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Grade	0.00 out of 25.00 (0%)

Question **1**
Not answered
Marked out of 1.00

63. Pankaj makes a program to print the product of cubes of the first 10 whole numbers She writes the following program:

```
integer x = 0 // statement 1
integer sum = 0 // statement 2
while ( x < 10 ) // statement 3
{
    sum = x*x*x // statement 4
    x = x + 1 // statement 5
}
print sum // statement 6
```

Is her program correct? If not, which statement will you modify to correct it?

Select one:

- ☐ a. No error, the program is correct
- ☐ b. Statement 4
- ☐ c. Statement 1
- ☐ d. statement 6

The correct answer is: Statement 4

Question **2**
Not answered
Marked out of 1.00

59. Yukta created an interface to use it in different parts of the program by implementing it. But she forgot to specify the access specifier for each contained method. What will be the access specifier of the methods that will be inherited/implemented?

Select one:

- ☐ a. Private
- ☐ b. An error will be generated
- ☐ c. Public
- ☐ d. Protected

The correct answer is: Public

Question **3**

Not answered

Marked out of
1.00

54.

```
function main() {  
    integer i=0.7  
    static float m=0.7  
    if (m equals i)  
        print "we are Equal"  
    else if( m>i )  
        print "I am greater"  
    else  
        print "I am lesser"  
}
```

Select one:

- ☐ a. We are equal
- ☐ b. I am greater
- ☐ c. This code will generate an error
- ☐ d. I am lesser

The correct answer is: I am greater

Question **4**

Not answered

Marked out of
1.00

62. A 8-bit signed integer has the following range?

Select one:

- ☐ a. 0 to 255
- ☐ b. -255 to 254
- ☐ c. -128 to 127
- ☐ d. 0 to 509

The correct answer is: -128 to 127

Question **5**

Not answered

Marked out of
1.00

52. Consider the given statement for their correctness with respect to stacks data structure

1. Stacks follow a LIFO approach
2. Stacks are used to convert binary numbers to corresponding decimal numbers.
3. Stacks use two pointers for performing PUSH and POP respectively

Select one:

- ☐ a. TTT
- ☐ b. TTF
- ☐ c. FTF
- ☐ d. TFF

The correct answer is: TTF

Question **6**
Not answered
Marked out of 1.00

64. Here is an infix notation: $((A+B)*C-(D-E))^{(F+G)}$ Choose the correct postfix notation of the above from the given options?

Select one:

- ☐ a. $AB+C*DE-FG-+^{\wedge}$
- ☐ b. $AB+CD*E\text{ñ}FG+^{\wedge}$
- ☐ c. $AB+C*DE\text{ñ}FG+^{\wedge}$
- ☐ d. $A+BC*DE-FG-+^{\wedge}$

The correct answer is: $AB+C*DE\text{ñ}FG+^{\wedge}$

Question **7**
Not answered
Marked out of 1.00

48. For the given array, find the arrangement of the elements after 3rd pass of selection sort. Assume that the array is being sorted in ascending order list ; 33,22, 11, 77, 66, 88, 55

Select one:

- ☐ a. 11, 22, 33, 77, 66, 88, 55
- ☐ b. 22, 11, 33, 66, 77, 55, 88
- ☐ c. 11, 22, 33, 55, 66, 77, 88
- ☐ d. 11, 22, 33, 55, 66, 88, 77

The correct answer is: 11, 22, 33, 77, 66, 88, 55

Question **8**
Not answered
Marked out of 1.00

57. Choose the correct answer. Ankita takes as input 2 integer numbers, a and b, whose value can be between 0 and 31. He stores them as 5 bit numbers. He writes the following code to process these numbers to produce a third number c.
 $c = 2*(a \text{ ñ } b)$
In how many minimum bits should Ankita store c?

Select one:

- ☐ a. 8 bits
- ☐ b. 7 bits
- ☐ c. 9 bits
- ☐ d. 6 bits

The correct answer is: 7 bits

Question **9**
Not answered
Marked out of 1.00

45. Every element of a data structure has an address and a key associated with it. A search mechanism deals with two or more values assigned to the same address by using the key. What is this search mechanism?

Select one:

- ☐ a. None of this
- ☐ b. Selection search
- ☐ c. Linear search
- ☐ d. Binary search
- ☐ e. Hash coded search

The correct answer is: Hash coded search

Question **10**

Not answered

Marked out of
1.00

43. In which area of a class are data and function directly accessible outside the class? Choose the correct answer

Select one:

- ☐ a. None
- ☐ b. Public
- ☐ c. Private
- ☐ d. Protected

The correct answer is: Public

Question **11**

Not answered

Marked out of
1.00

56. Choose the correct answer. Consider the statement

Assuming a is positive, for what value of a will this code statement result in an infinite loop?

```
while (a < 10.0) {  
  a = a*a  
}
```

Select one:

- ☐ a. 0
- ☐ b. a
- ☐ c. $a > \sqrt{10}$
- ☐ d. $a < 1.0$
- ☐ e. a

The correct answers are: $a < 1.0$, 0

Question **12**

Not answered

Marked out of
1.00

47. Pragya sells footballs. She has a large container to store footballs which is closed from below. Footballs are piled one on top of the other in the box.

When new balls are supplied, Pragya puts the balls in the box from the top. When a customer buys a ball, she delivers the ball at the top of the pile to the customer.

Each ball has a code. She wants to store the ball codes in the data structure to keep track of her inventory.

What data structure should she use? Choose the correct answer?

Select one:

- ☐ a. Array
- ☐ b. Stack
- ☐ c. Graph
- ☐ d. Queue

The correct answer is: Stack

Question **13**

Not answered

Marked out of
1.00

58. Recursive function is executed in a _____

Select one:

- ☐ a. Parallel Fashion
- ☐ b. Last in First Out Order
- ☐ c. First in First Out Order
- ☐ d. All of the above

The correct answer is: Last in First Out Order

Question **14**

Not answered

Marked out of
1.00

46. Which of the following abstract data types can be used to represent many ñ to- many relations? Choose the correct answer?

Select one:

- ☐ a. Graph
- ☐ b. Queue
- ☐ c. Stack
- ☐ d. Tree

The correct answer is: Graph

Question **15**

Not answered

Marked out of
1.00

61. Choose the correct answer. A Queue is implemented by a linear array of size 10 (and not as a circularly connected array). Front and Rear are represented as an index in the array. To add an element, the rear index is incremented and the element is added. To delete an element, the front index is incremented. The following operations are done on an empty queue.

ADD 1; DELETE; ADD 2; ADD 3; ADD 4; DELETE, DELETE.

After this set of operations, what is the maximum capacity of the queue?

Select one:

- ☐ a. 7
- ☐ b. 10
- ☐ c. 6
- ☐ d. None of these

The correct answer is: 7

Question **16**

Not answered

Marked out of
1.00

53. Which of the following options gives the lower bound on running time for an algorithm?

Select one:

- ☐ a. Average case complexity of the algorithm
- ☐ b. Worst case complexity of the algorithm
- ☐ c. Best case complexity of the algorithm
- ☐ d. Number of iterations taking place in the algorithm

The correct answer is: Worst case complexity of the algorithm

Question **17**

Not answered

Marked out of
1.00

50. The algorithm design technique used in quick sort algorithm is? Choose the correct answer

Select one:

- ☐ a. Dynamic programming
- ☐ b. Greedy search
- ☐ c. Back tracking
- ☐ d. Divide and conquer

The correct answer is: Divide and conquer

Question **18**

Not answered

Marked out of
1.00

51. How can call to an overloaded function be ambiguous?

Select one:

- ☐ a. By misspelling the name
- ☐ b. There might be two or more functions with equally appropriate signatures
- ☐ c. none of these
- ☐ d. There might be two or more functions with the same name

The correct answer is: There might be two or more functions with equally appropriate signatures

Question **19**

Not answered

Marked out of
1.0066. What is the time complexity of adding three matrices of size $N \times N$ cell-by-cell?

Select one:

- ☐ a. $O(N^2)$
- ☐ b. $O(N^3)$
- ☐ c. None of these
- ☐ d. $O(N)$

The correct answer is: $O(N^2)$ Question **20**

Not answered

Marked out of
1.00

49. For solving a problem, which of these in the 1st step in developing a working programme for it? Choose the correct answer?

Select one:

- ☐ a. Writing the step by step algorithm to solve the problem
- ☐ b. Writing the program in the programming language
- ☐ c. Code debugging
- ☐ d. Compiling the libraries required

The correct answer is: Writing the step by step algorithm to solve the problem

Question **21**

Not answered

Marked out of
1.00

60. Which of the following statements are true?

- 1)An Arithmetic left shift multiplies a signed number by two
- 2)An Arithmetic right shift divides a signed number by two
- 3)Mask operation is an AND micro-operation and insert is an OR micro-operation
- 4)In a logical shift, the serial input to the shift is one

Select one:

- ☐ a. Both 3 and 4
- ☐ b. Both 1 and 2
- ☐ c. 1, 2 and 3
- ☐ d. 2, 3 and 4

The correct answer is: 1, 2 and 3

Question **22**

Not answered

Marked out of
1.00

55. Consider an array on which bubble sort is used. The bubble sort would compare the element A[x] to which of the following elements in a single iteration?

Select one:

- ☐ a. A[x+2]
- ☐ b. All of these
- ☐ c. A[x+2x]
- ☐ d. A[x+1]

The correct answer is: All of these

Question **23**

Not answered

Marked out of
1.00

44. Which of the following options is true regarding inheritance in Object Oriented Programming ? Choose the correct answer?

Select one:

- ☐ a. All of the above
- ☐ b. A class may are may not have any object
- ☐ c. Class- object relation can be changed at run time
- ☐ d. Two are more functions can have the same name and number and type of arguments in a program
- ☐ e. There is reduced interaction with the hardware

The correct answer is: All of the above

Question **24**

Not answered

Marked out of
1.00

6. A stack is implemented as a linear array A[0.....N-1] A programmer writes the function given below to pop out an element from the stack .

```
function POP( top,N )
{
  if (X)
  {
    top = top -1
  }
  else
  {
    print"Underflow"
  }
  return top
}
```

Which of the following should substitute the condition "X"?

Select one:

- ☐ a. top>
- ☐ b. 0
- ☐ c. top
- ☐ d. top>1
- ☐ e. top

The correct answers are: top>, 0

Question **25**

Not answered

Marked out of 1.00

65. One of the following options is a form of access used to add and remove nodes from a queue.

Select one:

- ☐ a. FIFO
- ☐ b. Both LIFO and FIFO
- ☐ c. LIFO
- ☐ d. None of these

The correct answer is: FIFO

◀ Tech test 8

Jump to...

Tech Test 10 ▶