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Grade	**27.00** out of 40.00 (**68%**)

Question 1

Incorrect

Mark 0.00 out of 1.00

What is the output of the following code?

```
void main()
    {

        int a[5] = {4, 0, 15, 20, 25};
        int i, j, m;
        i = ++a[1];
        j = a[1]++;
        m = a[i++];
        printf("%d, %d, %d", i, j, m);

    }
```

Select one:

○ a. 1, 2, 1

○ b. 2, 1, 2

◉ c. 1, 2, 15 ✗

○ d. 0, 1, 15

Your answer is incorrect.

The correct answer is: 2, 1, 2

Predict the output of the following program.

```c
#include<stdio.h>

int main()
{
    char str1[10]="abcz";
    for(int i=0;i<4;i++)
        printf("%c",(str1[i]-32));
    return 0;

}
```

Select one:

○ a. AB

◉ b. ABCZ ✓

○ c. abcz

○ d. zcba

Your answer is correct.

The correct answer is: ABCZ

The output of the following program is

```c
#include<stdio.h>
int f(int n)
{
    int x=1, k;
    if (n==1)
        return x;
    for (k=1; k<n; ++k)
        x=x+f(k)*f(n-k);
    return x;
}
int main()
{
    printf("%d",f(4));
return 0;
}
```

Select one:

  ○ a. 51

  ◉ b. 15 ✓

  ○ c. 4

  ○ d. 1

Your answer is correct.

The correct answer is: 15

The output of the following program is

```c
#include <stdio.h>
int counter = 0;
int calc (int a, int b) {
    int c;
    counter++;
    if (b==3) return (a*a*a);
    else {
        c = calc(a, b/3);
        return (c*c*c);
    }
}
int main () {
    calc(2,9);
    printf ("%d",counter);
    return 0;
}
```

Select one:

○ a. 16

○ b. 2

○ c. 8

◉ d. 512 ✗

Your answer is incorrect.

The correct answer is: 2

What is the output of C Program with functions.?

```c
#include<stdio.h>

void show();


int main()
{
    show();
    printf("ARGENTINA ");
    return 0;
}


void show()
{
    printf("AFRICA ");
}
```

Select one:

○ a.
Compiler error

○ b.
ARGENTINA AFRICA

◉ c.
AFRICA ARGENTINA
✔

○ d.
ARGENTINA

Your answer is correct.

Question 6

Correct

Mark 1.00 out of 1.00

Guess the output:

```c
#include <stdio.h>
int 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;
}
```

Select one:

○ a. **Before swapping num1 = 10 num2 = 20 After swapping num1 = 10 num2 = 10**

○ b. **Before swapping num1 = 10 num2 = 20 After swapping num1 = 20 num2 = 10**

◉ c. **Before swapping num1 = 10 num2 = 20 After swapping num1 = 10 num2 = 20** ✔

○ d. **Before swapping num1 = 10 num2 = 20 After swapping num1 = 20 num2 = 20**

Your answer is correct.

The correct answer is: **Before swapping num1 = 10 num2 = 20 After swapping num1 = 10 num2 = 20**

What will be the output of the following program?

```c
#include<stdio.h>
#include<string.h>
int main()
{
    char str1[]="HELLO ";
    char str2[15];
    strcpy(str2,str1);
    printf("%s%s",str2,str1);
    printf("%d",(str1!=str2));
    printf("%d",strcmp(str1,str2));
    return 0;
}
```

Select one:

○   a. HELLO HELLO 10

◉   b. HELLOHELLO10 ✗

○   c. HELLO HELLO 00

○   d. HELLO HELLO 01

Your answer is incorrect.

The correct answer is: HELLO HELLO 10

The output of the following program is

```c
#include<stdio.h>
int max(int x, int y)
{
    if (x>y)
        return x;
    else
        return y;
}
 int f(int a[], int n)
    {
            if (n <= 1) return 0;
            else return max(f(a+1,n-1),a[0]-a[1]);
    }
int main()
    {
        int a[] = {6,10,4,12,8};
        printf("%d", f(a,5));
        return 0;
    }
```

Select one:

- a. 6
- b. 12
- c. 10 ✗
- d. 4

Your answer is incorrect.

The correct answer is: 6

What is the output of the following code?

```
void main()
{

        int a[4] = {4,9,20};
        int b[3];
        b=a;
        printf("%d", b[0]);

}
```

Select one:

- a. 4
- b. 9
- ○ c. Compilation Error ✓
- d. 20

Your answer is correct.

The correct answer is: Compilation Error

Which function will run without any compile errors?

Select one:

- a.
  int sum(int a, int b)

  {return (a + b);}
  ✔

- b.
  int sum(int a, int b)

  return (a + b);

- c.
  none of the mentioned

- d.
  int sum(a, b)

  return (a + b);

Your answer is correct.

The correct answer is:
 int sum(int a, int b)

{return (a + b);}

The output of the following program is

```c
#include <stdio.h>
int counter = 0;
int calc (int a, int b) {
    int c;
    counter++;
    if (b==3) return (a*a*a);
    else {
        c = calc(a, b/3);
        return (c*c*c);
    }
}
int main () {
    printf ("%d", calc(2,9));
    return 0;
}
```

Select one:

○   a. 0

○   b. 18

○   c. 2

◉   d. 512 ✓

Your answer is correct.

The correct answer is: 512

What does the following program print?

```c
#include <stdio.h>
#include<math.h>
void main()
{
  double pi = 3.1415926535;
  int a = 1;
  int i;
  for(i=0; i < 3; i++)
  if(a = cos(pi * i/2) )
  printf("%d ",1);
  else printf("%d ", 0);
}
```

Select one:

○ a. **101** ✓

○ b. **010**

○ c. **000**

○ d. **111**

Your answer is correct.

The correct answer is: **101**

How many elements of array are printed?

```c
#include <stdio.h>

int main () {

    /* an array with 5 rows and 2 columns*/
    int a[5][2] = { {0,0}, {1,2}, {2,4}, {3,6},{4,8}};
    int i, j;

    /* output each array element's value */
    for ( i = 0; i < 4; i++ ) {

        for ( j = 0; j < 1; j++ ) {
            printf("a[%d][%d] = %d\n", i,j, a[i][j] );
        }
    }

    return 0;
}
```

Select one:

- ○ a. None of these

- ○ b. 3

- ◉ c. 4 ✓

- ○ d. 5

Your answer is correct.

The correct answer is: 4

What is the output of the following code?

```
void main()
{
    int i;
    int arr[100] = {sizeof(arr)/sizeof(arr[0])};
    for (i = 0; i < 5; i++)
    printf("%d ", arr[i]);
}
```

Select one:

    ○   a. Compilation Error

    ○   b. Runtime Error

    ○   c. 0 0 0 0 0

    ◉   d. 100 0 0 0 0 ✓

Your answer is correct.

The correct answer is: 100 0 0 0 0

Question 15

Correct

Mark 1.00 out of 1.00

What will be the output of the following code for the input "Hello World"?

```c
#include<stdio.h>

int main()
{
    char str1[10];
    scanf("%s",str1);
    printf("%s",str1);
    return 0;
}
```

Select one:

○ a. Compiler error

◉ b. Hello ✓

○ c. Hello World

○ d. H

Your answer is correct.

The correct answer is: Hello

What is the output of the following program?

```c
#include <stdio.h>
int g(int);
int f (int b)
{
    if(b==0)
        return b;
    else
    {
        --b;
        g(b);
    }
}
int g (int a)
{
    if(a==0)
        return a;
    else
    {
        --a;
        f(a);
    }
}
int main()
{
    int a = 7;
    printf ("%d ", g(a));
    return 0;
}
```

Select one:

- a. **Compile error**
- b. 0 ✓
- c. **Infinite Loop**
- d. **7**

Your answer is correct.

The correct answer is: 0

Question 17

Correct

Mark 1.00 out of 1.00

What should be substituted in place of 'X' in the below program so as to get output as "ISE2"?

```c
#include <stdio.h>
int main()
{
char arr[] = "PSIP ISE2";
printf("%s", X);
return 0;
}
```

Select one:

○   a. Not possible

○   b. (arr+4)

◉   c. (arr+5) ✓

○   d. arr

Your answer is correct.

The correct answer is: (arr+5)

What is the output of the following code?

```c
#include<stdio.h>

void dynamic(int s, ...)
{
    printf("%d ", s);
}

int main()
{
    dynamic(2, 4, 6, 8);
    dynamic(3, 6, 9);
    return 0;
}
```

Select one:

- a. **Compiler Error**
- b. **3 2**
- c.
  2 3
  ✓
- d. **4 3**

Your answer is correct. Correct answer is 2 3.

The correct answers are:
2 3
, **Compiler Error**, **4 3**, **3 2**

The output of the following program is

```c
#include <stdio.h>
int collatz_repeat (int n)
{
    if ( n == 1 ) {
        return 0;
    }else{
        if ( n % 2 == 1 ) {
            return 1 + collatz_repeat(3*n+1);
        }else{
            return 1 + collatz_repeat(n/2);
        }
    }
}
int main()
{
    printf("%d\n", collatz_repeat(4));
    return 0;
}
```

Select one:

○ a. 2

○ b. 4

● c. 12 ✗

○ d. 5

Your answer is incorrect.

The correct answer is: 2

What is the output?

```c
#include <stdio.h>

int incr(int i)
{
    int count = 0;
    count = count + i;
    return (count);
}
int main()
{
    int i,j;
    for (i = 0; i <=4; i++)
    {
        j = incr(i);
        printf("%d ",j);
    }
    return 0;
}
```

Select one:

- a. **1 2 3 4 5**
- b.
  0 1 2 3 4 ✓
- c. **Program will not run**
- d. **1 1 1 1 1**

Your answer is correct.

The correct answer is:
0 1 2 3 4

Which of the following is acceptable?

```
A) int arr1[ ][3] = { 12, 34, 23, 45, 56, 45 } ;
B) int arr2[2][ ] = { 12, 34, 23, 45, 56, 45 } ;
C) int arr3[ ][ ] = { 12, 34, 23, 45, 56, 45 } ;
D) None of the above
```

Select one:

○ a.
  Option D
  ✗

○ b.
  Option A

○ c.
  Option C

○ d.
  Option B

Your answer is incorrect.

The correct answer is:
Option A

How many times will Hi be printed?

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

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

Select one:

  ◉ a. **Infinite times**
     ✘

  ○ b. **Zero**

  ○ c. **Once**

  ○ d. **Compiler error**

Your answer is incorrect.

The correct answer is: **Zero**

Any C program

Select one:

○ a.
None of given options

◉ b.
Must contain at least one function.
✔

○ c.
Needs input data.

○ d.
Need not contain any function.

Your answer is correct.

The correct answer is:
Must contain at least one function.

What is the output of the following code?

```c
#include <stdio.h>
void change(float age[]);

int main()
{
        float result, age[] = {23.4, 55, 22.6, 3, 40.5, 18};
        printf("%.2f ", age[0]);
        change(age);
        printf("%.2f", age[0]);
         return 0;

}

void change(float age[])
{
   age[0]=11.4;
}
```

Select one:

○   a. Compilation Error

◉   b. 23.40 11.40 ✔

○   c. 55.00 11.40

○   d. 23.40 23.40

Your answer is correct.

The correct answer is: 23.40 11.40

```c
Guess the output of the following program if the input characters 'a','b' and
    'c' are supplied to it.
#include <stdio.h>
#include <string.h>
int main()
{
    void fun();
    fun();
    printf("\n");
    return 0;
}
void fun()
{
    char c;
    if((c = getchar())!= '\n')
        fun();
    printf("%c", c);
}
```

Select one:

  a. bca

  b. abc ✗

  c. cba

  d. abc abc

Your answer is incorrect.

The correct answer is: cba

What does the program below print?

```c
#include <stdio.h>

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 ("%dn", sum);

    return 0;

}
```

Select one:

○ a. **8, 4, 0, 2, 14**

◉ b. **8, 4, 0, 2, 0**
✗

○ c. **2, 0, 4, 8, 0**

○ d. **2, 0, 4, 8, 14**

Your answer is incorrect.

The correct answer is: **2, 0, 4, 8, 0**

Question 27

Correct

Mark 1.00 out of 1.00

Choose a correct statement about C Language Functions.

Select one or more:

- a.
  A function name can start with an Underscore(_) or A to Z or a to z.

- ☑ b.
  All given options ✓

- c. **Default return type of any function is an Integer**

- d.
  A function name can not be same as a predefined C Keyword.

Your answer is correct.

The correct answer is:
All given options

What will be the output?

```c
#include<stdio.h>
int a=10;
void compute(int a)
{
    a=a;
}
int main()
{
    int a=100;
    printf("%d ",a);
    compute(a);
    printf("%d",a);
    return 0;
}
```

Select one:

- ⊙ a. **Compile time error**
  ✗

- ○ b. **100 10**

- ○ c. **100 100**

- ○ d. **10 10**

Your answer is incorrect.

The correct answer is: **100 100**

What is the output of the following code?

```
void main()
{
        int arr[5]={10,20,45,30,89};
        printf("%d\n", 3[arr] / 1[arr]);
}
```

Select one:

- a. 3
- b. 4
- c. 2
- d. 1 ✓

Your answer is correct.

The correct answer is: 1

What is the output of the following C program?

```c
#include<stdio.h>
#include<string.h>
int main()
{
    char str1[]="GOOD ";
    char str2[15]="MORNING ";
    strcat(str2,str1);
    printf("%s",str2);
    printf("%s",str1);
    return 0;
}
```

Select one:

○   a. GOOD GOOD

○   b. MORNING GOOD MORNING GOOD

◉   c. MORNING GOOD GOOD ✓

○   d. GOOD MORNING GOOD MORNING

Your answer is correct.

The correct answer is: MORNING GOOD GOOD

Consider the following:

```c
#include <stdio.h>

void fun(int a , int b){
    printf("%d %d ",(a+1),(b=a+2));

}

int main()
{
    int a = 20;
    int b = 30;
    fun(a,b);
    return 0;
}
```

The output for the code if the compiler evaluates function parameters from right to left will be:

Select one:

○   a.
  21 23

○   b.
  21 32

◉   c.
  Compiler Error due to (b=a+2) in the first printf().
  ✗

○   d. **21 22**

Your answer is incorrect.

The correct answer is: **21 22**

Correct

Mark 1.00 out of 1.00

Consider the following two-dimensional array definition.
```
int values[3][4] = (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12);
What is values[1][3] ?
```

Select one:

○ a. 8 ✓

○ b. 10

○ c. 9

○ d. 7

Your answer is correct.

The correct answer is: 8

Question 33

Correct

Mark 1.00 out of 1.00

What is the output of the following code?

```
int main()
{
        char grade[] = {'A','B','C'};
        printf("%d", grade);
        return 0;
}
```

Select one:

○ a. 65

○ b. A

○ c. Compilation Error

○ d. Address ✓

Your answer is correct.

The correct answer is: Address

What is the output of the following?

```c
#include <stdio.h>
int f (int );
int g (int );

int main()
{
    int a = 3, b = 6, count;
    for (count = 1; count <= 2; ++count)
    {
        b += f(a) + g(b);
        printf ("%d ", b);
    }
    return 0;
}

int f(int x)
{
    int y;
    y = g(x);
    return (y);
}

int g(int x)
{
    int y = 10;
    y += 1;
    return (y+x);
}
```

Select one:

- a. **37 99**
- b. **37 100**
- c. **35 100** ✗
- d. **36 99**

Your answer is incorrect.

The correct answer is: **37 99**

What is the output?

```c
#include <stdio.h>
void fun(int mat[][])
{
    mat[0][1] = 3;
    int i = 0, j = 0;
    for (i = 0;i < 3; i++)
    for (j = 0;j < 3; j++)
    printf("%d", mat[i][j]);
}
void main()
{
    int arr[3][3] = {0};
    fun(arr);
}
```

Select one:

○ a.
   030000000

◉ b. **Compilation error** ✓

○ c. **300000000**

○ d. **003000000**

Your answer is correct.

The correct answer is: **Compilation error**

What will be the output of the following program if str1="abc" and str2="afv"?

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

int main()
{
    char str1[5], str2[5];
    int i;
    scanf("%s",str1);
    scanf("%s",str2);
    i = strcmp(str1, str2);
    printf("%d\n", i);
    return 0;
}
```

Select one:

○ a. -4 ✓

○ b. 24

○ c. -24

○ d. 4

Your answer is correct.

The correct answer is: -4

Consider the following code:

```c
#include <stdio.h>
double fun (double); /* Line fun */

int main()
{

    double da, db;
    // input da
    db = fun(da);
    return 0;
}

double fun(double a)
{
    return a;
}
```

If we delete Line fun above, the output will have:

Select one:

○ a.
compiler errors only

○ b. **compiler warnings only**

◉ c.
no compiler warnings and errors
✗

○ d.
compiler errors and warnings both

Your answer is incorrect.

The correct answer is:
compiler errors and warnings both

What is the output of the following code?

```
void main()
{

    int a[5] = {4, 0, 15, 20, 25};

    ++a[4];
    a[4]++;
    a[1]++;
    printf("%d, %d", a[1], a[4]);

}
```

Select one:

- a. 0, 26
- b. 1, 27 ✓
- c. 0, 27
- d. 1, 26

Your answer is correct.

The correct answer is: 1, 27

Correct

Mark 1.00 out of 1.00

What will be the output of the following?

```c
#include<stdio.h>

int main()
{
    char str1[] = "Hello";
    char str2[] = "Hello";
    if(str1 == str2)
        printf("Equal\n");
    else
        printf("Unequal\n");
    return 0;
}
```

Select one:

- a. None of the mentioned
- b. Equal
- ⦿ c. Unequal ✓
- d. Error

Your answer is correct.

The correct answer is: Unequal

Correct

Mark 1.00 out of 1.00

How many bytes of memory are occupied by int my_array[5][3] array ?

Select one:

- a. 45
- b. 80
- c. None of these
- ⦿ d. 60 ✓

Your answer is correct.

The correct answer is: 60