of 1.00

Flag question

Question text

What is the purpose of file open modes?

Question 30Select one:

a.

Determine how a file is accessed

b.

Determines where a file is located

c.

Determines how long a file is saved

d.

Opens a file for reading

Feedback

Your answer is correct.

The correct answer is: Determine how a file is accessed

Question 31

Correct

1.00 points out of 1.00

Flag question

Question text

What is unget()?

Question 31Select one:

a.

remembers the last character a stream produced

b.

stops reading a file before the end-of-file is reached

c.

automatically sets the end-of-file indicator to true

d.

indicates a file has a fatal error when being read

Feedback

Your answer is correct.

The correct answer is: remembers the last character a stream produced

Question 32

Correct

1.00 points out of 1.00

Flag question

Question text

When do you use file positioning?

Question 32Select one or more:

a.

When reading a file from a specific place

b.

When writing to a file at a specific place

c.

You would never use file positioning

d.

When file error checking at run time is extremely important

Feedback

Your answer is correct.

The correct answers are: When reading a file from a specific place, When writing to a file at a specific place

Question 33

Correct

1.00 points out of 1.00

Flag question

Question text

When do you use line-oriented input?

Question 33Select one:

a.

the definition of whitespace isn’t always appropriate

b.

you need to read one character at a time

c.

you need to read one "word" at a time

d.

the data in the file is compressed

Feedback

Your answer is correct.

The correct answer is: the definition of whitespace isn’t always appropriate

Question 34

Correct

1.00 points out of 1.00

Flag question

Question text

When it would probably be beneficial to use a binary file instead of a text file?

Question 34Select one or more:

a.

When dealing with a sound file

b.

When dealing with a picture file

c.

When dealing with a payroll file

d.

When dealing with e-mail logs

Feedback

Your answer is correct.

The correct answers are: When dealing with a sound file, When dealing with a picture file

Question 35

Incorrect

0.00 points out of 1.00

Flag question

Question text

A nonstandard separator in iostream is "whitespace"

Question 35Select one:

True

False

Feedback

The correct answer is 'False'.

Question 36

Correct

1.00 points out of 1.00

Flag question

Question text

The notations oct, hex, and dec are "sticky" and in effect until they are explicitly turned off

Question 36Select one:

True

False

Feedback

The correct answer is 'True'.

**Lesson 9**

How can we initialize a pointer named ptr with the address of mydouble?

Question 1Select one:

a.

double\* ptr = new mydouble;

b.

double ptr = &mydouble;

c.

double \*ptr = mydouble;

d.

double \*ptr = nullptr;

Feedback

Your answer is incorrect.

The correct answer is: double\* ptr = new mydouble;

Question 2

Partially correct

0.67 points out of 1.00

Flag question

Question text

What are the characteristics of an array?

Question 2Select one or more:

a.

a homogeneous sequence of elements, usually numbered

b.

contain a specific number of elements of a particular type.

c.

contain a variable number of elements of a particular type.

d.

zero-indexed; so the first element is at index 0

Feedback

Your answer is partially correct.

You have correctly selected 2.

The correct answers are: a homogeneous sequence of elements, usually numbered, contain a specific number of elements of a particular type. , zero-indexed; so the first element is at index 0

Question 3

Correct

1.00 points out of 1.00

Flag question

Question text

What are the five “essential operations” for a class?

Question 3Select one:

a.

construction, default construction, copy construction, copy assignment, and destruction

b.

construction, default construction, assignment, copy, and destruction

c.

construction, assignment, move, copy assignment, and destruction

d.

construction, delete, copy, assignment, and destruction

Feedback

Your answer is correct.

The correct answer is: construction, default construction, copy construction, copy assignment, and destruction

Question 4

Correct

1.00 points out of 1.00

Flag question

Question text

What are the four types of storage?

Question 4Select one:

a.

code storage, static storage, stack storage, and free store

b.

operating system storage, static storage, stack storage, and free store

c.

code storage, io storage, stack storage, and free store

d.

code storage, static storage, database storage, and free store

Feedback

Your answer is correct.

The correct answer is: code storage, static storage, stack storage, and free store

Question 5

Correct

1.00 points out of 1.00

Flag question

Question text

What does a cast do?

Question 5Select one:

a.

explicitly convert between related pointer types

b.

converts the pointer from const to allow the calling object to be altered

c.

converts the pointer to const to prevent the calling object from being altered

d.

converts the pointer to a null pointer

Feedback

Your answer is correct.

The correct answer is: explicitly convert between related pointer types

Question 6

Correct

1.00 points out of 1.00

Flag question

Question text

What does this refer to?

Question 6Select one:

a.

the pointer that points to the current object for which the function was called

b.

the pointer that points to the start of the object that called the function

c.

the end of the object that called the function

d.

the pointer that points to the start of the current function

Feedback

Your answer is correct.

The correct answer is: the pointer that points to the current object for which the function was called

Question 7

Incorrect

0.00 points out of 1.00

Flag question

Question text

What is a copy assignment?

Question 7Select one:

a.

Initializes a new object with the data of a previously created object of the same class

b.

Initializes an existing object with the data of a previously created object of the same class

c.

releases the resources of a previously created object after a copy

d.

a temporary object used to hold data during a copy operation

Feedback

Your answer is incorrect.

The correct answer is: Initializes an existing object with the data of a previously created object of the same class

Question 8

Incorrect

0.00 points out of 1.00

Flag question

Question text

What is a copy constructor?

Question 8Select one:

a.

Initializes a new object with the data of a previously created object of the same class

b.

Initializes an existing object with the data of a previously created object of the same class

c.

releases the resources of a previously created object after a copy

d.

a temporary object used to hold data during a copy operation

Feedback

Your answer is incorrect.

The correct answer is: Initializes a new object with the data of a previously created object of the same class

Question 9

Correct

1.00 points out of 1.00

Flag question

Question text

What is a dereference operator?

Question 9Select one:

a.

the operator (\*) and retrieves the contents of the memory location

b.

the operator (&) and retrieves the contents of the memory location

c.

the operator (\*) and retrieves the addreess of the memory location

d.

the operator (&) and retrieves the address of the memory location

Feedback

Your answer is correct.

The correct answer is: the operator (\*) and retrieves the contents of the memory location

Question 10

Correct

1.00 points out of 1.00

Flag question

Question text

What is a destructor?

Question 10Select one:

a.

makes sure that an object is properly cleaned up before it is destroyed (ex., at the end of a scope).

b.

makes sure that to initialize an object's variables and/or allocate storage

c.

releases an object's memory when the program ends

d.

reserves an object's memory when the program first starts.

Feedback

Your answer is correct.

The correct answer is: makes sure that an object is properly cleaned up before it is destroyed (ex., at the end of a scope).

Question 11

Partially correct

0.50 points out of 1.00

Flag question

Question text

What is a leak?

Question 11Select one or more:

a.

the failure of a program to release discarded memory

b.

a failure in a program to release input and output resources no longer needed

c.

a failure in a program to clear the input screen

d.

No longer occurs since the operating system automatically frees resources not currently needed

Feedback

Your answer is partially correct.

You have correctly selected 1.

The correct answers are: the failure of a program to release discarded memory, a failure in a program to release input and output resources no longer needed

Question 12

Incorrect

0.00 points out of 1.00

Flag question

Question text

What is a null pointer?

Question 12Select one:

a.

A value used to indicate the pointer does not currently address a memory location

b.

A value used to point to a variable containing NULL

c.

A value used to point to a zero (0) number

d.

An obsolete initialization of a pointer

Feedback

Your answer is incorrect.

The correct answer is: A value used to indicate the pointer does not currently address a memory location

Question 13

Correct

1.00 points out of 1.00

Flag question

Question text

What is an explicit constructor?

Question 13Select one:

a.

prevents the compiler from using that constructor from converting from one data type to another

b.

The default constructor for a class

c.

The required constructor for vectors

d.

One of the essential operations for a class

Feedback

Your answer is correct.

The correct answer is: prevents the compiler from using that constructor from converting from one data type to another

Question 14

Incorrect

0.00 points out of 1.00

Flag question

Question text

What is deep copy?

Question 14Select one:

a.

copies only a pointer so that the two pointers now refer to the same object

b.

copies what a pointer points to so that the two pointers now refer to two distinct objects

c.

makes a copy of an existing object and places the data in a new object

d.

makes a copy of an existing object and places the data in another existing object

Feedback

Your answer is incorrect.

The correct answer is: copies what a pointer points to so that the two pointers now refer to two distinct objects

Question 15

Incorrect

0.00 points out of 1.00

Flag question

Question text

What is shallow copy?

Question 15Select one:

a.

copies only a pointer so that the two pointers now refer to the same object

b.

copies what a pointer points to so that the two pointers now refer to two distinct objects

c.

makes a copy of an existing object and places the data in a new object

d.

makes a copy of an existing object and places the data in another existing object

Feedback

Your answer is incorrect.

The correct answer is: copies only a pointer so that the two pointers now refer to the same object

Question 16

Incorrect

0.00 points out of 1.00

Flag question

Question text

What is the default meaning of copying for class objects?

Question 16Select one:

a.

Copy all the class's data members

b.

Copy the class's first data member

c.

Copy the class's last data member

d.

Copy the class's memory location (return a pointer)

Feedback

Your answer is incorrect.

The correct answer is: Copy all the class's data members

Question 17

Incorrect

0.00 points out of 1.00

Flag question

Question text

What is the free store?

Question 17Select one:

a.

The memory available for a program to use during it's execution

b.

The memory available for the program code to reside

c.

The memory available for the program's function calls and local variable storage

d.

The memory available for global variable storage

Feedback

Your answer is incorrect.

The correct answer is: The memory available for a program to use during it's execution

Question 18

Correct

1.00 points out of 1.00

Flag question

Question text

What operations may be invoked implicitly for a class object?

Question 18Select one:

a.

constructor and destructor

b.

constructor and delete

c.

destructor and range

d.

constructor and conversion

Feedback

Your answer is correct.

The correct answer is: constructor and destructor

Question 19

Incorrect

0.00 points out of 1.00

Flag question

Question text

What operator retrieve the memory location of my\_num and places it in mem\_loc?

Question 19Select one:

a.

mem\_loc = &my\_num;

b.

mem\_loc = \*my\_num;

c.

mem\_loc = my\_num;

d.

mem\_loc = address(my\_num);

Feedback

Your answer is incorrect.

The correct answer is: mem\_loc = &my\_num;

Question 20

Incorrect

0.00 points out of 1.00

Flag question

Question text

A C-style string is a zero-terminated array of characters

Question 20Select one:

True

False

Feedback

The correct answer is 'True'.

**Lesson 10**

How do you convert to and from a string representation (to and from some other type)?

Question 1Select one or more:

a.

write a function using ostreamstring and/or istreamstring

b.

use the string library functions including stoi, stod, and stol

c.

use conversion functions in the iostring library

d.

use the string library functions including cnv2i, cnv2d, and cnv2l

Feedback

Your answer is partially correct.

You have selected too many options.

The correct answers are: write a function using ostreamstring and/or istreamstring, use the string library functions including stoi, stod, and stol

Question 2

Correct

1.00 points out of 1.00

Flag question

Question text

How do you get a regular expression into a regex variable?

Question 2Select one:

a.

Declare a regex variable (ex regular\_expression pat R"(\w{2}\s\*\d{5}(–\d{4})?)"; )

b.

Declare a string variable (ex string pat {R"(\w{2}\s\*\d{5}(–\d{4})?)"; }

c.

Declare a regex variable and put a raw string into it (ex regex pat {R"(\w{2}\s\*\d{5}(–\d{4})?)"}; )

d.

Declare a string variable and put a raw string into it (ex string pat= R"(\w{2}\s\*\d{5}(–\d{4})?)"; )

Feedback

Your answer is correct.

The correct answer is: Declare a regex variable and put a raw string into it (ex regex pat {R"(\w{2}\s\*\d{5}(–\d{4})?)"}; )

Question 3

Incorrect

0.00 points out of 1.00

Flag question

Question text

How do you iterate over the elements of a map with the following declaration?

map <char, int> test\_map;

Question 3Select one:

a.

test\_map::iterator it; for(it = test\_map.begin(); it!= test\_map.end(); ++it)

b.

test\_map::iterator it;

for(it = test\_map.start(); it!= test\_map.end(); ++it)

c.

int it;

for(it = test\_map.begin(); it= test\_map.end(); ++it)

d.

test\_map::iterator it;

for(it = test\_map.begin(); it!= test\_map.last(); ++it)

Feedback

Your answer is incorrect.

The correct answer is: test\_map::iterator it; for(it = test\_map.begin(); it!= test\_map.end(); ++it)

Question 4

Correct

1.00 points out of 1.00

Flag question

Question text

How do you represent the character dot (.) in a regular expression?

Question 4Select one:

a.

Put an escape character in front of the dot. So write \.

b.

Write a dot, no special handling needed

c.

Put an escape character in front of the dot. So write ^.

d.

Put an escape character in front of the dot. So write $.

Feedback

Your answer is correct.

The correct answer is: Put an escape character in front of the dot. So write \.

Question 5

Correct

1.00 points out of 1.00

Flag question

Question text

How do you represent the notion of “at least three” in a regular expression?

Question 5Select one:

a.

{3}

b.

[3]

c.

(3)

d.

(dot3) .3

Feedback

Your answer is correct.

The correct answer is: {3}

Question 6

Incorrect

0.00 points out of 1.00

Flag question

Question text

How would you represent a floating point number as a regular expression?

Question 6Select one:

a.

^[-+]?[0-9]\*\.?[0-9]+$

b.

^[-+]?[0-9]\*.?[0-9]+$

c.

[-+]?[0-9]\*\.?[0-9]+$

d.

[-+]?[0-9]\*\.?[0-9]+

Feedback

Your answer is incorrect.

The correct answer is: ^[-+]?[0-9]\*\.?[0-9]+$

Question 7

Correct

1.00 points out of 1.00

Flag question

Question text

What are the standard libraries most frequently useful for text analysis?

Question 7Select one:

a.

string, iostream

b.

string, vector

c.

iostream, fstream

d.

string, namespace

Feedback

Your answer is correct.

The correct answer is: string, iostream

Question 8

Correct

1.00 points out of 1.00

Flag question

Question text

What does auto do?

Question 8Select one:

a.

use the type of the iterator as the type of the variable:

b.

control the number of iterations through an array

c.

control the number of iterations through a loop

d.

automatically formats numeric data

Feedback

Your answer is correct.

The correct answer is: use the type of the iterator as the type of the variable:

Question 9

Correct

1.00 points out of 1.00

Flag question

Question text

What does regex\_match(line, matches, pat) do?

Question 9Select one:

a.

searches the line for anything that matches the regular expression stored in pat, and if it finds any matches, it stores them in matches

b.

searches the line for anything that matches the regular expression stored in pat, and if it finds any matches, it stores true in matches

c.

verifies that the line exactly matches the regular expression stored in pat, and if it finds a match, it stores it in matches

d.

verifies that the line exactly matches the regular expression stored in pat, and if it finds a match, it stores true in matches

Feedback

Your answer is correct.

The correct answer is: verifies that the line exactly matches the regular expression stored in pat, and if it finds a match, it stores it in matches

Question 10

Correct

1.00 points out of 1.00

Flag question

Question text

What does regex\_search(line, matches, pat) do?

Question 10Select one:

a.

searches the line for anything that matches the regular expression stored in pat, and if it finds any matches, it stores them in matches

b.

searches the line for anything that matches the regular expression stored in pat, and if it finds any matches, it stores true in matches

c.

verifies that the line exactly matches the regular expression stored in pat, and if it finds a match, it stores it in matches

d.

verifies that the line exactly matches the regular expression stored in pat, and if it finds a match, it stores true in matches

Feedback

Your answer is correct.

The correct answer is: searches the line for anything that matches the regular expression stored in pat, and if it finds any matches, it stores them in matches

Question 11

Incorrect

0.00 points out of 1.00

Flag question

Question text

What does \w+\s\d{4} match?

Question 11Select one:

a.

a letter or number, followed by a space, followed by 4 digits

b.

a letter, followed by a space, followed by 4 digits

c.

any character, followed by a space, followed by 4 digits

d.

a letter or number, followed by a space, followed by 4 digits. The string can not exceed 6 symbols

Feedback

Your answer is incorrect.

The correct answer is: a letter or number, followed by a space, followed by 4 digits

Question 12

Correct

1.00 points out of 1.00

Flag question

Question text

What is a multimap

Question 12Select one:

a.

Isi

Is similar to map with an addition that multiple elements can have the same key value

b.

Two or more maps working together

c.

Is similar to map with an addition that multiple keys can point to the same element

d.

Multimap does not exist

Feedback

Your answer is correct.

The correct answer is: Isi

Is similar to map with an addition that multiple elements can have the same key value

Question 13

Incorrect

0.00 points out of 1.00

Flag question

Question text

What is a template?

Question 13Select one:

a.

a mechanism that allows a programmer to use types as parameters for a class or a function.

b.

a format for defining a function

c.

a format for defining a vector

d.

a format for coding a program

Feedback

Your answer is incorrect.

The correct answer is: a mechanism that allows a programmer to use types as parameters for a class or a function.

Question 14

Correct

1.00 points out of 1.00

Flag question

Question text

What is smatch

Question 14Select one or more:

a.

an object that holds information about a regular expression match

b.

holds the portion of the string that matched the pattern

c.

holds the regular expression pattern

d.

holds true if a match was found

Feedback

Your answer is correct.

The correct answers are: an object that holds information about a regular expression match, holds the portion of the string that matched the pattern

Question 15

Incorrect

0.00 points out of 1.00

Flag question

Question text

What is the difference between cin>>s and getline(icin, s) assuming s is a string?

Question 15Select one:

a.

cin>>s reads an individual "word" and getline(cin,s) reads an entire line

b.

cin>>s reads an individual character and getline(cin,s) reads an entire line

c.

No difference

d.

cin>>s reads a only letters and getline(cin,s) reads letters and numbers

Feedback

Your answer is incorrect.

The correct answer is: cin>>s reads an individual "word" and getline(cin,s) reads an entire line

Question 16

Correct

1.00 points out of 1.00

Flag question

Question text

What is the key of a map?

Question 16Select one:

a.

The first element in a map

b.

The second element in a map

c.

The first string element in a map

d.

The first numeric element in a map

Feedback

Your answer is correct.

The correct answer is: The first element in a map

Question 17

Correct

1.00 points out of 1.00

Flag question

Question text

What is the notation for an uppercase character?

Question 17Select one:

a.

\u

b.

\U

c.

\upper

d.

\UPPER

Feedback

Your answer is correct.

The correct answer is: \u

Question 18

Correct

1.00 points out of 1.00

Flag question

Question text

Why do you need escape characters in a regular expression?

Question 18Select one:

a.

To allow the pattern to handle "special characters" as regular characters

b.

To indicate the end of a pattern

c.

To stop the regular expression's execution

Feedback

Your answer is correct.

The correct answer is: To allow the pattern to handle "special characters" as regular characters

Question 19

Correct

1.00 points out of 1.00

Flag question

Question text

insert() adds before its position (or iterator)

Question 19Select one:

True

False

Feedback

The correct answer is 'True'.

Question 20

Correct

1.00 points out of 1.00

Flag question

Question text

7 is a \w character

Question 20Select one:

True

False

Feedback

The correct answer is 'True'.

Question 21

Incorrect

0.00 points out of 1.00

Flag question

Question text

\_ is a \w character

Question 21Select one:

True

False

Feedback

The correct answer is 'False'.

**Lesson 11**

How can you detect overflow?

Question 1Select one:

a.

Use the value of INT\_MAX to determine the largest possible integer

b.

Use the value of sizeof(int) to determine the largest possible integer

c.

Use the value of MAXIMUM\_iNT to determine the largest possible integer

d.

Use the value of size(int) to determine the largest possible integer

Feedback

Your answer is incorrect.

The correct answer is: Use the value of INT\_MAX to determine the largest possible integer

Question 2

Correct

1.00 points out of 1.00

Flag question

Question text

How do you move the iterator p to the next element?

Question 2Select one:

a.

++p

b.

\*p

c.

p = next()

d.

p == next(i)

Feedback

Your answer is correct.

The correct answer is: ++p

Question 3

Incorrect

0.00 points out of 1.00

Flag question

Question text

How do you move the iterator p to the previous element?

Question 3Select one:

a.

--p

b.

p.prev()

c.

p.prev(1)

d.

p.GetPrev()

Feedback

Your answer is incorrect.

The correct answer is: --p

Question 4

Correct

1.00 points out of 1.00

Flag question

Question text

What are the characteristics of a C-style multidimensional array?

Question 4Select one or more:

a.

an array of arrays, that is, an array with arrays as elements.

b.

A fixed size array

c.

Allows range checking

d.

May easily be passed to a function

Feedback

Your answer is correct.

The correct answers are: an array of arrays, that is, an array with arrays as elements., A fixed size array

Question 5

Correct

1.00 points out of 1.00

Flag question

Question text

What does iter = insert(iter, 9) do?

Question 5Select one:

a.

inserts 9 in the location iter points to

b.

inserts iter in the location 9 points to

c.

inserts 9 blank elements at location iter

d.

inserts 9 blank elements after location iter

Feedback

Your answer is correct.

The correct answer is: inserts 9 in the location iter points to

Question 6

Incorrect

0.00 points out of 1.00

Flag question

Question text

What happens if you try to move an iterator past the end of a sequence?

Question 6Select one:

a.

Fatal error "iterator not incrementable"

b.

Nothing. The data in the adjoining memory location is accessed

c.

It will never occur. The condition will be discovered at compile

d.

The iterator is automatically be returned to the end of the container

Feedback

Your answer is incorrect.

The correct answer is: Fatal error "iterator not incrementable"

Question 7

Correct

1.00 points out of 1.00

Flag question

Question text

What is a broadcast operation

Question 7Select one:

a.

An operation that is performed on every element of an array

b.

An operation that is performed on the first row of a 2 dimensional array

c.

An operation prints every element of an array

d.

An operation that adds a specific numeric value to a 2 dimensional array

Feedback

Your answer is correct.

The correct answer is: An operation that is performed on every element of an array

Question 8

Correct

1.00 points out of 1.00

Flag question

Question text

What is a common size of a double?

Question 8Select one:

a.

1 byte (8 bits)

b.

2 bytes (16 bits)

c.

4 bytes (32 bits)

d.

8 bytes (64 bits)

Feedback

Your answer is correct.

The correct answer is: 8 bytes (64 bits)

Question 9

Correct

1.00 points out of 1.00

Flag question

Question text

What is a common size of a integer?

Question 9Select one:

a.

1 byte (8 bits)

b.

2 bytes (16 bits)

c.

4 bytes (32 bits)

d.

8 bytes (64 bits)

Feedback

Your answer is correct.

The correct answer is: 4 bytes (32 bits)

Question 10

Incorrect

0.00 points out of 1.00

Flag question

Question text

What is a slice?

Question 10Select one:

a.

a contiguous selection of an array

b.

the selected first elements of an array

c.

the selected last elements of an array

d.

elements randomly selected from a pizza array

Feedback

Your answer is incorrect.

The correct answer is: a contiguous selection of an array

Question 11

Correct

1.00 points out of 1.00

Flag question

Question text

What is an STL container?

Question 11Select one:

a.

a collection of data with a beginning and end

b.

identifies an element of a sequence.

c.

standard template library

d.

an object that holds elements (other objects)

Feedback

Your answer is correct.

The correct answer is: an object that holds elements (other objects)

Question 12

Incorrect

0.00 points out of 1.00

Flag question

Question text

What is an STL iterator?

Question 12Select one:

a.

a collection of data with a beginning and end

b.

identifies an element of a sequence.

c.

standard template library

d.

an object that holds elements (other objects)

Feedback

Your answer is incorrect.

The correct answer is: identifies an element of a sequence.

Question 13

Incorrect

0.00 points out of 1.00

Flag question

Question text

What is an STL sequence?

Question 13Select one:

a.

a collection of data with a beginning and end

b.

identifies an element of a sequence.

c.

standard template library

d.

an object that holds elements (other objects)

Feedback

Your answer is incorrect.

The correct answer is: a collection of data with a beginning and end

Question 14

Correct

1.00 points out of 1.00

Flag question

Question text

What is double precision floating point?

Question 14Select one:

a.

lose the least significant bits

b.

lose the most significant bits

c.

a whole number, such as 42 and –99.

d.

a number that takes 8 bytes to represent, such as 14.1304347826087

Feedback

Your answer is correct.

The correct answer is: a number that takes 8 bytes to represent, such as 14.1304347826087

Question 15

Correct

1.00 points out of 1.00

Flag question

Question text

What is integer?

Question 15Select one:

a.

lose the least significant bits

b.

lose the most significant bits

c.

a whole number, such as 42 and –99.

d.

a number that takes 8 bytes to represent, such as 14.1304347826087

Feedback

Your answer is correct.

The correct answer is: a whole number, such as 42 and –99.

Question 16

Correct

1.00 points out of 1.00

Flag question

Question text

What is overflow?

Question 16Select one:

a.

lose the least significant bits

b.

lose the most significant bits

c.

a whole number, such as 42 and –99.

d.

a number that takes 8 bytes to represent, such as 14.1304347826087

Feedback

Your answer is correct.

The correct answer is: lose the most significant bits

Question 17

Correct

1.00 points out of 1.00

Flag question

Question text

What is precision?

Question 17Select one:

a.

lose the least significant bits

b.

lose the most significant bits

c.

a whole number, such as 42 and –99.

d.

a number that takes 8 bytes to represent, such as 14.1304347826087

Feedback

Your answer is correct.

The correct answer is: lose the least significant bits

Question 18

Correct

1.00 points out of 1.00

Flag question

Question text

What is the STL?

Question 18Select one:

a.

a collection of data with a beginning and end

b.

identifies an element of a sequence.

c.

standard template library

d.

an object that holds elements (other objects)

Feedback

Your answer is correct.

The correct answer is: standard template library

Question 19

Correct

1.00 points out of 1.00

Flag question

Question text

What makes a number random?

Question 19Select one:

a.

a sequence of numbers where you cannot easily predict the next number in the sequence given the previous numbers.

b.

The number of seconds from 1/1/1990

c.

The number of seconds from the start of the current year / PI

d.

The number generated by random();

Feedback

Your answer is correct.

The correct answer is: a sequence of numbers where you cannot easily predict the next number in the sequence given the previous numbers.

Question 20

Incorrect

0.00 points out of 1.00

Flag question

Question text

Where do you find numeric limits, such as the largest int?

Question 20Select one:

a.

<limits>, <climits>, <limits.h>, and <float.h>

b.

<intmaxmin>, <cintmaxmin>, <intmaxmin.h>, and <float.h>

c.

<intmaxmin>, <cintmaxmin>, <intmaxmin.h>, and <floatmaxmin.h>

d.

<maxmin>, <cintmaxmin>, <maxmin.h>, and <dblmaxmin.h>

Feedback

Your answer is incorrect.

The correct answer is:

<limits>, <climits>, <limits.h>, and <float.h>

Question 21

Incorrect

0.00 points out of 1.00

Flag question

Question text

Where do you find the standard mathematical functions?

Question 21Select one:

a.

The standard library

b.

The Matrix header Matrix.h

c.

A custom library named stdmath.h

d.

The random header named random

Feedback

Your answer is incorrect.

The correct answer is: The standard library