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[NPTEL \(https://swayam.gov.in/explorer?ncCode=NPTEL\)](https://swayam.gov.in/explorer?ncCode=NPTEL) » [Problem solving through Programming In C \(course\)](#)
[Announcements \(announcements\)](#) [About the Course \(https://swayam.gov.in/nd1_noc20_cs06/preview\)](https://swayam.gov.in/nd1_noc20_cs06/preview)
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Unit 10 - Week 8

Course outline

How does an NPTEL online course work?

Week 0

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

● Lecture 36:
More on
Functions (unit?
unit=9&lesson=50)

● Lecture 37:
Function
(Contd.) (unit?
unit=9&lesson=51)

Assignment 8

The due date for submitting this assignment has passed. **Due on 2020-03-25, 23:59 IST.**
As per our records you have not submitted this assignment.

1) A function prototype is used for

1 point

- ☐ a) Declaring the function logic
- ☐ b) Calling the function from the main body
- ☐ c) Telling the compiler, the kind of arguments used in the function
- ☐ d) Telling the user for proper use of syntax while calling the function

No, the answer is incorrect.

Score: 0

Accepted Answers:

c) Telling the compiler, the kind of arguments used in the function

2) What is the default return type if it is not specified in function definition?

1 point

- ☐ a) void
- ☐ b) integer
- ☐ c) double
- ☐ d) float

No, the answer is incorrect.

Score: 0

Accepted Answers:

b) integer

☐ Lecture 38:
Scanf and Printf
Functions;
Function
Prototype (unit?
unit=9&lesson=52)

☒ Lecture 39 :
Parameter
Passing in
Function
Revision (unit?
unit=9&lesson=53)

☐ Lecture 40:
Parameter
Passing in
Function
Revision
(Contd.) (unit?
unit=9&lesson=54)

☐ Quiz :
Assignment 8
(assessment?
name=140)

☐ Week-08
Program-01
(/noc20_cs06/progassignment?
name=142)

☐ Week-08
Program-02
(/noc20_cs06/progassignment?
name=144)

☐ Week-08
Program-03
(/noc20_cs06/progassignment?
name=145)

☐ Week-08
Program-04
(/noc20_cs06/progassignment?
name=146)

☐ Week-08
Program-05
(/noc20_cs06/progassignment?
name=147)

☐ Feedback For
Week 8 (unit?
unit=9&lesson=149)

Week 9

Week 10

Week 11

Week 12

3)

What is the error in the following program?

```
#include<stdio.h>
int f(int a)
{
    a > 20? return(10): return(20);
}
int main()
{
    int b;
    b = f(20);
    printf("%d\n", b);
    return 0;
}
```

- ☐ a) Error: 'return' statement cannot be used with conditional operators
- ☐ b) Error: Prototype declaration
- ☐ c) Error: Two return statements cannot be used in any function
- ☐ d) No error

No, the answer is incorrect.
Score: 0

Accepted Answers:

a) *Error: 'return' statement cannot be used with conditional operators*

1 point

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Solution**

How many times 'Hi' will be printed in the program given below

```
#include<stdio.h>
int i;
int fun();

int main()
{
    while(i)
    {
        fun();
        main();
    }
    printf("Hello\n");
    return 0;
}
int fun()
{
    printf("Hi");
}
```

- ☐ a) Only once
- ☐ b) Zero times
- ☐ c) Infinite times
- ☐ d) Compilation error

No, the answer is incorrect.
Score: 0

Accepted Answers:

b) Zero times

5)

1 point

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("%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;
}
```

- ☐ a) 27.08
- ☐ b) 27.083334
- ☐ c) Compiler error as result is declared twice
- ☐ d) Error: Invalid prototype declaration

No, the answer is incorrect.

Score: 0

Accepted Answers:

a) 27.08

6)

1 point

What will be the output?

```
#include <stdio.h>
int main( )
{
int i;
for (i=0; i<5; i++)
{
int i = 10;
printf ("%d ", i);
i++;
}
return 0;
}
```

- ☐ a) 10 11 12 13 14
- ☐ b) 0 1 2 3 4
- ☐ c) 10 10 10 10 10
- ☐ d) Compilation Error

No, the answer is incorrect.

Score: 0

Accepted Answers:

c) 10 10 10 10 10

7)

How many times the function factorial will be executed?

```
#include<stdio.h>
int factorial(int);
int main()
{
    int n=10;
    long int f;
    f = factorial(n);
    printf("%d! = %ld\n", n, f);
    return 0;
}
int factorial(int n)
{
    if (n == 0)
        return 1;
    else
        return(n * factorial(n-1));
}
```

Hint

No, the answer is incorrect.

Score: 0

Accepted Answers:

(Type: Numeric) 11

1 point

8)

1 point

What will be the output?

```
#include <stdio.h>
void swap(int a, int b)
{
    int temp;
    temp = a;
    a = b;
    b = temp;
}

int main()
{
    int num1 = 10, num2 = 20;

    printf("Before swapping num1 = %d num2 = %d\n", num1, num2);
    swap(num1, num2);
    printf("After swapping num1 = %d num2 = %d \n", num1, num2);
    return 0;
}
```

- ☐ a) Before swapping num1 = 10 num2 = 20
After swapping num1 = 10 num2 = 20
- ☐ b) Before swapping num1 = 10 num2 = 20
After swapping num1 = 20 num2 = 10
- ☐ c) Before swapping num1 = 10 num2 = 20
After swapping num1 = 20 num2 = 20
- ☐ d) Before swapping num1 = 10 num2 = 20
After swapping num1 = 10 num2 = 10

No, the answer is incorrect.

Score: 0

Accepted Answers:

a) *Before swapping num1 = 10 num2 = 20*
After swapping num1 = 10 num2 = 20

9)

1 point

Consider the following C function definition:

```
int func(int a, int b, int c)
{
    if ((a >= b) && (c < b)) return b;
    else if (a >= b) return func(a,c,b);
    else return func(b,a,c);
}
```

The function func():

- ☐ (a) Finds the maximum of a, b, and c
- ☐ (b) Finds the minimum of a, b and c
- ☐ (c) Finds the middle number of a, b, c
- ☐ (d) None of the above

No, the answer is incorrect.

Score: 0

Accepted Answers:

(c) *Finds the middle number of a, b, c*

10

Consider the following C function definition.

1 point

```
int f(int j)
{
    static int i = 50;
    int k;
    if (i == j)
    {
        printf("something");
        k = f(i);
        return 0;
    }
    else return 0;
}
```

Which one of the following is TRUE?

- ☐ (a) The function returns 0 for all values of j.
- ☐ (b) The function prints the string something for all values of j.
- ☐ (c) The function returns 0 when j = 50.
- ☐ (d) The function will exhaust the runtime stack or run into an infinite loop when j = 50

No, the answer is incorrect.

Score: 0

Accepted Answers:

(d) The function will exhaust the runtime stack or run into an infinite loop when $j = 50$