Assignment # 5 – Class XI – Computer Science

Chapter 6: Getting Started with C++

- 1. What is a lexical unit? Name the lexical units being used in C++.
- 2. What are literals? Explain the different types of literals being used in C++.
- 3. What is the difference between '=' and '==' operators?
- 4. Which of the following are valid/invalid operands:

```
height, main, rollno-5, my address, 2day, class
```

- 5. What is the difference between '5', 5 and "5"?
- 6. Identify the errors in the following program:

```
void main()
{
    int x
    char endl;
    x=3;
    cin>>endl;
    cout<<x<3
}</pre>
```

- 7. Explain the two different ways to give comments in C++.
- 8. Differentiate between '<<' and '>>' operators.
- 9. 'Every C++ program must have a main().' Why?
- 10. Explain the different types of errors that may occur while programming.
- 11. What will be the output of the following code:
 - (i) cout<<" #\n**\n###\n***\n ";(ii) char a= '@';cout << a;cout<<'a';

PROGRAMS

(to be done in the lab during practical periods)

- 1. To create a formatted output screen as given in the lab.
- 2. Write a C++ program that accepts marks and displays the percentage. Assume maximum marks is 50.
- 3. Write a program that accepts the temperature in percentage and displays in Fahrenheit
- 4. Write a program that accepts length, breadth and then displays the area and perimeter of a rectangle.

Note:

- 1. All programs must have a comment entry on the top indicating what exactly the program is about.
- 2. Proper messages should be given for input and output operations.
- 3. All programs should be properly indented.

Chapter 7: Data Handling

- 1. Name the fundamental data types along with the number of bytes they occupy.
- 2. Explain integer type modifies
- 3. Define the following -
 - (i) Array
 - (ii) Pointer
 - (iii) Reference
 - (iv) Enumeration
- 4. Differentiate between a class and a structure.
- 5. Explain 'const' modifier with an example.
- 6. Why do we need to initialize variable?
- 7. An unsigned int can be twice as large as signed int?

Programs

- 1. Write a program that accepts a number, say num and print num, num², num³, num⁴ and num⁵.
- 2. Write a program to accept two numbers and print their quotient and reminder.
- 3. Write a program to compute simple interest after accepting principal, Rate and Time. Include the header file iomanip.h and display the S.I. using setw(), setprecision (), setf().