Started on	Thursday, 21 September 2023, 5:07 PM
State	Finished
Completed on	Thursday, 21 September 2023, 5:22 PM
Time taken	15 mins
Grade	**7.00** out of 10.00 (**70**%)

Question 1

Correct

Mark 1.00 out of 1.00

What does the following function print for n = 25?

```
void test(int n) {
    if (n == 0)
        return;
    printf("%d", n%2);
    test(n/2);
}
```

a. 00000

b. 10011 ✔

c. 11001

d. 11111

The correct answer is:
10011

Question 2

Correct

Mark 1.00 out of 1.00

Which of the following is the correct way for declaring a float pointer?

- a. float *ptr ✔
- b. *float ptr
- c. None of the above
- d. float ptr

The correct answer is:
float *ptr

Question 3

Incorrect

Mark 0.00 out of 1.00

What is the output of the following program?

```
#include <stdio.h>
void func(int *a, int *b)
{
    a = b;
    *a = 2;
}
int i = 0, j = 1;
int main()
{
    func(&i, &j);
    printf("%d %d", i, j);
    return 0;
}
```

- a. 2 1 ✖
- b. 0 2
- c. 0 1
- d. 2 2

The correct answer is:
0 2

Question 4

Correct

Mark 1.00 out of 1.00

What happens when one assigns a value to an element of array whose subscript exceeds the size of the array?

a. Compiler error

b. Nothing, it is done all the time

c. Other data may be overwritten ✔

d. The element is set to zero

The correct answer is:
Other data may be overwritten

Question 5

Correct

Mark 1.00 out of 1.00

What is the return type of the function with prototype: "int func(char x, float v, double t);"

a. float

b. double

c. char

d. int ✔

The correct answer is:
int

Question 6

Incorrect

Mark 0.00 out of 1.00

```
int main() {
   char *p = “Programming”;
   printf(“%c”, *& * & * p);
   return 0;
}
```

a. Runtime Error

b. Garbage value

c. P

d. Programming ✖

The correct answer is:
P

Question 7

Incorrect

Mark 0.00 out of 1.00

What is the problem with following code?

```
#include<stdio.h>
int main() {
    int *ptr = (int *)malloc(sizeof(int));
    ptr = NULL;
    free(ptr);
}
```

a. Compiler Error: free can't be applied on NULL pointer

b. Memory Leak

c. Dangling Pointer ✖

The correct answer is:
Memory Leak

Question 8

Correct

Mark 1.00 out of 1.00

What will be the output produced by the following C code:

```
int main() {
   int arr[5][5];
   printf("%d", ((arr == *arr) && (*arr == arr[0]) ));
   return 0;
}
```

a. -1

b. 0

c. 1 ✔

d. 2

The correct answer is:
1

Question 9

Correct

Mark 1.00 out of 1.00

Consider the following recursive function fun(x, y). What is the value of fun(4, 3)?

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

a. 9

b. 10

c. 13 ✔

d. 12

The correct answer is:
13

Question 10

Correct

Mark 1.00 out of 1.00

Match the following with respect to the following program segment:

```
int arr[3][3] = {{2,4,6}, {9,1,10}, {16, 64, 5}};
```

*(arr[1] + 1) | arr[1][2]	11 ✔
*(arr[0]) | *(arr[2])	18 ✔
**arr	2 ✔
arr[0][1] ^ arr[0][2]	2 ✔
**arr < *(*arr+2)	1 ✔

The correct answer is:
*(arr[1] + 1) | arr[1][2] → 11,

*(arr[0]) | *(arr[2]) → 18,

**arr → 2,

arr[0][1] ^ arr[0][2] → 2,

**arr < *(*arr+2) → 1