Basic Programming Concepts Test

21 questions

1) Determine the following term based on the description below

What do you call a group of statements that together perform a task in a computer program?

Please choose the correct answer:

- A) algorithm
- B) function
- C) class
- D) None of the above

2) Determine the following term based on the description below

What is a computer procedure that is similar to a recipe which allows for the solving of a problem that can be used towards designing a computer program? The ingredients in this computer procedures are call inputs and the results are called outputs.

- A) algorithm
- B) function
- C) class
- D) None of the above

3) Determine the following term based on the description below

What type of programming is based on the concepts of classes, fields and methods where there is no single flow within the program as these classes can freely interact with one another by passing messages?

Please choose the correct answer:

- A) structured
- B) functional
- C) object oriented
- D) None of the above

4) Determine the following term based on the description below

When a parameter is passed in a way that the caller and callee use the same variable, this is called passing a parameter by .

Please choose the correct answer:

- A) value
- B) reference
- C) function
- D) None of the above

5) When comparing ASCII vs Unicode Characters

Which sets of characters do they share in common?

- A) 0-255
- B) 0-16384
- C) 0-65536
- D) None of the above

```
print ("Hello, World")
```

Please choose the correct answer:

- A) Hello, World
- B) Hello World
- C) Hello
- D) World

7) What will the printed output be based on the following sample pseudo code

```
val = 400
print (val)
```

Please choose the correct answer:

- A) val
- B) 400
- C) val = 400
- D) None of the above

8) What will the printed output be based on the following sample pseudo code

```
lastName = "Smith"
print ("Hello ", lastName)
```

- A) Hello lastName
- B) Hello, lastName
- C) Hello Smith
- D) None of the above

```
a = 10
b = 20
c = 5
d = a + b * c
print (d)
```

Please choose the correct answer:

- A) 150
- B) 10
- C) 5
- D) 1000

10) What will the printed output be based on the following sample pseudo code

```
foo = 2
bar = 3

if (foo > bar)
    print ("Foo has a higher value")
else
    print ("Bar has a higher value")
end if
```

- A) Foo has a higher value
- B) Bar has a higher value
- C) Foo has a higher value Bar has a higher value
- D) None of the above

```
val = 1
while (val < 5)
    print ("val is ", val)
    val = val + 1
end while</pre>
```

Please choose the correct answer:

A) val is 1
val is 2
val is 3
val is 4
val is 5
C) val is 1

B) val is 1 val is 1 val is 1

C) val is 1 val is 2 val is 3 val is 4

D) None of the above

12) What will the printed output be based on the following sample pseudo code

```
list = [1, 2, 3, 4, 5]
index = 0;
lengthOfList = 5;
while (index < lengthOfList)
      print (list[index])
      index = index + 2
end while</pre>
```

Please choose the correct answer:

C) 1 3 5

D) None of the above

$$a = 10$$

 $b = 11$
print $(a = b)$

Please choose the correct answer:

- A) true
- B) false
- C) 11
- D) 10

14) Boolean Operators

Choose which of the following are typical boolean operators (terms) in programming languages

Please choose the correct answer:

- A) true, false
- B) AND, OR, NOT
- C) NOT TRUE, IS FALSE
- D) None of the above

15) Determine the following term based on the description below

The _____ function requires an array and another function. It returns a new array which is the result of applying that function to all elements of the original array.

- A) map
- B) curry
- C) iteration
- D) None of the above

16) Determine the following term based on the description below

Α	function	which	calls	itself	in	а	potential	cycle	is
called a				function	ì.				

Please choose the correct answer:

- A) map
- B) recursive
- C) iterative
- D) None of the above

17) Determine the following term based on the description below

An optimization technique used primarily to speed up computer programs by storing the result of expensive function calls and returning the cached result when the same input occurs is called?

Please choose the correct answer:

- A) mapping
- B) memoization
- C) chaining
- D) None of the above

18) Determine the following term based on the description below

A programming paradigm in which the flow of the program is determined by events such as user actions, sensor outputs, messages, etc., is called?

- A) event driven
- B) observer driven
- C) sequential driven
- D) None of the above

19) Determine the following term based on the description below

A value that cannot be altered during the normal execution of a program is called?

Please choose the correct answer:

- A) variable
- B) object
- C) constant
- D) None of the above

20) Determine the following term based on the description below

What is the term used to add two or more strings together?

Please choose the correct answer:

- A) addition
- B) concatenation
- C) merge
- D) None of the above

21) Determine the following term based on the description below

In programming languages which are C/C++/Java based, which character is used as an 'escape' character in a string?

- A) &
- B) |
- C) #
- D) None of the above