

# **Shyampur Siddheswari Mahavidyalaya**

B.SC. Sem1(Internal Test)- 2019

## **COMPUTER SCIENCE (Hons.)**

CC2

## Total Marks-30

Time- 1Hr.

**Q1. Answer Any 4 Question (Each Carrying 1.5 marks)                  4X1.5=6**

1.What will be the output of the following C code?

```
#include <stdio.h>
int main()
{
    int a[5] = {1, 2, 3, 4, 5};
    int i;
    for (i = 0; i < 5; i++)
        if ((char)a[i] == '5')
            printf("%d\n", a[i]);
        else
            printf("FAIL\n");
```

- a) The compiler will flag an error
  - b) The program will compile and print the ASCII value of 5
  - c) The program will compile and print the output 5
  - d) The program will compile and print FAIL for 5 times

2. The format identifier '%i' is also used for \_\_\_\_\_ data type.

- a) char      b) int      c) float      d) double

3. What will be the output of the following C code?

```
1.      #include <stdio.h>
2.      int main()
3.      {
4.          int i = -3;
5.          int k = i % 2;
6.          printf("%d\n", k);
7.      }
```

- a) Compile time error      b) -1      c) 1      d) Implementation defined

4. . What will be the output of the following C code?

```
1.      #include <stdio.h>
2.      int main()
3.      {
4.          int i = 3;
5.          int l = i / -2;
6.          int k = i % -2;
7.          printf("%d %d\n", l, k);
8.          return 0;
9.      }
```

- a)Compile time error      b) -1 1      c) 1 -1      d) Implementation defined

5. What will be the output of the following C code?

```
1. #include <stdio.h>
2. void main()
3. {
4.     int x = 5.3 % 2;
5.     printf("Value of x is %d", x);
6. }
```

- a) Value of x is 2.3      b) Value of x is 1  
c) Value of x is 0.3      d) Compile time error

6. What will be the output of the following C code?

```
1. #include <stdio.h>
2. void main()
3. {
4.     int y = 3;
5.     int x = 5 % 2 * 3 / 2;
6.     printf("Value of x is %d", x);
7. }
```

- a) Value of x is 1      c) Value of x is 2  
b) Value of x is 3      d) Compile time error

## Q2. Answer Any 4 Question(Each Carrying 6 marks)

**4X6=24**

1. Write a c code to check whether string entered is a palindrome or not without using string library functions.
2. Discuss the differences between while and do-while, break and continue with suitable example. Discuss the static and register storage class.
3. Write a c code to find out prime numbers between 2 and 2000.
4. Define recursion. Write a c code to find out the factorial of a number using recursion.
5. Write a c code find out GCD and LCM of two numbers.
6. Write a c code to add the two matrices.