

يوم الامتحان: السبت

تاریخ الامتحان: 5 / 1 / 2019 م

المادة : حاسب الي 1 (30 مج)

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مدرس بقسم الرياضيات بكلية العلوم

الاسئلة و نموذج الإجابة

ورقة كاملة



**Computer Science (1) (30 UR) for First Level Students**

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**Group (A)**

**Choose the correct answer for each of the following:[ $12 \times 1 + 18 \times 2 = 48$  Marks]**

- 1- The function `tan(x)` is defined in the header file  
 (A) `math.h`      (B) `iomanip.h`      (C) `string.h`      (D) `iostream.h`
- 2- Any statement in C++ ends with  
 (A) }      (B) {      (C) ;
- 3- ..... is logical operator  
 (A) ==      (B) &&      (C) >
- 4- Which of the following is used to terminate the function prototype?  
 (A) !      (B) ;      (C) }      (D) nothing
- 5- In the following function prototype: `int fun(double Num1, double& Num2);`  
 (A) Function `fun` can modify the arguments passed to both `Num1` and `Num2`  
 (B) Function `fun` can not modify the arguments passed to `Num1` and `Num2`  
 (C) Function `fun` can only modify the argument passed to `Num1`  
 (D) Function `fun` can only modify the argument passed to `Num2`
- 6- The output of the following C++ statement is  
`cout << pow(2, 5);`  
 (A) 25      (B) 32      (C) 10      (D) 2.5
- 7- Given `m=20, n=6` then the value of the expression `(++m % n--) * 3` is ...  
 (A) 20      (B) 7      (C) 9      (D) 6
- 8- The C++ expression of `ln(x)` is  
 (A) `log10(x)`      (B) `log(x)`      (C) `ln(x)`      (D) `ln10(x)`
- 9- The number of iterations in the following statement is  
`for(int M = 1; M <= 9; M += M)`  
`cout << "hello C++";`  
 (A) 6      (B) 5      (C) 16      (D) 4
- 10- The output of the following C++ statements is  
`int x = 1, y = 5; cout << (x < y ? -1 : (x == y ? 0 : 1));`  
 (A) 1      (B) -1      (C) 0      (D) nothing
- 11- The following C++ statement is correct?  
`for ( ; ; )`  
 (A) Yes      (B) NO
- 12- A boolean function returns a ..... value to the caller.  
 (A) `bool`      (B) `int`      (C) `char`      (D) `double`

**What will be the output of the following C++ programs?**

- 13- `#include <iostream.h>`  

```
int fun(int a, int b )
{
    return ( a > b ? a : b );
}
int main()
{
    int i = 5, j = 7;
    cout << fun(i, j );
    system("pause");
}
```

(A) 9      (B) 7      (C) 5      (D) 11

14- #include <iostream.h>  
void fun(int a, int & b){  
 int temp = b; b = a; a = temp;}  
int main(){  
 int c = 2, d = 5;  
 fun(c,d);  
 cout << c \* d << endl;  
 system("pause"); return 0;}  
(A) 25 (B) 10 (C) 4 (D) 12

15- #include <iostream.h>  
int fun (int x, int y){  
 int result = 0;  
 while (y != 0){  
 result = result + x;  
 y = y - 1;  
 }  
 return result;}  
int main (){  
 int x = 5, y = 5;  
 cout << fun(x, y) ;  
 system("pause"); return 0 ;}  
(A) 20 (B) 25 (C) 30 (D) 35

16- #include<iostream.h>  
int fun(int n){  
 int f = 0;  
 for(int i = 1; i <= n; i+=3)  
 f += i;  
 return f;}  
int main(){  
 cout << fun(20) << endl;  
 system("pause"); return 0;}  
(A) 35 (B) 75 (C) 70 (D) 100

17- #include <iostream.h>  
int fun(int X, int Y){  
 return X \* Y;}  
double fun(double X, double Y){  
 return X + Y;}  
int main(){  
 cout << fun(5, 6) << " ";  
 cout << fun(5.5, 6.6);  
 system("pause"); return 0;}  
(A) 30 12.1 (B) 11 36.3 (C) 5 5.5 (D) 6 6.6

18- #include<iostream.h>  
int main(){  
 int s = 10;  
 for(int x = 1; x <= 7; x+=2)  
 s = s \* x ;  
 s = s \* 2;  
 cout << s << endl;  
 system("pause"); return 0;}  
(A) 1200 (B) 2100 (C) 1000 (D) 2000

**19-** #include <iostream.h>  
void fun(int & number) {  
 number+=10;  
int main() {  
 int n = 8;  
 fun(n);  
 cout << n << endl;  
 system("pause"); return 0; }  
(A) 20 (B) 19 (C) 18 (D) 8

**20-** #include <iostream.h>  
void fun(int & a, int & b, int & c){  
 a = a + 1;  
 b = b +c;  
 c = c + 5;  
}  
int main(){  
 int x = 1, y = 2, z =3;  
 fun(x, y, z);  
 cout << x \* y \* z << endl;  
 system("pause"); return 0; }  
(A) 70 (B) 80 (C) 90 (D) 110

**21-** #include<iostream.h>  
int main( ){  
 int i, j, Y = 0;  
 for ( i = 1; i <= 5; i ++ )  
 for ( j = i; j <= 5; j ++ )  
 Y = Y + ( i + 2 \* j );  
 cout << Y << endl;  
 system("pause"); return 0; }  
(A) 120 (B) 105 (C) 140 (D) 145

**22-** #include<iostream.h>  
int main( ){  
 int count = 1;  
 do{  
 cout << ( count % 2 ? "\*\*\*\*" : "\*\*\*") << endl;  
 ++ count; } while ( count <= 3 );  
 system("pause"); return 0; }  
(A) \*\*\*\* (B) \*\*\*  
\*\*\* \*\*\*\*  
\*\*\*\* \*\*\*

**23-** #include<iostream.h>  
int fun(int x, int y, int z){  
 int A =x;  
 if(y>A)  
 A = y;  
 if(z > A)  
 A =z;  
 return A;}  
int main(){  
 int a = 3, b = 1, c = 4;  
 cout << fun(a,b,c) << endl;  
 system("pause"); return 0; }  
(A) 3 (B) 1 (C) 4 (D) 8

```

24- #include <iostream.h>
int fun(int a, int b){
    int temp;
    while (b != 0)
    {
        temp = a % b;
        a = b;
        b = temp;
    }
    return a;
}
int main (){
    int x = 15, y = 25;
    cout << fun(x, y);
    system("pause");
    return 0;
}

```

25- #include<iostream.h>  
int main(){  
    for (int M = 0; M < 6; M ++ )  
    {  
        if ( M % 2 == 0 ) cout << M + 1 << endl;  
        else if ( M % 6 == 0 ) break;  
        else if ( M % 5 == 0 ) continue;  
        cout << "end program \n";  
    }  
    cout << "end...";  
    system("pause"); return 0;}

(A) 1  
    end program  
    end program  
    3  
    end program  
    end program  
    5  
    end program  
    end...  
  
(B) 1  
    end program  
    3  
    end program  
    5  
    end program  
    end...

```
26- #include<iostream.h>
int main( ){
    int A=5;
    for ( int i = 1; i <= 2; i ++ )
        for ( int j = 1; j <= 4; j ++ )
            for ( int k = 1; k <= 2; k ++ )
                A = A + i + j;
    cout << A << endl; system("pause"); return 0;
}
```

27- #include <iostream.h>  
int main(){  
 int n = 6, z = 1;  
 do {  
 z\*= n;  
 n--;  
 }while (n > 1);  
 cout << z << endl;  
 system("pause"); return 0;}

- 28-** #include<iostream.h>  
int fun(int n, int m){  
 int p = 1;  
 for(int i = 1; i <= m; i++)  
 p \*= n;  
 return p;}  
int main(){  
 int result=0, num1 = 3, num2 = 4;  
 for(int i = 1; i <= num1; i+=2)  
 result += fun(num2, i);  
 cout << result << endl;  
 system("pause"); return 0;}  
(A) 60      (B) 86      (C) 68      (D) 80
- 29-** #include <iostream.h>  
int main()  
{ int g = 10, n = 1, s = 1;  
 while (s < g)  
 s += ++n;  
 cout << n;  
 system("pause"); return 0;}  
(A) 5      (B) 4      (C) 3      (D) 2
- 30-** #include<iostream.h>  
int fun(int first, int last)  
{  
 int i, X = 0;  
 if (first <= last)  
 for (i = first; i <= last; ++i)  
 X += i;  
 else  
 for (i = first; i >= last; --i)  
 X += i;  
 return X;  
}  
int main(){  
 int a = 7, b = 12;  
 cout << fun(a, b) << endl;  
 system("pause"); return 0;}  
(A) 55      (B) 57      (C) 75      (D) 77

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*Best Wishes*

*Dr. Mosab Abd El-Hameed, Dr. Abeer El-Feshawey, Dr. Heba Fathy , and Dr Amira masoud*

# **Model Answer**

## **Computer Science (1) (30 UR) for First Level Students**

### **Group (A)**

- 1- A
  - 2- C
  - 3- B
  - 4- B
  - 5- D
  - 6- B
  - 7- C
  - 8- B
  - 9- D
  - 10- B
  - 11- A
  - 12- A
  - 13- B
  - 14- C
  - 15- B
  - 16- C
  - 17- A
  - 18- B
  - 19- C
  - 20- B
  - 21- D
  - 22- A
  - 23- C
  - 24- D
  - 25- A
  - 26- C
  - 27- C
  - 28- C
  - 29- B
  - 30- B
-