

Question 1

2.5 out of 2.5 points

What is the value of **result** after the following code fragment is executed?

```
s = "5843619270"  
result = len(s) - int(s[4])  
print(result)
```

Answer:

Question 2

2.5 out of 2.5 points

What is the correct order of evaluating the operators in the following expression: (The order is from left to right)

(a > b or not b < c) and c != 1

Answer:

Question 3

2.5 out of 2.5 points

What will be the result of executing the following C code?

```
1  #include<stdio.h>  
2  int main(void)  
3  {  
4      int y = 3, x = 7, *p1, *p2;  
5  
6      p1 = &y;  
7      *p1 += 4;  
8      p2 = &x;  
9  
10     if(p1 == p2)  
11         printf("104 ");  
12     if(*p1 == *p2)  
13         printf("ICS ");  
14     p2 = p1;  
15     *p1 = -3;  
16     printf("%d %d", x, *p1);  
17  
18     return 0;  
19 }
```

Answer:



Question 4

2.5 out of 2.5 points

Given the following Python code fragment:

```
if x > 0 or x < 0:
    z=y/x
else:
    z=0
```

which of the following is an equivalent C code that produces the same result as the above code fragment? You can assume that x, y, and z are of type float.

Answer:

Question 5

2.5 out of 2.5 points

Consider the following C code fragment:

```
#include <stdio.h>

int main() {
    int i=2, j = 7;
    double k = 1.5, m = 0.5;
    double result;
    result = j / i + k - m;
    printf("result = %.1f\n", result);

    return 0;
}
```

The output of running the above code is:

Answer:

Question 6

2.5 out of 2.5 points

Given the python statement $y = 5 \cdot 3^{2/2} + 5$, which of the following is an equivalent C statement that results in the same value for y? You can assume that y is of the same data type in both statements. Note that the C function `pow(base, exponent)`

returns the double value $\text{base}^{\text{exponent}}$ (base to the power exponent)

Answer:

Question 7

2.5 out of 2.5 points

Which of the following Python commands is used to open a file `tempFile.txt` in read-mode only?

Answer:

Question 8

2.5 out of 2.5 points

```
class student:
    def __init__(self, id, name):
        self.id = id
        self.name = name

    def display_info(self):
        print("Student ID: ", self.id)
        print("Student Name: ", self.name)
```

Which of the following statements will create a class object that can be called later on

Answer:

Question 9

2.5 out of 2.5 points

What is the output of the following Python code fragment?

```
def fun(x):
    if x//3==1:
        return 1
    elif x//2==1:
        return 2
    else:
        return 3

print(fun(2))
```

Answer:

Question 11

2.5 out of 2.5 points

What will be the result of executing the following Python code:

```
myValues = {2:5, -4:6, 3:-2, -1:-4}
sum = 0
for keys in myValues.keys() :
    sum = sum + keys
print(sum)
```

Answer:

By: Abdulellah Alghamdi



SomeoneA

Question 12

2.5 out of 2.5 points

What is the output of the following Python code fragment?

```
def fun(a, b, c):  
    if a > b:  
        if a > c:  
            return a  
    if b > a:  
        if b > c:  
            return b  
    if c > a:  
        if c > b:  
            return c  
    return None  
  
print(fun(12, 15, 8))
```

Answer:

Question 13

0 out of 2.5 points

Which of the following statements is correct for this Python code, when the user enters his name ("Ahmad") instead of his age.

```
In [*]: age = int(input("Enter your age: "))
```

Enter your age:

Answer:

Question 14

2.5 out of 2.5 points

What is the output of the following C code?

```
#include <stdio.h>  
  
int main(void)  
{  
    int x,y,z;  
    double a,b;  
    x = 3 / 4;  
    y = 10.0 / 4;  
    a = 10 % 4;  
    b = (double) 10 / 4;  
    z = x / y * a + b;  
  
    printf("%d %d %d %.5f %.3f", x, y, z, a, b);  
  
    return 0;  
}
```

Answer:

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Question 16

2.5 out of 2.5 points

What is the output of the following Python code?

```
x = [24, 4]
smallest = min(x)
i = 1
s = 0
while (i <= smallest):
    if (x[0] % i == 0) and (x[1] % i == 0):
        s += i
    i += 1
print(s)
```

Answer:

Question 18

2.5 out of 2.5 points

What is the value of **result** after the following code fragment is executed?

```
n = 5
result = 1 + 2 * n
print(result)
```

Answer:

Question 19

2.5 out of 2.5 points

What will be the result of executing the following Python code?

```
myNumbers = [1.0, 2.0, 3.0]
hisNumbers = myNumbers[1] + (myNumbers[2] * 3)
print(hisNumbers)
```

Answer:



What is the output of the below C code?

```
#include <stdio.h>

int main()
{
    int Red = 90, Blue = 95, Green = 99 ;

    if(Red > Blue){
        if(Red > Green)
            printf("Red");

        else
            printf("Green");
    }
    else{
        if(Blue > Green)
            printf("Blue");
        else
            printf("Green");
    }
    return 0;
}
```

Answer:

Question 21

2.5 out of 2.5 points

What will be the result of executing the following C code?

```
#include <stdio.h>
int main()
{
    int i, n = 5;
    int f_1 = 1, f_2 = 1;

    if (n==0 || n==1)
        printf("%d ", 1) ;
    else if (n>=2)
        for (i=2; i<=n ; i++) {
            f_1 = f_1 + f_2 ;
            f_2 = f_1 - f_2 ;
        }
    if (n>=2)
        printf("%d", f_1);
    return 0;
}
```

Answer:

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Question 22

2.5 out of 2.5 points

What will be the result of executing the following C code?

```
1  #include<stdio.h>
2
3  int main(void)
4  {
5      char O = 'C';char P = 'I';char *u;
6
7      u = &P;printf("%c", *u);
8      u = &O;printf("%c", *u);
9      *u = 'C';printf("%c", O);
10
11     return 0;
12 }
```

Answer:

Question 23

2.5 out of 2.5 points

What is the output of the following Python code:

```
i = 2
x = 2
for i in range(6):
    print(i, end = ' ')
    x += 1
print(x, end = ' ')
```

Answer:

Question 24

2.5 out of 2.5 points

What will be the output of the following python code:

```
class Square:
    def __init__(self, side = 1):
        self.area = side*side
        self.perimeter = side*4

s1 = Square()
s2 = Square(5)
print(s1.area, s2.area)
```

Answer:

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SomeoneA

Question 26

2.5 out of 2.5 points

What will be the result of executing the following C code?

```
#include <stdio.h>
void fun(int a, int *b, int *c) ;
int main()
{
    int x,y, n = 3;
    fun(n, &x, &y) ;
    printf("%d %d", x, y);
    return 0;
}

void fun(int a, int *b, int *c)
{
    int x = 5;
    int y = 10;
    *b = a * a ;
    *c = *b * a ;
}
```

Answer:

Question 27

2.5 out of 2.5 points

What is the output of the following Python code:

```
d = { 1: 'a', 2:'b' , 3:'c'}
d['b'] = 13
d[2] += 'k'
d.pop(2)
for i in d:
    print( i, d[i], end = ' ' )
```

Answer:

Question 28

2.5 out of 2.5 points

What will be the result of executing the following Python code:

```
tmp = [[1, 4, 2], [19, 7, 8], ['a', 3, 'c']]
tmp[1].append(5)
tmp[2].pop()
tmp[1].insert(1,5)
print(tmp)
```

Answer:

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Question 29

2.5 out of 2.5 points

Consider the following C code:

```
#include <stdio.h>

int myFun (int value);
int hisFun (int value);
int herFun (int value);

int main() {
    int i, j = 4;
    int herFun = 3;
    i = myFun(j);
    printf("The values of i and j are %d and %d\n", i, j);

    return 0;
}

int myFun (int value) {
    int myVar;
    myVar = value + value;
    return myVar;
}

int hisFun(int value) {
    int myFun = 8;
    return (myFun + value);
}

int herFun(int value) {
    int hisFun = 4;
    return (hisFun - value);
}
```

The function `herFun` is visible in

Answer:

Question 30

2.5 out of 2.5 points

What is the output of the following Python code:

```
def fun(number):
    f = 1
    if number == 0:
        return 1
    else:
        while(number >= 1):
            f = f * number
            number -= 1
        return f
print(fun(4))
```

Answer:

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Question 31

2.5 out of 2.5 points

What will be the result of executing the following Python code:

```
aList = ["ICS 104 is EASY!", [4, 8, 12, 16]]
print(aList[0][1])
print(aList[1][2])
```

Answer:

Question 32

2.5 out of 2.5 points

#What is the output of the following Python code, given that the user entered 111 then 222?

```
x = input('Enter a number')    # Assume 111 is entered
y = input('Enter another number') # Assume 222 is entered
z = int(x)
w = float(y)
s1 = x + y
s2 = z + w
print(s1, end = ' ')
print(s2)
```

Answer:

Question 33

2.5 out of 2.5 points

What is the output of the following Python code:

```
a = 2.2
b = 3.6
print("The result of %.0f + %.1f = %.2f" % (a,b,a+b))
```

Answer:

Question 34

2.5 out of 2.5 points

Given a string 'Ali horses' in Python, we want to add a verb to make a sentence such as 'Ali likes horses'. Suppose we have a string-variable name as defined below (**names** has one space between the two words - **Ali** and **horses**), and we want to insert a string 'likes' in this space, which of the following solutions is the correct answer.

```
names = 'Ali horses'
```

Answer:

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Question 35

2.5 out of 2.5 points

An input to a Python program that expects a positive input such as any of these **YES, Yes, yes, YeS, YEs, yES, yEs, yeS.** to terminate the program (showing **Quit** on the screen),

```
userinput = input('If you want to quit type Yes:')
```

Can be validated as follows:

Answer:

Question 36

2.5 out of 2.5 points

What is the output of the following Python code fragment?

```
set1 = {1, 2, 3}
set1.add(4)
set1.add(4)
set1.discard(1)

print(set1)
```

Answer:

Question 37

2.5 out of 2.5 points

```
def MyFunction(a,b,c):  
    c = a + b  
    return c
```

```
x = 1; y = 2; z = 0
print(MyFunction(x,y,z))
```

Which of the following C codes produce result(s) similar to the above Python code

```
#include <stdio.h>

void fun1(int *x, int *y, int *z){*z = *x + *y;}

void fun2(int x, int y, int z){z = x + y;}

int fun3(int x, int y, int z){
    z = x + y;
    return z;}

int fun4(int x, int y, int z){
    printf("%d\n", x + y);
    return z;}
```

```
void main(void){  
    int i = 1, j = 2, k = 0;  
    // ////////////////////////////////////// //  
    // Your choice goes here //  
    // ////////////////////////////////////// //  
}
```

try it by
yourself 😊

Selected Answer: None of the given answers is correct

Correct Answer: ☒ None of the given answers is correct

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Question 38

2.5 out of 2.5 points

What is the output of the below C code?

```
#include <stdio.h>

void test1(int m, int n);

void test3(int a, int *b);

int main(void) {
    int a=10, b=16;

    test1(a,b);
    printf("a=%d, b=%d, ",a,b);

    test3(a,&b);
    printf("a=%d, b=%d\n",a,b);

    return 0;
}

void test1(int m, int n) {
    m=5;
    n=24;
}

void test3(int a, int *b) {
    a=38;
    *b=57;
}
```

Answer:

Question 39

2.5 out of 2.5 points

What is the output of the following Python code fragment?

```
class Person:
    def __init__(self, name, id):
        self.name = name
        self.id = id * 2

p1 = Person("Omar", 100)
print(p1.id)
```

Answer:

What is the expected outcome of the following Python code when executed?

```
num=5

try:
    y=num/10
    print("Message 1")
except:
    print("Message 2")
```

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Answer:

Question 41

2.5 out of 2.5 points

What is the output of the following C code?

Assume the following inputs to the program:

num1 = 8.99, num2 = 1, and '+' as operator

```
1 #include <stdio.h>
2
3 int main() {
4     double num1, num2;
5     char oper;
6     double total;
7
8     scanf("%lf", &num1); // Assume num1 = 8.99
9     scanf("%lf", &num2); // Assume num2 = 1
10    scanf(" %c", &oper); // Assume oper is +
11
12    if (oper == '+') {
13        printf("Sum of two numbers is %.4f", (num1+num2));
14    }
15    else if (oper == '*') {
16        printf("Product of two numbers is %.5f", (num2*num1));
17    }
18    else {
19        printf("\nInvalid operator is used! ");
20    }
21    return 0;
22 }
```

Answer:

Question 42

2.5 out of 2.5 points

```
for x in range(5):
    print("x + x = 2 * x")
    print("x / 2 = 0.5 * x")
```

Which of the following C codes produce result(s) similar to the above Python code

Answer:

Good luck with your exam.. 😊 دعواتكم لنا

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