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Grade	**0.00** out of 25.00 (**0**%)

Question 1

Not answered

Marked out of 1.00

201. How can a call to an overloaded function be ambiguous?

Select one:

○ a. There might be two or more functions with equality appropriate signature

○ b. There might be two or more functions with the same name

○ c. The name of the function might have been misspelled

○ d. None of the above

The correct answer is: There might be two or more functions with equality appropriate signature

Question 2

Not answered

Marked out of 1.00

202. What is the output of the pseudocode statements given below?
(Note: Assume that when two data types are processed through an operator, the answer maintains the same data type as that of the input. Also, all data types have enough range to accommodate any number. If two different data types are operated upon, the result assumes the data type that is more expressive.)
integer a=984, b=10

float c
c = a / b
print c

Select one:

○ a. 984

○ b. Error

○ c. 98.4

○ d. 98

The correct answer is: 98

Question 3

Not answered

Marked out of 1.00

203. What will be the output generated when the given code is executed? A pseudo- code is used which is self explanatory.

```
function main()
{
integer a=5
switch(a)
  {
default: print "hello"
case 5:   print "How are you?"
break

  }
}
```

Select one:

○ a. This code will generate a compile time error

○ b. How are you

○ c. Hello How are you?

○ d. hello

The correct answer is: How are you

Question 4

Not answered

Marked out of 1.00

204. A language has 28 different letters in total.
Each word in the language consists of a maximum of 7 letters.
A programmer wants to create a data type to store a word of this language.
She decides to store the word as an array of letters.
How many bits should she assign to the data type to store all kinds of words of the language?

Select one:

○ a. 7

○ b. 196

○ c. 35

○ d. 28

The correct answer is: 35

Question 5

Not answered

Marked out of 1.00

205. How can the largest number in a list of twenty numbers be found?

Select one:

○ a. Use bubble sort to sort the list in a descending order and the print the first number of the series

○ b. Use selection sort to sort the list in a descending order and the print the first number of the series

○ c. Implement one iteration of selection sort for descending order and print the first number in the series

○ d. None of the above

The correct answer is: Implement one iteration of selection sort for descending order and print the first number in the series

Question 6

Not answered

Marked out of 1.00

206. A programmer writes an efficient program to sum two square diagonal matrices (matrices with elements only on the diagonal positions).
The size of each matrix is nXn. What is the time complexity of the algorithm?

Select one or more:

☐ a. O(n2)

☐ b. O(n)

☐ c. O(n*log(n))

☐ d. None of the above

Question 7

Not answered

Marked out of 1.00

207. How many nodes does a full binary tree with 'n' leaves contain?

Select one:

○ a. 2n nodes

○ b. log2n nodes

○ c. 2n + 1 nodes

○ d. 2n - 1 nodes

The correct answer is: 2n - 1 nodes

Question 8

Not answered

Marked out of 1.00

208. A developer writes the program given below to print the sum of the squares of the first five whole numbers (0...4). is the program correct? If not, which statement should be modified to correct the program? snipping tool tech pg-83-7
print sum // statement 6

Select one:

○ a. No error, the program is correct

○ b. Statement 1

○ c. Statement 4

○ d. Statement 6

The correct answer is: Statement 4

Question 9

Not answered

Marked out of 1.00

209. What is the minimum number of stacks of size ìnî required to implement a queue of size ìnî?

Select one:

○ a. 4

○ b. 3

○ c. 2

○ d. 1

The correct answer is: 2

Question 10

Not answered

Marked out of 1.00

21. How many nodes does a full binary tree with nî non-leaf nodes contain?

Select one:

- ○ a. n + 1
- ○ b. log n
- ○ c. 2n
- ○ d. 2n + 1

The correct answer is: 2n + 1

Question 11

Not answered

Marked out of 1.00

210. Passage snipping tool tech 83-9
Refer to the pseudocode given in the ëPassageí.
The code is similar to that in C++ and is self-explanatory.
An accessible member function and a data member for an object are accessed by the statements objectname. functionname and objectname. datamembername, respectively.
Which statement should be deleted from the code to rectify the error in it ?

Select one or more:

- ☐ a. Statement 3
- ☐ b. Statement 1
- ☐ c. Statement 2
- ☐ d. Statement 4

Question 12

Not answered

Marked out of 1.00

211. The following values are to be stored in a hash Table- 15,22,41,19,102,18,37
Using the division method of hashing with a table size of 10 (use sequential method of resolving collision),give the contents of Hash Table.

Select one or more:

- ☐ a. 41,22,102,15,37,18,19,Null, Null, Null
- ☐ b. Null,41,22,102,Null, 15,Null, 37,18,19
- ☐ c. Null, Null, Null,41,22,102,15,37,18,19
- ☐ d. 41,22,102,15,37,18,19

Question 13

Not answered

Marked out of 1.00

212. Consider the code given below. How many times will 'Hello' be printed if m<n and exactly one of (m,n) is even?
for i= m to n increment 2

{ print "Hello!" }

Select one:

- ○ a. (n - m + 1)/2
- ○ b. 1 + (n - m)/2 if m is even, (n - m + 1)/2 if m is odd
- ○ c. (n - m + 1)/2 if m is even,1 + (n - m)/2 if m is odd
- ○ d. 1 + (n - m)/2

The correct answer is: 1 + (n - m)/2

Question 14

Not answered

Marked out of 1.00

213. The function given below takes an even integer 'n' as the input and calculates the sum of first 'n' even natural numbers. The function is called by the statement "sum(30)". How many times will the function sum "be called to compute the sum"
function sum(n)

```
function sum(n)
{
  if (n equals 2)
    return 2
  else
    return (n + sum(n-2))
  end
}
```

Select one:

○ a. 15

○ b. 30

○ c. 1

○ d. 16

The correct answer is: 15

Question 15

Not answered

Marked out of 1.00

214. Two programmers, X and Y, are asked to write a code to evaluate the following expression: a- b + c/(a-b) + (a-b)2 X writes the following code statements (Code A): print (a-b) + c/(a-b) + (a+b)*(a-b) Y writes the following code statements (Code B); d = (a-b) print d + c/d + d*d Which of the following is TRUE if the time taken to load a value in a variable for addition, multiplicand or division between two operands is the same?

Select one:

○ a. Code A uses lesser memory and is slower than Code B

○ b. Code A uses lesser memory and is slower than Code B

○ c. Code A uses lesser memory and is faster than Code B

○ d. Code A uses lesser memory and is faster than Code B

The correct answer is: Code A uses lesser memory and is slower than Code B

Question 16

Not answered

Marked out of 1.00

215. _____ is the compile time binding whereas _____ is run time binding of functions.

Select one:

○ a. Function overriding. Function overloading

○ b. Varies from program to program

○ c. Function overloading, Function overriding

○ d. Abstraction, Encapsulation

The correct answer is: Function overloading, Function overriding

Question **17**

Not answered

Marked out of 1.00

216. Which of the following is the lowest level format to which the computer converts a program in a higher language before execution?

Select one:

○ a. System language

○ b. Assembly language

○ c. Machine code

○ d. English code

The correct answer is: Machine code

Question **18**

Not answered

Marked out of 1.00

217. A programmer writes a code snippet in which a set of three lines occurs ten times in different parts of the program. What programming concept should be used to shorten the code length?

Select one:

○ a. Functions

○ b. Arrays

○ c. For loops

○ d. Classes

The correct answer is: Functions

Question **19**

Not answered

Marked out of 1.00

218. A sorting algorithm traverses through a list, comparing adjacent elements and switching them under certain conditions. What is this sorting algorithm called?

Select one or more:

☐ a. Insertion sort

☐ b. Quick sort

☐ c. Bubble sort

☐ d. Heap sort

Question **20**

Not answered

Marked out of 1.00

219. The following operations are performed on an empty stack ìAî

Select one:

○ a. PUSH(1)
PUSH(2)
POP
PUSH(5)
PUSH(6)
POP
What will the stack contain after these operations?
(Note: The top of the stack is underlined in the options below.)
{

○ b. 1 5

○ c. 5 1

○ d. 5 6

○ e. 5 6

The correct answer is: 5 1

Question 21

Not answered

Marked out of 1.00

22. A programmer mistakenly writes ìgorî instead of the keyword ìforî used in loops, while writing a program in C++. What will this result in?

Select one:

○ a. The code may work for some inputs and not for the others

○ b. The code would give an error while execution.

○ c. The code would not compile.

○ d. The code would not create any problem.

The correct answer is: The code would not compile.

Question 22

Not answered

Marked out of 1.00

220. Which of the following will create an object named pigeon of the class Bird in C++?

Select one:

○ a. pigeon bird

○ b. None of the above

○ c. Object pigeon of bird

○ d. bird pigeon

The correct answer is: bird pigeon

Question 23

Not answered

Marked out of 1.00

222. What is a function contained within a class called in c++?

Select one:

○ a. An operator

○ b. A method

○ c. A member function

○ d. A class function

The correct answer is: A member function

Question 24

Not answered

Marked out of 1.00

223. Which of the following abstract data types can be used to represent a many-to-many relation?

Select one:

○ a. Graph

○ b. Tree

○ c. Queue

○ d. Stack

The correct answer is: Graph

Question **25**

Not answered

Marked out of 1.00

224. A programmer writes a sorting algorithm that takes different of time to sort two different lists of equal size. What is the possible difference between the two lists?

Select one:

- a. One list has all negative numbers while the other has all positive numbers.
- b. All numbers in one list are more than 100 while in the other are less than 100
- c. The ordering of numbers with respect to the magnitude in the two lists has different properties.
- d. One list contains 0 as an element while the other does not.

The correct answer is: The ordering of numbers with respect to the magnitude in the two lists has different properties.

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Question **25**

Not answered

Marked out of 1.00

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