



قائمة الاسئلة

برمجة الحاسوب وتطبيقاتها - كلية الهندسة - قسم الميكانيك - المستوى الثالث- ثلاث ساعات - درجة هذا الاختبار (40)

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- 1) which of the following is not reserved words
 - 1) - int
 - 2) - return
 - 3) - cost
 - 4) ☒ + num
- 2) Function that doesn't have a return type are called _____ function.
 - 1) ☒ + void
 - 2) - Recursive
 - 3) - sum
 - 4) - Factorail
- 3) The statement : return 10+8 ; return the value :
 - 1) - 17
 - 2) - 15
 - 3) ☒ + 18
 - 4) - None of the above
- 4) _____ function is executed when it is
 - 1) - Definition
 - 2) - Prototype
 - 3) - Declared
 - 4) ☒ + call
- 5) Consider that : int y = !(21< 5 || 3 < 5 && 3 > x) ? 7 : 9 ; what is the value of y if x = 2 ;
 - 1) - y = 7
 - 2) ☒ + y = 9
 - 3) - y = 10
 - 4) - y = 21
- 6) _____ identifier are not accessible use outside the function:
 - 1) ☒ + Local
 - 2) - global
 - 3) - Static
 - 4) - Automatic
- 7) In a _____ control structures, computation exercises particular statements depending on some conditions.
 - 1) - Sequential
 - 2) - Repetition
 - 3) ☒ + Selection
 - 4) - Non of the above
- 8) Which of the following executes directly after continue ststatement in for Loop:
 - 1) - I <= 10
 - 2) ☒ + i++
 - 3) - For statement
 - 4) - Non of the above
- 9) X++ has the same meaning as:
 - 1) ☒ + X = X + 1;
 - 2) - X / = 17;
 - 3) - X = x - 4;



- 4) - $X *= 1$
- 10) By default. Variables declared within a block are automatic variables
- 1) ☒ True .
- 2) - FALSE.
- 11) What is the purpose of cin?
- 1) - includes a header file
- 2) - print variable's value
- 3) ☒ Take information (data) from the user
- 4) - All of the above is true
- 12) How many nested if statements can an if statement contain?
- 1) - Only two
- 2) ☒ As many as you want
- 3) - Only one
- 4) - None
- 13) The output of executing the following while loop code is to print End Exam ten times.

```
int main()
{
    int j = 0;
    while (j >= 10)
    {
        cout << "End Exam";
        j++;
    }
}
```

- 1) - True.
- 2) ☒ FALSE.
- 14) The following array declaration is not valid `int x[-30];`
- 1) ☒ True .
- 2) - FALSE.
- 15) **The following two instructions are identical and are used to correctly initialize the elements of an array.**

```
int list[] = { 18, 13, 14, 16 };
int list[4] = { 18, 13, 14, 16 };
```

- 1) ☒ True .
- 2) - FALSE.
- 16)



The output of executing the following code is: 100

```
#include <iostream>
using namespace std;

void abc(float p)
{
    cout << p << endl;
}

int main()
{
    int m = 100;
    abc(m);
}
```

- 1) ☒ True .
2) ☐ FALSE.
- 17) The _____ statement is used to ignore the following steps and continue executing the repeat statement

- 1) ☒ continue;
2) ☐ break;
3) ☐ stop;
4) ☐ Non

- 18) Consider the following program segment. A complete C++ program with these statements will print _____.

```
int main()
{
    int a;
    for (a = 7; a <= 11; a++)
    {
        cout << a << endl;
        if (a > 9) break;
    }
    cout << a + 10;
}
```

- 1) ☐ 7 8 9 10.
2) ☒ 7 8 9 10 20.
3) ☐ 7 8 9 9 9 9 9 infinite
4) ☐ 7 8 9 10 11 22
- 19) Consider the following function definition:

```
int func(int x, double y, char u, string name)
{
    //function body
}
```

Which of the following are correct function prototypes of the function func?

- 1) ☐ int func(x, y, u, name);
2) ☐ int func(int x, double y, char u, string name);



- 3) ☒ int func(int x, double y, char u, string name); and int func(int, double, char, string);
4) ☐ int func(int, double, char, string);

20) Consider the following statements:

```
int num1, num2, num3;  
double length, width, height;  
double volume;  
num1 = 6; num2 = 7; num3 = 4;  
length = 6.2;  
width = 2.3;  
height = 3.4;
```

and the function prototype :

```
double box(double, double, double);
```

Which of the following statements are valid?

- 1) ☐ volume = box(length, 3.8, height);
2) ☐ cout << box(num1, num3, num2) << endl;
3) ☐ volume = box(length, num1, height);
4) ☒ All of the above is true
- 21) The variable that are listed in the function's calls are called
- 1) ☐ Formal Parameteer
2) ☐ Declared parameter
3) ☒ Actual Parameter
4) ☐ Non of them
- 22) What is stored in list array after the following C++ code executes?

```
int main()  
{  
    int list[5];  
    for (int i = 1; i <= 5; i++)  
    {  
        list[i] = i + 5;  
        cout << list[i] << " ";  
    }  
}
```

- 1) ☒ 6 7 8 9 10
2) ☐ 0 1 2 3 4
3) ☐ 10 12 13 14 15
4) ☐ 10 11 12 13 14
- 23) Which of the flowing is a complete correct function definition?
- 1) ☐ int func();
2) ☒ int func(int x) { x = x+1; return x;}
3) ☐ void func(int) {cout<< "Hello";
4) ☐ void func(int) {cout<< Hello";}
- 24)



Insert the missing part to print the number 8 in main, by using a specific keyword inside my Function:

```
int myFunction(int x)
{
    ----- 5 + x;
}
int main()
{
    cout << myFunction(3);
}
```

- 1) - return 0;
 - 2) - return;
 - 3) ☒ + return
 - 4) - All of the above is true
- 25) In C++, the head of a function consists of its :
- 1) - Function name
 - 2) - Function return type
 - 3) - Function parameter list
 - 4) ☒ + All of the above is true
- 26) Which of the following function return no value?
- 1) - sqrt()
 - 2) - log()
 - 3) ☒ + printDate
 - 4) - cos()
- 27) A _____ is a function that calls itself either directly or indirectly through another function.
- 1) - start function
 - 2) - fall function
 - 3) ☒ + recursive function
 - 4) - final function
- 28) Fill in the blanks to declare an array of integers containing 9 elements. Assign to each element the value 45 using the for loop.

```
int main()
{
    int anArr[___];
    for (int x = 0; x <= ___; x++)
    {
        anArr[___] = 45;
    }
}
```

- 1) - 8, 9, i
 - 2) ☒ + 9, 8, x
 - 3) - 45, 8, x
 - 4) - 45
- 29) Which operation is used as Logical 'AND'



- 1) - Operator &
 - 2) - Operator ||
 - 3) ☒ Operator &&
 - 4) - Operator +
- 30) The sequence of object that have the same type, is called
- 1) - Functuion
 - 2) - Operator
 - 3) ☒ Array
 - 4) - Stacks
- 31) Which of the following correctly declares an array?
- 1) ☒ int array[10];
 - 2) - int array;
 - 3) - array{10};
 - 4) - array array[10];
- 32) The index of the first and end array element are
- 1) - 1, n
 - 2) - 1, n-1
 - 3) - 0, n
 - 4) ☒ 0, n-1
- 33) _____ function is used to get the absolute value.
- 1) ☒ fabs()
 - 2) - floor()
 - 3) - pow()
 - 4) - exp()
- 34) The keyword _____ is used in a function header to indicate that a function does not return a value.
- 1) - int
 - 2) - double
 - 3) ☒ void
 - 4) - include
- 35) A function _____ tells the compiler the name of function, return type and its arguments.
- 1) - Definition
 - 2) - invoking
 - 3) ☒ Prototype
 - 4) - call
- 36) An array with m rows and n columns is called _____ array
- 1) - n by m
 - 2) - n by n
 - 3) - m by m
 - 4) ☒ m by n
- 37) Select the true option, prefix and postfix have other forms is...
- 1) - increment
 - 2) - decrement
 - 3) ☒ both increment and decrement
 - 4) - none of these
- 38) to calculate the factorial of a number the recursive definition of a factorial is
- 1) - $n! = n * (n-1)! + (n-2)!$
 - 2) ☒ $n! = n * (n-1)!$
 - 3) - $n! = n * (n-1)$
 - 4) - $n = n * (n-1)!$



39) Print the value of the second element in the cars array.

- 1) - `cout<<cars[2];`
- 2) - `cout<<cars[1];`
- 3) + `cout<<cars[0+1];` and `cout<<cars[1];`
- 4) - `cout<<cars[0+1];`

40) What the following array declarations are valid?

- 1) - `int list[] = {18, 13, 14, 16};`
- 2) - `int x[10] = {1, 7, 5, 3, 2, 8};`
- 3) - `double y[4] = {2.0, 5.0, 8.0, 11 };`
- 4) + all of the above is true