1)

The number of tokens in the following C statement.  
       printf("i = %d, &i = %x", i, &i); is  
(a) 3 (b) 26 (c) 10 (d) 21  
  
Ans: option (c)

*2)*

main()

{

int i=-1;

+i;

printf("%d %d ",i,+i);

}

*a)-1 1 b)-1 -1 c)1 1 d)1 -1*

*ans:b*

3)

 Consider the following C-program:

void foo(int n, int sum)

{

  int k = 0, j = 0;

  if (n == 0) return;

  k = n % 10; j = n / 10;

  sum = sum + k;

  foo (j, sum);

  printf ("%d,", k);

}

int main ()

{

  int a = 2048, sum = 0;

  foo (a, sum);

  printf ("%d\n", sum);

  getchar();

}

What does the above program print?

(a) 8, 4, 0, 2, 14 (b) 8, 4, 0, 2, 0 (c) 2, 0, 4, 8, 14 (d) 2, 0, 4, 8, 0

Ans: option (d)

4)

|  |
| --- |
| #include <stdio.h>    void myStrcat(char \*a, char \*b)  {      int m = strlen(a);      int n = strlen(b);      int i;      for (i = 0; i <= n; i++)         a[m+i]  = b[i];  }    int main()  {      char \*str1 = "Geeks ";      char \*str2 = "Quiz";      myStrcat(str1, str2);      printf("%s ", str1);      return 0;  } |

Which of the following changes can correct the program so that it prints “Geeks Quiz”?  
**(A)** char \*str1 = “Geeks “; can be changed to char str1[100] = “Geeks “;  
**(B)** char \*str1 = “Geeks “; can be changed to char str1[100] = “Geeks “; and a line a[m+n-1] = ‘\0′ is added at the end of myStrcat  
**(C)** A line a[m+n-1] = ‘\0′ is added at the end of myStrcat  
**(D)** A line ‘a = (char \*)malloc(sizeof(char)\*(strlen(a) + strlen(b) + 1)) is added at the beginning of myStrcat()  
  
  
**Answer:** **(A)**

5)

 Consider the following C program  
main()  
{  
   int x, y, m, n;  
   scanf ("%d %d", &x, &y);  
   /\* x > 0 and y > 0 \*/  
   m = x; n = y;  
   while (m != n)  
   {   
      if(m>n)  
         m = m - n;  
      else  
         n = n - m;  
   }  
   printf("%d", n);  
}  
The program computes  
a) x + y using repeated subtraction  
b) x mod y using repeated subtraction  
c) the greatest common divisor of x & y  
d)the least common multiple of x & y  
  
Ans: option (c)

*6)*

main()

{

char not;

not=!2;

printf("%d",not);

}

*a)0 b)2 c)garbage value d)error*

*ans: a*

7) What will be output if you will compile and execute the following c

code?

#define call(x,y) x##y

void main(){

int x=5,y=10,xy=20;

printf("%d",xy+call(x,y));

}

(A) 35

(B) 510

(C) 15

(D) 40

Ans:40

*8)*

*#include<stdio.h>*

*main()*

*{*

*struct x*

*{*

*int x;*

*struct y*

*{*

*int x;*

*};*

*struct y \*q;*

*};*

*}*

a)no error

b)error-Redeclaration of x

c)error-Declaration terminated incorrectly

d)error-Nesting of structures not allowed

ans: c

9) #include "stdio.h"

#include "string.h"

void main(){

   char \*str=NULL;

   strcpy(str,"cquestionbank");

   printf("%s",str);

}

(A) cquestionbank

(B) cquestionbank\0

(C) (null)

(D) It will print nothing

Answer (c)

*10)*

#define FALSE -1

#define TRUE 1

#define NULL 0

main() {

if(NULL)

puts("NULL");

else if(FALSE)

puts("TRUE");

else

puts("FALSE");

}

*a)NULL b)TRUE c)FALSE d)1*

*ans: b*

**11) Consider the following C function:**

|  |
| --- |
| int f(int n)  {     static int i = 1;     if (n >= 5)        return n;     n = n+i;     i++;     return f(n);  } |

**The value returned by f(1) is (GATE CS 2004)**  
a) 5  
b) 6  
c) 7  
d) 8

Answer (c)

12) main ( )

{

static char \*s[ ] = {“black”, “white”, “yellow”, “violet”};

char \*\*ptr[ ] = {s+3, s+2, s+1, s}, \*\*\*p;

p = ptr;

\*\*++p;

printf(“%s”,\*--\*++p + 3);

}

a)te b)black c)low d)ck

ans: d

|  |
| --- |
| 13)  # include <stdio.h>  # define print(x)  printf ("%d", x)  int x;  void Q(int z)  {    z += x;    print(z);  }  void P(int \*y)  {    int x = \*y+2;    Q(x);    \*y = x-1;    print(x);  }    main(void)  {    x=5;    P(&x);    print(x);    getchar();  } |

**The output of this program is (GATE CS 2003)**  
a) 1276  
b) 22 12 11  
c) 14 6 6  
d) 766

Answer (a)

*14)*

int main()

{

    int  num1 = 123;

    float num2  = 123.0;

    if(num1 == num2)

        printf("num1 and num2 are equal");

    else

        printf("num1 and num2 are not equal");

    return 0;

}

1. num1 and num2 are equal
2. num1 and num2 are not equal
3. error
4. no output

*ans: a*

**15) What is printed by the following C program?**

|  |
| --- |
| int f(int x, int \*py, int \*\*ppz)  {    int y, z;    \*\*ppz += 1;     z  = \*\*ppz;    \*py += 2;     y = \*py;     x += 3;     return x + y + z;  }    void main()  {     int c, \*b, \*\*a;     c = 4;     b = &c;     a = &b;     printf( "%d", f(c,b,a));     getchar();  } |

(A) 18  
(B) 19  
(C) 21  
(D) 22

Answer (B)

16)

main()

{

int i;

i = abc();

printf("%d",i);

}

abc()

{

\_AX = 1000;

}

a)garbage value b)0 c)error d)1000

ans: d

|  |
| --- |
| 17)  char c[] = "GATE2011";  char \*p =c;  printf("%s", p + p[3] - p[1]) ; |

(A) GATE2011  
(B) E2011  
(C) 2011  
(D) 011

Answer: (C)

*18)*

void main(){

int res;

res= 56>76 ? return 0:return 1;

printf("%d",res);

}

*a)compilation error b)0 c)1 d)run time error*

*ans: a*

19)

int foo ( int x , int n)

{

int val;

val =1;

if (n>0)

{

if (n%2 == 1) val = val \*x;

val = val \* foo(x\*x , n/2);

}

return val;

}

What function of x and n is compute by this code segment?   
  
(a) xn  
(b) x\*n  
(c) nx  
(d) None of the above

Answer (a)

20)

main(){

unsigned int i;

for(i=1;i>-2;i--)

printf("c");

}

a)does not print anything

b)prints c 1 time

c)prints c 2 times

d)prints c 3 times

ans: a