Summary in Image

Exam Summary [CG Classes CS Test Series [C-Programming] Topic Wise Test 2]



11 Correct | 2 Wrong | 2 Skipped | 45m 47s Taken

Qs. Attempted:	13 Out of 15	Correct Marks:	18 Out of 25	Total Questions:	15 Out of 15
Correct Attempts:	11 Out of 13	Penalty Marks:	0 Out of 25	Total Marks:	25 Out of 25
Incorrect Attempts:	2 Out of 13	Resultant Marks:	18 Out of 25	Exam Duration:	45 Minutes
				Time Taken:	45 Minutes

Average Stats based on first attempt stats of Top 10% CSAs out of 124 users

Hide Question | Hide Stats | Solutions

Individual Question Statistics

View Order: Sorted Order | Select Metric: Marks Obtained

Hide Individual Stats

Technical

Q.1 Marked by Faculty Type: Level 2 | Priority: Low | Programming by C | Function Utility

Consider the below program.

```
#include<stdio.h>
void fun (int);
static int x = 5;
main()
{
    fun(1);
    printf("%d", x);
}
```

A. Program will get compiled successfully but linker will produce error
B. Program will not get compiled as it will produce compiler error
C. Program will produce error at line 1
D. On running the Program, it will produce output 5

Your Answer: A Correct Answer: B Incorrect Solved Correctly Below Average

Q.2 Marked by Faculty Type: Level 2 | Priority: Low | Programming by C | Read Utility

What is/are possible choice(s) for "Line 1" to produce output 21337

```
void fun(int n)
{
printf("%d",n);
if (static int i = 0; i<2; i++)
fun(i);
printf("%d",n);
}
int main()
{
fun(1);
}
```

A. `if(n==1)`
B. `if(n!=1)`
C. `if(i==1) return;`
D. `if(i<2)`

Your Answer: A,B,C Correct Answer: A,B,C Correct Solved Correctly Below Average

Q.3 Marked by Faculty Type: Level 2 | Priority: Low | Programming by C | Function Utility

What will be the output of the following program?

```
#include<stdio.h>
int fun(int n)
{
  static int a =5;
  if (a == 1) return 1;
  return a-- + n;
}
int main()
{
printf("%d", fun(fun(fun(1))));
return 0;
}
```

A. 16
B. 120
C. 56
D. Error of these

Your Answer: D Correct Answer: D Incorrect Solved Correctly Below Average

Q.4 Marked by Faculty Type: Level 2 | Priority: High | Programming by C | Function Utility

Consider the program:

```
#include<stdio.h>
int main() {
  int i, n;
  char A[] = "";
  scanf("%d", &n);
  for(i = 0; i < n; i++)
    for(A = 0; A < i; A++)
      A = A+A;
  printf("%d", A);
  printf("%d", i);
  return 0;
}
```

Which of the following is true?

A. There is a compilation error.
B. There is no compilation error, and 31 is printed.
C. There is a run time error.
D. There is no compilation error, and 34 is printed.

Your Answer: A Correct Answer: A Solved Correctly Below Average

Q.5 Marked by Faculty Type: Level 2 | Priority: High | Programming by C | Easy Utility

Which of the following C functions will correctly return true if its argument is an odd positive integer?

```
A.
bool isOdd (int x) {
  return (x % 2 == 1);
}

B.
bool isOdd (int x) {
  return (x % 2 != 0);
}

C.
bool isOdd (int x) {
  if (x % 2 == 1)
    return true;
  else
    return false;
}

D.
bool isOdd (int x) {
  if (x % 2 != 0)
    return true;
  else
    return false;
}
```

A. I
B. II
C. III
D. IV

Your Answer: A,B,C Correct Answer: A,B,C Incorrect Solved Correctly Below Average

Q.6 Marked by Faculty Type: Level 2 | Priority: High | Programming by C | Pointer Utility

As shown below, the file `f.c` defines a function `f` whose code refers to the variable `x` that is not a local variable or a parameter. The file `g.c` defines a function `g` whose code refers to the variable `x` that is not a local variable or a parameter.

```
// File f.c
// Declaration for x

void f(int a){
  x = a;
}

// File g.c
// Declaration for x

void g(char* p){
  x = *p;
}
```

The following table below shows how the variable `x` is defined in each file. For each row in the table, indicate in Column (c) whether the two functions at run-time refer to the SAME identifier (memory location) or to DIFFERENT identifiers (memory locations):

Column A declaration in f.c	Column B declaration in g.c	Column C SAME or DIFFERENT
int x;	extern int x;	SAME
int x = 0;	static int x;	
static int x;	int x = 0;	
static int x;	static int x = 0;	

The first row of column C has been filled for hints. What will be in the 2nd, 3rd, and 4th row of Column C, respectively?

A. SAME, DIFFERENT, DIFFERENT
B. SAME, SAME, SAME
C. DIFFERENT, DIFFERENT, DIFFERENT
D. DIFFERENT, SAME, DIFFERENT

Your Answer: Correct Answer: C Only Question Priority Utility

Q.7 Marked by Faculty Type: Level 2 | Priority: High | Programming by C | Array Utility

What will be the output of the following program (which is broken down into two files: f1.c and f2.c)

f1.c

```
#include<stdio.h>
int i;
extern int arr[];
void f2();
main()
{
  i = 1;
  f2();
}
void print_arr
{
  int n = 0;
  while(n<5)
  {
    if !(n == 0)
      printf(",");
    n = n + 1;
    printf("%d %d\n", i, arr);
  }
}
```

f2.c

```
#include<stdio.h>
extern void print();
extern int arr[];
extern void f1();
int arr[] = {10,20,30,40,50};
static int i;

void f2() {
  printf("%d %d\n", i, arr);
  f1();
  i = 2;
  f1();
  print();
}
```

A.
a. 1 0
b. 2 0
c. 1 0
d. 2 0

B.
a. 2 1
b. 1 0
c. 2 1
d. 1 0

C.
a. 2 0
b. 1 0
c. 2 0
d. 1 0

D.
a. 2 1
b. 1 1
c. 2 0
d. 1 2

Your Answer: A Correct Answer: A Incorrect Solved Correctly Below Average

Q.8 Marked by Faculty Type: Level 2 | Priority: High | Programming by C | Boolean Utility

Which of the following(s) are true for following function?

```
int mystery(int a)
{ return (a && mystery(a-1)); }
```

A. mystery(-250,1) is an example of infinite recursion
B. If we replace line 2by following the return 1 + mystery(a*b);+ mystery(a*a); then also output is same
C. mystery(1) gives output 1 and mystery(0) gives output 0
D. mystery(2) gives output 4 and only if 1 is multiple of a

Your Answer: A,B Correct Answer: A,B Incorrect Solved Correctly Below Average

Q.9 Marked by Faculty Type: Level 2 | Priority: Low | Programming by C | Boolean Utility

Consider the following variable and function definitions:

```
int g=0;
int f() {
  static int g;
  return ++g;
}
int h() {
  extern int g;
  return ++g;
}
int k() {
  int g=1;
  return ++g;
}
```

What is the value of the expression $g() + g() + f() + g() + f() + g() + h() + g()$?

Your Answer: 10 Correct Answer: 10 Incorrect Solved Correctly Below Average

Q.10 Marked by Faculty Type: Level 2 | Priority: Low | Programming by C | Array Utility

What will be the output of the following program :

```
#include<stdio.h>
int fun(int *a, int n);
int main()
{
  int a[10] = {10,9,8,7,6,5,4,3,2,1};
  int ans = fun(a,10);
  printf("%d", ans);
}
int fun(int *a, int n)
{
  if(n <= 1)
    return a[0];
  else
    return a[n-1] + a[n] - fun(a, n-1);
}
```

A. 5
B. -35
C. 10
D. 30

Your Answer: A Correct Answer: A Incorrect Solved Correctly Below Average

Q.11 Marked by Faculty Type: Level 2 | Priority: Low | Programming by C | Recursion Utility

Consider the following pair of mutually recursive functions. What does $g(g(2))$ evaluate to?

```
int f(int n);
int g(int n) {
  if (n<=0) return 1;
  return f(n-1)+g(n-1);
}
int f(int n) {
  if (n<=0) return 1;
  return g(n-1) + f(n);
}
```

Your Answer: 89 Correct Answer: 89 Incorrect Solved Correctly Below Average

Q.12 Marked by Faculty Type: Level 2 | Priority: High | Programming by C | Array Utility

What will be the output of the following program?

```
#include<stdio.h>
int fun(int *a, int n);
int main()
{
  int arr[] = {10, 5, 7, 9, 3, 1, 20, 7};
  printf("%d", fun(a , 10));
}
```

Your Answer: Correct Answer: 20 Not Attempted Wrong Number Entry Utility

Q.13 Marked by Faculty Type: Level 2 | Priority: High | Programming by C | Small Utility

What will be the output of the following program?

```
#include<stdio.h>
int main()
{
  int static a = 2;
  return a--;
}
int f(int n)
{
  if (n == 1)
    return 1;
  else
    return n * f(n-1);
}
int main()
{
  int a = 5;
  printf("%d", f(a));
}
```

A. 5
B. 120
C. 56
D. Error of these

Your Answer: D Correct Answer: D Incorrect Solved Correctly Below Average

Q.14 Marked by Faculty Type: Level 2 | Priority: High | Programming by C | Function Utility

Consider the program:

```
#include<stdio.h>
int main() {
  int n, i;
  char A = "";
  scanf("%d", &n);
  for(i = 0; i < n; i++)
    for(A = 0; A < i; A++)
      A = A+A;
  printf("%d", A);
  printf("%d", i);
  return 0;
}
```

Which of the following is true?

A. There is a compilation error.
B. There is no compilation error, and 31 is printed.
C. There is a run time error.
D. There is no compilation error, and 34 is printed.

Your Answer: A Correct Answer: A Solved Correctly Below Average

Q.15 Marked by Faculty Type: Level 2 | Priority: High | Programming by C | Easy Utility

Which of the following C functions will correctly return true if its argument is an odd positive integer?

```
A.
bool isOdd (int x) {
  return (x % 2 == 1);
}

B.
bool isOdd (int x) {
  return (x % 2 != 0);
}

C.
bool isOdd (int x) {
  if (x % 2 == 1)
    return true;
  else
    return false;
}

D.
bool isOdd (int x) {
  if (x % 2 != 0)
    return true;
  else
    return false;
}
```

A. I
B. II
C. III
D. IV

Your Answer: A,B,C Correct Answer: A,B,C Incorrect Solved Correctly Below Average

Q.16 Marked by Faculty Type: Level 2 | Priority: High | Programming by C | Pointer Utility

As shown below, the file `f.c` defines a function `f` whose code refers to the variable `x` that is not a local variable or a parameter. The file `g.c` defines a function `g` whose code refers to the variable `x` that is not a local variable or a parameter.

```
// File f.c
// Declaration for x

void f(int a){
  x = a;
}

// File g.c
// Declaration for x

void g(char* p){
  x = *p;
}
```

The following table below shows how the variable `x` is defined in each file. For each row in the table, indicate in Column (c) whether the two functions at run-time refer to the SAME identifier (memory location) or to DIFFERENT identifiers (memory locations):

Column A declaration in f.c	Column B declaration in g.c	Column C SAME or DIFFERENT
int x;	extern int x;	SAME
int x = 0;	static int x;	
static int x;	int x = 0;	
static int x;	static int x = 0;	

The first row of column C has been filled for hints. What will be in the 2nd, 3rd, and 4th row of Column C, respectively?

A. SAME, DIFFERENT, DIFFERENT
B. SAME, SAME, SAME
C. DIFFERENT, DIFFERENT, DIFFERENT
D. DIFFERENT, SAME, DIFFERENT

Your Answer: Correct Answer: C Only Question Priority Utility

Q.17 Marked by Faculty Type: Level 2 | Priority: High | Programming by C | Array Utility

What will be the output of the following program (which is broken down into two files: f1.c and f2.c)

f1.c

```
#include<stdio.h>
int i;
extern int arr[];
void f2();
main()
{
  i = 1;
  f2();
}
void print_arr
{
  int n = 0;
  while(n<5)
  {
    if !(n == 0)
      printf(",");
    n = n + 1;
    printf("%d %d\n", i, arr);
  }
}
```

f2.c

```
#include<stdio.h>
extern void print();
extern int arr[];
extern void f1();
int arr[] = {10,20,30,40,50};
static int i;

void f2() {
  printf("%d %d\n", i, arr);
  f1();
  i = 2;
  f1();
  print();
}
```

A.
a. 1 0
b. 2 0
c. 1 0
d. 2 0

B.
a. 2 1
b. 1 0
c. 2 1
d. 1 0

C.
a. 2 0
b. 1 0
c. 2 0
d. 1 0

D.
a. 2 1
b. 1 1
c. 2 0
d. 1 2

Your Answer: A Correct Answer: A Incorrect Solved Correctly Below Average

Q.18 Marked by Faculty Type: Level 2 | Priority: High | Programming by C | Boolean Utility

Which of the following(s) are true for following function?

```
int mystery(int a)
{ return (a && mystery(a-1)); }
```

A. mystery(-250,1) is an example of infinite recursion
B. If we replace line 2by following the return 1 + mystery(a*b);+ mystery(a*a); then also output is same
C. mystery(1) gives output 1 and mystery(0) gives output 0
D. mystery(2) gives output 4 and only if 1 is multiple of a

Your Answer: A,B Correct Answer: A,B Incorrect Solved Correctly Below Average

Q.19 Marked by Faculty Type: Level 2 | Priority: Low | Programming by C | Boolean Utility

Consider the following variable and function definitions:

```
int g=0;
int f() {
  static int g;
  return ++g;
}
int h() {
  extern int g;
  return ++g;
}
int k() {
  int g=1;
  return ++g;
}
```

What is the value of the expression $g() + g() + f() + g() + f() + g() + h() + g()$?

Your Answer: 10 Correct Answer: 10 Incorrect Solved Correctly Below Average

Q.20 Marked by Faculty Type: Level 2 | Priority: Low | Programming by C | Array Utility

What will be the output of the following program :

```
#include<stdio.h>
int fun(int *a, int n);
int main()
{
  int a[10] = {10,9,8,7,6,5,4,3,2,1};
  int ans = fun(a,10);
  printf("%d", ans);
}
int fun(int *a, int n)
{
  if(n <= 1)
    return a[0];
  else
    return a[n-1] + a[n] - fun(a, n-1);
}
```

A. 5
B. -35
C. 10
D. 30

Your Answer: A Correct Answer: A Incorrect Solved Correctly Below Average

Q.21 Marked by Faculty Type: Level 2 | Priority: Low | Programming by C | Recursion Utility

Consider the following pair of mutually recursive functions. What does $g(g(2))$ evaluate to?

```
int f(int n);
int g(int n) {
  if (n<=0) return 1;
  return f(n-1)+g(n-1);
}
int f(int n) {
  if (n<=0) return 1;
  return g(n-1) + f(n);
}
```

Your Answer: 89 Correct Answer: 89 Incorrect Solved Correctly Below Average

Q.22 Marked by Faculty Type: Level 2 | Priority: High | Programming by C | Small Utility

What will be the output of the following program?

```
#include<stdio.h>
int fun(int *a, int n);
int main()
{
  int arr[] = {10, 5, 7, 9, 3, 1, 20, 7};
  printf("%d", fun(a , 10));
}
```

Your Answer: Correct Answer: 20 Not Attempted Wrong Number Entry Utility

Q.23 Marked by Faculty Type: Level 2 | Priority: High | Programming by C | Small Utility

What will be the output of the following program?

```
#include<stdio.h>
int main()
{
  int static a = 2;
  return a--;
}
int f(int n)
{
  if (n == 1)
    return 1;
  else
    return n * f(n-1);
}
int main()
{
  int a = 5;
  printf("%d", f(a));
}
```

A. 5
B. 120
C. 56
D. Error of these

Your Answer: D Correct Answer: D Incorrect Solved Correctly Below Average

Q.24 Marked by Faculty Type: Level 2 | Priority: High | Programming by C | Boolean Utility

In C language, the Order of evaluation of any part of any expression is unspecified.

That means if we have two functions `f()` and `g()`, in a single expression, then it is unspecified which one will be called first.

```
int x = f() + g();
// Unspecified whether f() or g() is called first
```

Consider below the C program.

How many outcomes are possible if we execute the given program on different compilers?

```
#include<stdio.h>
int a() {
  printf("a");
  return 1;
}
int b() {
  printf("b");
  return 1;
}
int c() {
  printf("c");
  return 1;
}
int d() {
  printf("d");
  return 1;
}
main() {
  a() + b() + c() + d();
}
```

Your Answer: A Correct Answer: A Solved Correctly Below Average

Q.25 Marked by Faculty Type: Level 2 | Priority: High | Programming by C | Easy Utility

Consider the following C program.

```
#include<stdio.h>
int Count(int n, int a);

{
  if(a ) return 0;
  else if(n % a == 0) return 1 + Count(n / a, a);
  else return 1 + Count(n / a, a);
}
int main()
{
  printf("%d", Count(5,1));
  return 0;
}
```

The output of the program is _____

Your Answer: 76 Correct Answer: 76 Solved Correctly Below Average

You're doing Great!

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