

What will be the output?

```
#include <stdio.h>
int main()
{
    {
        int a = 70;
    }
    {
        printf("%d", a);
    }
    return 0;
}
```

- a) 70
- b) Garbage value
- c) Compilation error
- d) None

Answer: c

Which of the following statements are correct in C?

- a) A function with the same name cannot have different signatures
- b) A function with the same name cannot have different return types
- c) A function with the same name cannot have a different number of parameters
- d) All of the mentioned

- a) Option (a)
- b) Option (b)
- c) Option (c)
- d) Option (d)

Answer: d

What will the function return?

```
int func(int x, int y)
{
    if (y==0) return 0;
    if (y ==1) return x;
    return x+func(x, y-1);
}
```

- a) $x * y$ where x and y are integers
- b) $x * y$ where x and y are non-negative integers
- c) $x + y$ where x and y are integers
- d) $x + y$ where x and y are non-negative integers

- a) Option (a)
- b) Option (b)
- c) Option (c)
- d) Option (d)

Answer: b

What is the output of the following C program?

```
#include <stdio.h>
void foo(), f();
int main()
{
    f();
    return 0;
}
void foo()
{
    printf("2 ");
}
void f()
{
    printf("1 ");
    foo();
}
```

- a) Compiler error as foo() is not declared in main
- b) 1 2
- c) 2 1
- d) Compile time error due to declaration of functions inside main

Answer: b

What will be the output?

```
#include <stdio.h>
int main()
{
    switch(printf("C"))
    {
        default:
            printf("Default");
        case 1: printf("Choice1");
            break;
        case 2: printf("Choice2");
            break;
    }
    return 0;
}
```

- a) Choice1
- b) CChoice1
- c) DefaultChoice1
- d) CChoice1Choice2

Answer: b

What will be the output of the C code?

```
#include <stdio.h>
int main()
{
    char x=0;
    for(x=0; x<=127; x++)
    {
        printf("%d ", x);
    }
    return 0;
}
```

- a) Compilation error
- b) 0, 1, 2, 127
- c) 0, 1, 2,, 127, -128, -127,...infinite loop
- d) 1, 2, 3.....,127

Answer: c

What is the output of the following C program?

```
#include <stdio.h>
int fun(int n)
{
    int i, j, sum = 0;
    for(i = 1; i<=n; i++)
        for(j=i; j<=i; j++)
            sum = sum + j;
    return(sum);
}
int main()
{
    printf("%d", fun(10));
    return 0;
}
```

- a) 55
- b) 45
- c) 66
- d) 10

Answer: a

Consider the function

```
find(int x, int y)
{
    return((x<y) ? 0 : (x-y));
}
```

Let a and b be two non-negative integers. The call find(a, find(a, b)) can be used to find the

- a) Maximum of a, b
- b) Positive difference between a and b
- c) Sum of a and b
- d) Minimum of a and b

- a) Option (a)
- b) Option (b)
- c) Option (c)
- d) Option (d)

Answer: d

```
int fibonacci (int n)
{
    switch (n)
    {
        default:
            return (fibonacci(n - 1) + fibonacci(n - 2));
        case 1:
        case 2:
    }
    return 1;
}
```

The function above has a flaw that may result in a serious error during some invocations.

Which one of the following describes the deficiency illustrated above?

- (a) For some values of n, the environment will almost certainly exhaust its stack space before the calculation completes.
- (b) An error in the algorithm causes unbounded recursion for all values of n.
- (c) A break statement should be inserted after each case. Fall-through is not desirable here.
- (d) The fibonacci() function includes calls to itself. This is not directly supported by Standard C due to its unreliability.

- a) Option (a)
- b) Option (b)
- c) Option (c)
- d) Option (d)

Answer: a

What is the output of the C code given below

```
#include <stdio.h>
```

```
float func(float age[ ]);
```

```
int main()
```

```
{
```

```
    float result, age[] = { 23.4, 55, 22.6, 3, 40.5, 18 };
```

```
    result = func(age);
```

```
    printf("Result is=%0.2f", result);
```

```
return 0;
```

```
}
```

```
float func(float age[ ])
```

```
{
```

```
    int i;
```

```
    float result, sum = 0.0;
```

```
    for (i = 0; i < 6; ++i) {
```

```
        sum += age[i];
```

```
    }
```

```
    result = (sum / 6);
```

```
    return result;
```

```
}
```

Answer: 27.08